

Connectors

PRODUCT CATALOG
2024 EDITION

Overhead &
Underground Equipment



More than 70 years of high-quality products and unmatched customer service

Richards Manufacturing Company has been a trusted supplier of electrical and natural gas distribution products since 1945. Our philosophy has remained the same to this day—we demand excellence in every product we design, test and manufacture. We are dedicated to providing outstanding customer support to satisfy every inquiry, no matter how small.

Within this catalog, you will find a wide selection of electrical distribution products that make up our Connector Product Line. These products represent many decades of engineering and manufacturing excellence. We have the flexibility to offer solutions to address the special requirements of our diverse customer base. If you do not find what you're looking for in this catalog, please contact the factory to discuss your specific requirements.

Also from the Richards Manufacturing family

Medium Voltage

Richards designs, tests, and manufactures medium voltage power cable accessories for use through 35kV. Our facility utilizes advanced injection molding processes and a state-of-the-art high voltage test lab to make a product that is both cost-competitive and reliable. In addition to "standard" products, our selection includes a number of innovative solutions that were designed to solve specific industry issues.

Natural Gas

Richards Manufacturing Company supplies natural gas utilities with a wide variety of Meter Connections and Accessories, Manifold Assemblies, and Prefabricated Meter Assemblies.

Network Protectors, Relays, and Network Communications

Richards is the largest supplier of Network Protectors in the world. We manufacture several designs of Network Protectors from 800 through 5100 Amps. In addition, we recondition utility-owned units and provide a complete array of replacement components.

ETI™ is a division of Richards Manufacturing with extensive engineering and electronics expertise. The portfolio of products offered by ETI includes Microprocessor Network Protector Relays (MNPR®), Transformer/Vault/Network Protector monitoring sensors, and customized SCADA communications enclosures.

ETI helps end-users design and implement monitoring systems for their underground network distribution systems. These custom solutions incorporate information from sensors and MNPR® relays, and provide a means of transmitting, reporting, storing and displaying that data. More than 20 major utilities worldwide depend on ETI's MNPR® to automate their underground networks.

CONTENTS

Aluminum Compression Lugs	Series	Page
Short-Barrel Aluminum Lugs (One- & Two-Hole).....	SAL Series.....	2
Short-Barrel Aluminum Lugs	SAL Series (continued)	3
One-Hole Aluminum Lugs	AL Series	4
One-Hole Aluminum Lugs	AL Series (continued).....	5
Straight & Stacking One-Hole Aluminum Lugs – Common Die	ALCD & ASLCD Series	6
Straight & Stacking Two-Hole Aluminum NEMA Lugs	AL-N Series	7
Straight & Stacking Two-Hole Aluminum NEMA Lugs	AL-N Series (continued)	8
Straight & Stacking Two-Hole Aluminum NEMA Lugs – Common Die	ALCD-N Series	9
Tapered Aluminum Lugs	TAL Series	10
Tapered Aluminum Lugs	TAL Series (continued).....	11
Pin Terminals.....	APT Series.....	12
Four-Hole Aluminum NEMA Lugs.....	AL-4N Series	13

Copper Compression Lugs	Series	Page
Short-Barrel Copper Lugs	SCL Series.....	16
Short-Barrel Copper Lugs	SCL Series (continued)	17
One-Hole Copper Lugs	CL Series	18
Straight & Stacking Two-Hole Copper NEMA Lugs.....	CL-2N & CSL-2N Series (continued)	21
Four-Hole Copper Lugs	CL-4N Series	22
Heavy-Duty Copper Lugs.....	HDCL Series	23
Tapered Copper Lugs.....	TCL Series	24
Tapered Copper Lugs.....	TCL Series (continued).....	25
One-Hole Peephole Copper Lugs	CL-P Series.....	26
One-Hole Peephole Copper Lugs	CL-P Series (continued)	27
Two- & Four-Hole Peephole Copper NEMA Lugs	CL-N-P Series.....	28
Mechanical Copper Lugs	ML Series	29
Angled Copper Lugs	CL-2N-90 Series.....	31
Shrouded Copper Lugs	CL-66 Series.....	32
Copper Pin Terminals.....	CPT Series.....	33
Ring Bus Copper Lugs Assembly	MT Series	34

Aluminum Compression Connectors	Series	Page
Short Aluminum Splices.....	SALC Series	36
Aluminum Splices	ALC Series.....	37
Aluminum Splices – Common Die	ALCCD Series	38
Tapered Aluminum Splices.....	OATC Series	39
Tapered Aluminum Splices – Common Die	OATCCD Series.....	40
Aluminum Tees	ALT Series	41
Aluminum Tapered Tees.....	ALTT Series	42
Aluminum Tapered Tees.....	ALTT Series (continued).....	43
Aluminum Reducers	ALCR Series	44
Tapered Aluminum Reducers	OATCR Series	45
Aluminum Reducers – Common Die	ALCRCD Series.....	46

Copper Compression Connectors	Series	Page
Short Copper Splices	SCC Series	48
Copper Splices	CC Series	49
Tapered Copper Splices	TCC Series.....	50
Straight Oil-Stop Copper Splices.....	OCC Series	51
Tapered Oil-Stop Copper Splices	OTCC Series	52
Copper Compression Tees	CCT Series	53
Tapered Copper Compression Tees.....	TCCT Series	54
Copper Compression Reducers.....	CCR Series	55

Tapered Copper Compression Reducers	TCCR Series	56
Oil-Stop Copper Compression Reducers	OCCR Series	57
Oil-Stop Tapered Copper Compression Reducers	OTCCR Series	58
Corrugated Copper Reducing Adapters	CRA Series	59

Split Tinned Connectors

	Series	Page
Split Tinned Straight Connectors	RSS Series	61
Split Tinned Concentric Reducing Connectors	CR Series	62
Split Tinned Branch Connectors – Full Duplex	FD Series	63
Split Tinned Branch Connectors – Half Duplex	HD Series	64
Split Tinned Tee Connectors	ST Series	65
Lead Splicing Sleeves	LSV Series	66

Distribution Equipment

	Series	Page
Bronze Vise Connectors – Jaws Overlap	VC Series	69
Aluminum Hot-Line Clamps	AHLC Series	70
Bronze Hot-Line Clamps	BHLC Series	71
Aluminum Hot-Line Clamps	AHLC-397 Series	72
Aluminum Parallel Clamps With Plastic Covers	APC Series	73
Aluminum & Bronze Stirrup Connectors	ASC & BSC Series	74
Aluminum Clamshell Stirrups	BCASC Series	75
Bronze Vise Connectors – Jaws Meet	VC-H Series	76
Tank Ground Connectors	RTG Series	77
Service Drop Connectors	RSD Series	78
Mid-Span Clamps	SDC & SEC Series	79
Neutral Dead Ends	RDE Series	80
Stirrups	RST Series	81
Overhead Bail Clamps	RB Series	82
Bolted Wedge Connectors	RBWC Series	83
Bronze Parallel Vise Connectors	VC-80XX Series	84
Pedestal Connectors	PC371105 Series	85
Acorn Ground Clamps	ACRN Series	86
Neutral-Span Clamps	R07-1285 Series	87
Fiber Optic Clamp	RFB Series	88
Fiber Optic Offset Bracket	RFB Series	89

Underground Equipment

	Series	Page
Bare Crab Joints For Joining Bare Neutral Cables	FJB Series	95
Insulated Crab Joints	FJI Series	96
Fusible Crab Joints – Tower Joints	TWJ Series	97
Tower Joint Accessories – Cable End Caps & Shells	TWJA Series	98
High-Temperature Filler Shell	TWJA Series	98
Tower Joint Accessories – Insulating Sleeves & Caps	TWJS Series	99
Insulating Sleeves For Use With “TWJ” Series Fusible Crab Joints	TWJS Series	99
Fusible Crab Joints With Pigtails	CJLP Series	100
Crab Joints With Pigtails	SJ Series	102
Mole Limiter Assembly	RMLA Series	103
Cable-To-Cable IN-LINE Limiter	CCLA Series	104
Cable-To-Cable Limiter Assembly	CCLA Series	105
Cable-To-Cable Limiters	CCL Series	106
Two-Piece Cable-To-Cable Limiter Insulating Sleeves	LS Series	107
High-Temperature Filler Shell For Cable-To-Cable Limiters	ALS Series	107
Cable-to-Cable Current Limiting Fuses	CCLF Series	108
Two-Piece Cable-to-Cable Current Limiting Fuse Sleeves	CCLF-CCR Series	108
Limiter Lug Assembly	CLLA Series	109

Limiter Lugs	CLL Series	110
Limiter Lug Accessories – Insulating Sleeves.....	LLS Series	111
Limiter Lug Accessories – High-Temperature Filler Shells.....	ALLS Series.....	111
Current Limiting Lugs	CLLF Series.....	112
Ring bus Limiter Lug Assembly.....	CLLA Series.....	113
Network Protector Terminals	NPT Series	114
Network Protector Terminals	NPT Series (continued)	115
Accessories For Network Protector Terminals.....		115
Disconnect Network Protector Terminals	NPT-DISC Series.....	116
Disconnect Legs For Disconnect Network Protector Terminals.....	RDL Series	117
Protector Fuses – Low-Loss “S” Fuse	LLF Series	118
Network Protector Fuses – “Z” Fuse	NPF-Q Series.....	119
Network Protector Fuses – “Y” Fuse	NPF-L Series	120
Network Protector Fuse with Fuse Cover Assembly	FCA	121
Lead Alloy Network Protector Fuses – Laminated Type – Standard Speed.....	Alloy Fuse Series	122
Lead Alloy Network Protector Fuses – Laminated Type – Time Lag	Alloy Fuse Series (continued)	123
Lead Alloy Network Protector Fuses – Non-Laminated Type (Single Layer).....	NF Series.....	124
Copper Link Fuses.....	NWP Series	125
Copper Braids.....	CB Series	126
Secondary Spades.....	TRSS Series	127
Set Screw Connectors	SSCRW Series	128
Joint Casings.....	JC Series	129
Cable Rack Arms	RA Series	130
Stanchions	RA Series	131
Standard Cable Rack Arms	SCRA Series	132
Pigtail Plug	PTP Series.....	133
Lifting Hooks	RLH Series	134
Insulated T-Wrench.....		135

Pole Line Hardware	Series	Page
Eyelets.....	RENUT Series	137
“J” Hooks	RJH Series.....	138
Single-Position Equipment Brackets	LPB Series.....	139
Grid Gains & Crossarm Gains.....	RGG & RCG Series	140
Crossarm Support Gains.....	RCSG Series	141
Pole-Eye Plates.....	RPEP Series.....	142
Guy Hooks	RGH Series	143
Aerial Clamps	RAC Series	144
Turnbuckles.....	RTB Series	145
Pole-Top Extensions	RPTA Series.....	146
Three-Hole Messenger Clamps.....	RSC1204 Series	147
Heavy-Duty Messenger Clamps.....	RHDC Series	148
Swivel Nuts	SN Series	149

Rubber Products	Series	Page
Cable End Caps	CCAP Series	151
Insulated Connector Covers	348 Series.....	152
Wildlife Protectors – Plastic	RWP Series.....	153
Wildlife Protectors – Rubber	BG Series	154

Reference	Series	Page
Index		156

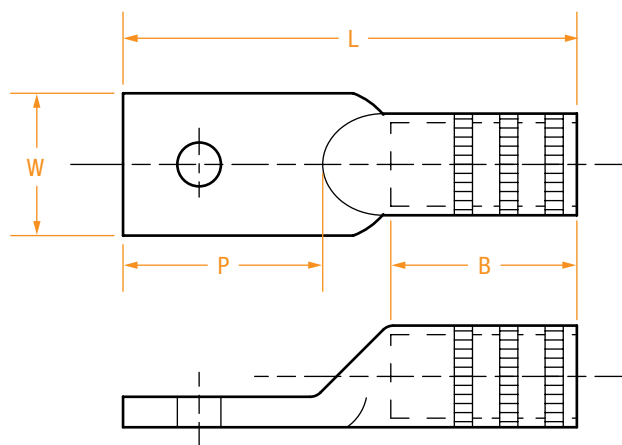
Aluminum Compression Lugs



Aluminum Compression Lugs

	Series	Page
Short-Barrel Aluminum Lugs (One- & Two-Hole).....	SAL Series.....	3
Short-Barrel Aluminum Lugs	SAL Series (continued)	4
One-Hole Aluminum Lugs	AL Series	5
One-Hole Aluminum Lugs	AL Series (continued).....	6
Straight & Stacking One-Hole Aluminum Lugs – Common Die	ALCD & ASLCD Series	7
Straight & Stacking Two-Hole Aluminum NEMA Lugs	AL-N Series	8
Straight & Stacking Two-Hole Aluminum NEMA Lugs	AL-N Series (continued)	9
Straight & Stacking Two-Hole Aluminum NEMA Lugs – Common Die	ALCD-N Series	10
Tapered Aluminum Lugs	TAL Series	11
Tapered Aluminum Lugs	TAL Series (continued).....	12
Pin Terminals.....	APT Series.....	13
Four-Hole Aluminum NEMA Lugs.....	AL-4N Series	14

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- For NEMA standards or any other special size requirements



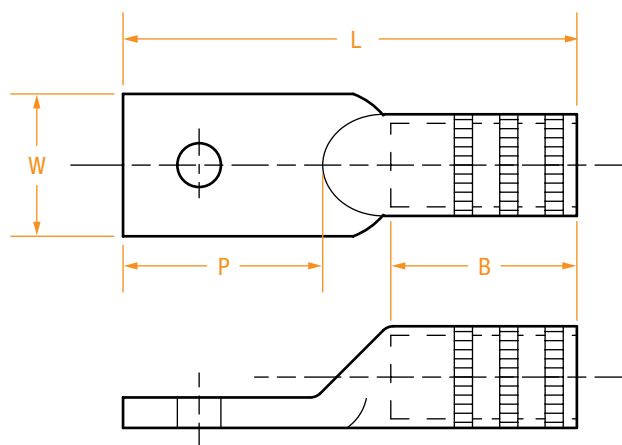
PART NUMBER*	WIRE SIZE	# OF HOLES	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
					B	L	P	W
SAL3	#6	1	1/4	5/16, 346, TP	3/4	1-3/4	5/8	5/8
SAL5	#4	1	5/16	TB, 375	7/8	2-3/16	13/16	13/16
SAL7	#2	1	3/8	TQ, 348, 1/2	1-1/8	2-1/2	7/8	7/8
SAL8	#1	1	3/8	TQ, 348, 1/2	15/16	2-9/16	1-1/8	3/4
SAL9	1/0	1	3/8	TU, BG, 5/8	1	2-9/16	1-1/8	13/16
SAL9-2N	1/0	2	3/8	TU, BG, 5/8	1	3-5/8	2-3/16	13/16
SAL10	2/0	1	1/2	TWTY, 297, 5/8-1	1-1/8	2-15/16	1-5/16	15/16
SAL10-2N	2/0	2	1/2	TWTY, 297, 5/8-1	1-1/8	4-11/16	3-1/16	15/16
SAL11	3/0	1	1/2	TV, 467, 781	1-1/4	3-3/16	1-5/16	1-1/16
SAL11-2N	3/0	2	1/2	TV, 467, 781	1-1/4	4-15/16	3-1/16	1-1/16
SAL12	4/0	1	1/2	TX, 298, 840	1-5/16	3-5/16	1-5/16	1-3/16
SAL12-2N	4/0	2	1/2	TX, 298, 840	1-5/16	5-1/16	3-1/16	1-3/16
SAL13	250	1	1/2	TX, 840, 324	1-7/16	3-7/16	1-5/16	1-1/4
SAL13-2N	250	2	1/2	TX, 840, 324	1-7/16	3-5/8	3-3/4	1-3/16
SAL14	300	1	1/2	TH, 470, 1	1-1/2	3-7/8	1-5/16	1-3/8
SAL14-2N	300	2	1/2	TH, 470, 1	1-1/2	5-5/16	3-1/16	1-3/8
SAL15	350	1	5/8	96, 299, 1-1/8	1-5/8	4-1/8	1-5/16	1-1/2
SAL15-2N	350	2	5/8	96, 299, 1-1/8	1-5/8	4-7/8	3-1/16	1-1/2
SAL16	400	1	5/8	96, 472, 1-1/8	1-13/16	4-7/8	1-9/16	1-5/8
SAL16-2N	400	2	5/8	96, 472, 1-1/8	1-13/16	6-1/4	3-9/16	1-5/8
SAL18	500	1	5/8	106A, 300, 1-5/16	1-7/8	5-1/16	1-13/16	1-13/16
SAL18-2N	500	2	5/8	106A, 300, 1-5/16	1-7/8	6-7/16	3-9/16	1-13/16
SAL20	600	1	5/8	115H, 473, 1-5/16	2	5-5/16	1-13/16	2

(continued)

PART NUMBER*	WIRE SIZE	# OF HOLES	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
					B	L	P	W
SAL20-2N	600	2	5/8	115H, 473, 1-5/16	2	6-5/8	3-9/16	2
SAL22	700	1	5/8	125H, 936, 1-1/2	2-1/4	5-3/4	1-13/16	2-3/16
SAL23-2N	750	2	5/8	125H, 936, 1-1/2	2-1/4	7-1/16	3-9/16	2-3/16
SAL24	800	1	5/8	140H, 474, 1-1/2	2-5/16	5-7/8	1-13/16	2-1/4
SAL24-2N	800	2	5/8	140H, 474, 1-1/2	2-5/16	7-1/8	3-9/16	2-1/4
SAL28	1000	1	5/8	150H, 302, 1-3/4	2-9/16	6-5/16	1-13/16	2-9/16
SAL28-2N	1000	2	5/8	150H, 302, 1-3/4	2-9/16	7-7/16	3-9/16	2-9/16
SAL30	1500	1	3/4	478, 189	3-3/16	7-9/16	2-1/16	3-1/16
SAL30-2N	1500	2	3/4	478, 189	3-3/16	8-7/16	3-9/16	3-1/16
SAL32	2000	1	3/4	479, 225	3-11/16	8-3/8	2-1/16	3-1/2
SAL32-2N	2000	2	3/4	479, 225	3-11/16	9-1/4	3-9/16	3-1/2

* For untinned lugs, add "-NT" from the part number (example: SAL3-NT for a #6 untinned lug with a 1/4" bolt).

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- For NEMA standards or any other special size requirements



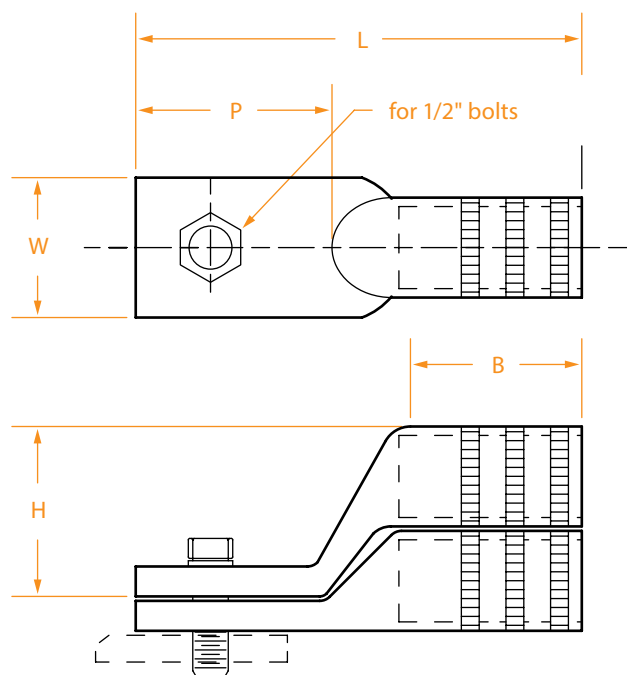
PART NUMBER*	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
				B	L	P	W
AL3-1/4	#6	1/4	5/16, 346, TP	13/16	2-5/32	7/8	9/16
AL5-1/4	#4	1/4	TB, 375	1	2-1/2	23/32	21/32
AL7-1/4	#2	1/4	TQ, 348, 1/2	1	2-1/2	23/32	21/32
AL9-3/8	1/0	3/8	TU, BG, 5/8	1-1/4	3-3/16	1-1/4	7/8
AL9	1/0	1/2	TU, BG, 5/8	1-1/4	3-3/16	1-1/4	7/8
AL10-3/8	2/0	3/8	TWTY, 297, 5/8-1	1-3/8	3-3/16	1-1/4	15/16
AL10	2/0	1/2	TWTY, 297, 5/8-1	1-3/8	3-3/16	1-1/4	15/16
AL11-3/8	3/0	3/8	TV, 467, 781	1-1/2	3-7/16	1-5/16	1-1/16
AL11	3/0	1/2	TV, 467, 781	1-1/2	3-7/16	1-5/16	1-1/16
AL12-3/8	4/0	3/8	TX, 298, 840	1-1/2	3-9/16	1-5/16	1-3/16
AL12	4/0	1/2	TX, 298, 840	1-1/2	3-9/16	1-5/16	1-3/16
AL13	250	1/2	TX, 840, 324	1-5/8	3-5/8	1-5/16	1-1/4
AL14	300	1/2	TH, 470, 1	2-1/4	4	1-5/16	1-3/8
AL15	350	1/2	96, 299, 1-1/8	2-1/4	4-1/4	1-5/16	1-1/2
AL16	400	1/2	96, 472, 1-1/8	2-1/2	4-7/8	1-1/4	1-5/8
AL16-5/8	400	5/8	96, 472, 1-1/8	2-1/2	4-7/8	1-1/4	1-5/8
AL18	500	1/2	106A, 300, 1-5/16	3	5-7/16	1-1/2	1-3/4
AL18-5/8	500	5/8	106A, 300, 1-5/16	3	5-7/16	1-1/2	1-3/4
AL20	600	1/2	115H, 473, 1-5/16	3	5-7/16	1-1/2	1-15/16
AL20-5/8	600	5/8	115H, 473, 1-5/16	3-1/16	5-11/16	1-9/16	1-15/16
AL23	700-750	1/2	125H, 608, 1-1/2	3-3/8	6-1/2	1-7/8	1-3/4
AL23-5/8	700-750	5/8	125H, 608, 1-1/2	3-3/8	6-1/2	1-7/8	1-3/4
AL24	800	1/2	140H, 474, 1-1/2	3-3/8	6-5/8	1-7/8	1-13/16

(continued)

PART NUMBER*	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
				B	L	P	W
AL24-5/8	800	5/8	140H, 474, 1-1/2	3-3/8	6-5/8	1-7/8	1-13/16
AL28	1000	1/2	150H, 725, 1-3/4	4-5/8	7-7/8	1-7/8	2-9/16
AL28-5/8	1000	5/8	150H, 725, 1-3/4	4-5/8	7-7/8	1-7/8	2-9/16

* For untinned lugs, add "-NT" to the part number (example: AL3-NT for a #6 untinned lug with a 1/4" bolt).

- Made of high-conductivity, tin plated aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Reduces die inventory
- Provided with color-coded PVC cap for easy conductor size identification
- Marked with conductor size and die information

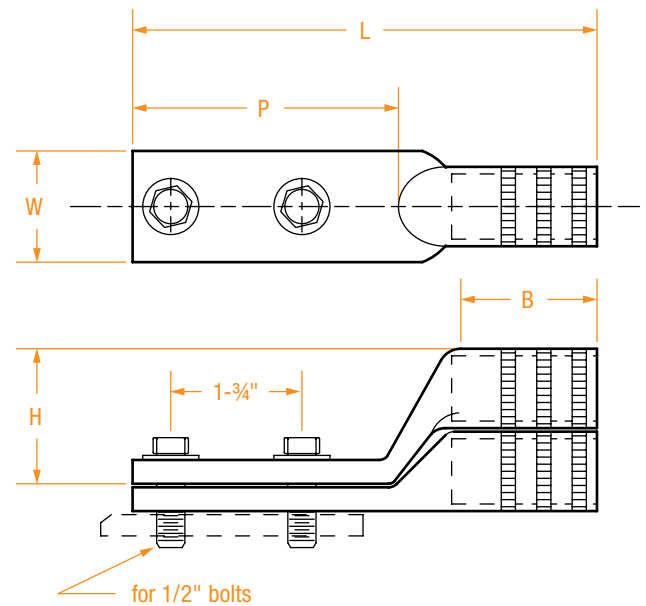


PART NUMBER		WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
Straight Lug	Stacking Lug			B	H*	L	P	W
ALCD2	ASLCD2	#8	687, 52, BG, TU, 243, 5/8, 8A, CSA 22	1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD3	ASLCD3	#6		1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD5	ASLCD5	#4		1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD7	ASLCD7	#2		1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD8	ASLCD8	#1		1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD9	ASLCD9	1/0		1-3/8	1-1/2	3-1/8	1-5/16	7/8
ALCD10	ASLCD10	2/0	249, TX, 76, 658, 840, 324, 11A, CSA 24	1-7/16	1-3/4	3-1/4	1-3/8	1-1/4
ALCD11	ASLCD11	3/0		1-1/2	1-3/4	3-3/8	1-3/8	1-1/4
ALCD12	ASLCD12	4/0		1-1/2	1-3/4	3-3/8	1-3/8	1-1/4
	ASLCD13	250		1-1/2	1-3/4	3-3/8	1-3/8	1-1/4
ALCD14	—	300	299, 96, 655, 321, 316, 1-1/8	1-5/8	—	3-5/8	1-3/8	1-1/4
ALCD15	—	350		1-5/8	—	3-5/8	1-3/8	1-1/4
ALCD16	—	400	300, 317, 1-5/16, 426	1-5/8	—	3-5/8	1-3/8	1-1/4
ALCD18	—	500		2-1/8	—	3-5/8	1-1/4	1-5/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For stacking lugs only.

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- In accordance with all NEMA standards



PART NUMBER		WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
Straight Lug	Stacking Lug			B	H**	L	P	W
AL3-2N	ASL3-2N	#6	375, TB	1-1/4	—	4-3/4	3-1/8	7/8
AL5-2N	ASL5-2N	#4	375, TB	1-1/4	—	4-3/4	3-1/8	7/8
AL7-2N	ASL7-2N	#2	52, BG, 243, 5/8	1-5/8	1-1/2	5-1/4	3-1/8	1
AL8-2N	ASL8-2N	#1	52, BG, 243, 5/8	1-1/2	1-1/2	5-1/4	3-1/8	1
AL9-2N	ASL9-2N	1/0	52, BG, 243, 5/8	1-1/2	1-1/2	5-1/8	3-1/8	1
AL10-2N	ASL10-2N	2/0	58, 297, 245, 5/8-1	1-3/4	1-5/8	5-1/2	3-1/8	1
AL11-2N	ASL11-2N	3/0	66, 167, 247, 781	1-7/8	1-3/4	5-5/8	3-1/8	1-1/8
AL12-2N	ASL12-2N	4/0	840, 298, TX	2	1-7/8	5-5/8	3-1/8	1-1/8
	ASL13-2N	250	840, 324, TX	2-1/8	2	6	3-1/8	1-1/8
AL14-2N	ASL14-2N	300	87H, 470, 251, 1	2-1/4	2	6-5/8	3-1/8	1-5/16
AL15-2N	ASL15-2N	350	96, 299, 655, 1-1/8	2-1/4	2-3/8	6-5/8	3-1/8	1-1/2
AL16-2N	ASL16-2N	400	96, 472, 705, 1-1/8	2-1/2	2-1/2	6-5/8	3-1/8	1-5/8
AL18-2N	ASL18-2N	500	106A, 300, 426 1-5/16	3	2-5/8	6-7/8	3-1/8	1-3/4
AL20-2N	ASL20-2N	600	115H, 473, 786 1-5/16	3	2-3/4	7-1/2	3-1/8	1-3/4
AL23-2N	ASL23-2N	700-750	140H, 301, 342, 1-1/2	3-3/8	3	7-1/2	3-1/8	1-3/4
AL24-2N	ASL24-2N	800	140H, 474, 724, 1-5/8	3-13/32	3-1/8	7-1/2	3-1/8	1-3/4
AL28-2N-W	ASL28-2N-W	1000	161, 302, 725, 1-3/4	4-11/16	3-1/4	9-1/2	3-5/8	2-9/16
AL28-2N	ASL28-2N	1000	161, 302, 725, 1-3/4	4-5/8	3-1/4	9-1/2	3-5/8	1-3/4
AL29-2N	ASL29-2N	1250	1-7/8, 727	4-5/8	—	9-5/8	3-5/8	1-3/4
AL30-2N	ASL30-2N	1500	478	5-9/16	—	10-7/8	3-5/8	3-3/16

(continued)

STRAIGHT & STACKING TWO-HOLE ALUMINUM NEMA LUGS

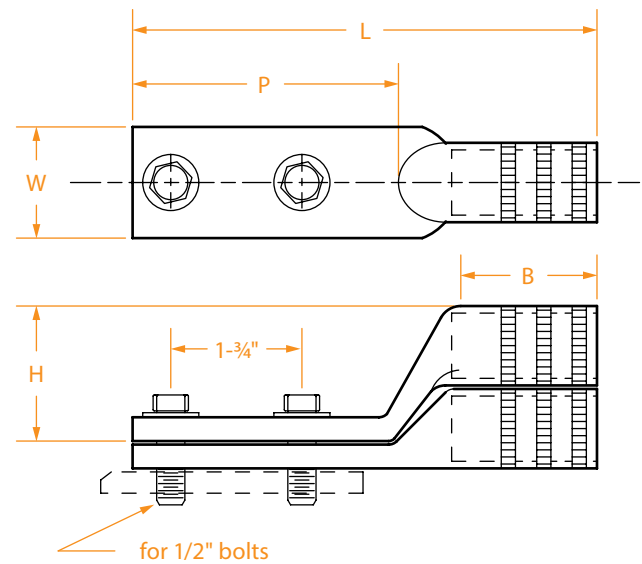
AL-N Series

PART NUMBER		WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
Straight Lug	Stacking Lug			B	H**	L	P	W
AL31-2N	ASL31-2N	1750	204, 729, 40AH	5-1/2	—	—	3-5/8	3-3/16
AL32-2N	ASL32-2N	2000	479	6-1/16	—	11-15/16	3-5/8	3-1/2

* For untinned lugs, add "-NT" to the part number (example: AL3-2N-NT for #6 straight untinned lug).

** For stacking lugs only.

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- In accordance with all NEMA standards



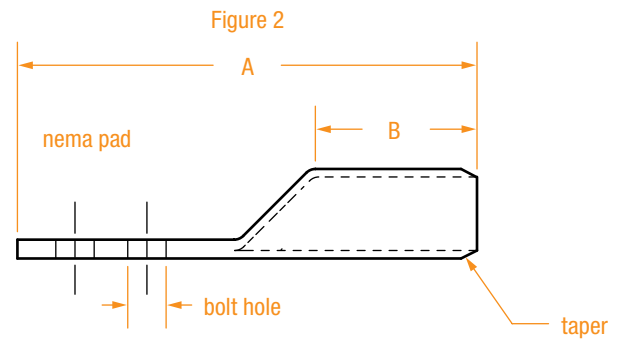
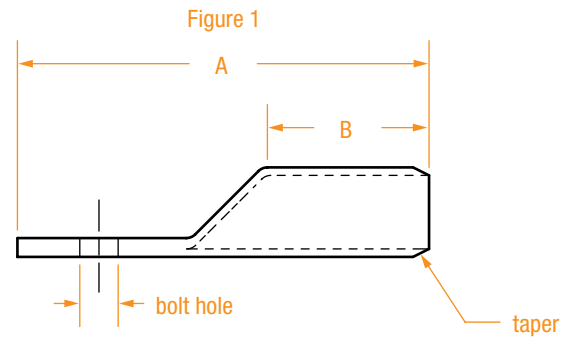
STRAIGHT LUG PART NUMBER*	STACKING LUG PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				B	H**	L	P	W
ALCD1-2N	ASLCD1-2N	#8	TU, 52, BG, 687, 243, 5/8, 8A	1-1/2	1-1/2	5-1/8	3-1/16	1-1/4
ALCD3-2N	ASLCD3-2N	#6		1-1/2	1-1/2	5-1/8	3-1/16	1-1/4
ALCD5-2N	ASLCD5-2N	#4	TX, 76, 324, 249, 658, 840, 11A	1-7/8	1-1/2	5-5/8	3-1/16	1-1/4
ALCD7-2N	ASLCD7-2N	#2		1-7/8	1-1/2	5-5/8	3-1/16	1-1/4
ALCD8-2N	ASLCD8-2N	#2 & #1		1-7/8	1-1/2	5-5/8	3-1/16	1-1/4
ALCD9-2N	ASLCD9-2N	1/0		1-7/8	1-1/2	5-5/8	3-1/16	1-1/4
ALCD10-2N	ASLCD10-2N	2/0		2	1-3/4	5-7/8	3-1/16	1-1/4
ALCD11-2N	ASLCD11-2N	3/0		2	1-3/4	6-5/16	3-1/16	1-1/4
ALCD12-2N	ASLCD12-2N	4/0		2	1-3/4	6-5/16	3-1/16	1-1/4
	ASLCD13-2N	250		2	1-3/4	6-5/16	3-1/16	1-9/16
ALCD14-2N	ASLCD14-2N	300	96, 299, 655, 1-1/8	2-1/4	—	6-1/2	3-1/16	1-9/16
ALCD15-2N	ASLCD15-2N	350		2-1/4	—	6-1/2	3-1/16	1-9/16
ALCD16-2N	ASLCD16-2N	400	300, 1-5/16, 317, 426	2-1/2	—	6-1/2	3-1/16	1-5/8
ALCD18-2N	ASLCD18-2N	500		2-3/4	—	6-5/8	3-1/16	1-5/8
ALCD23-2N	ASLCD23-2N	750	302, 1-3/4, 161	3-3/8	—	7-1/8	3-1/16	1-5/8
ALCD24-2N	ASLCD24-2N	800		3-3/8	—	7-1/8	3-1/16	1-5/8
ALCD28-2N	ASLCD28-2N	1000		3-7/8	—	7-5/8	3-1/16	1-5/8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For untinned lugs, add "-NT" to the part number (example: ALCD2-2N-NT for a #8 straight untinned lug).

** For stacking lugs only.

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- In accordance with all NEMA standards



PART NUMBER*	FIGURE	WIRE SIZE	INSTALLING DIES	PAD WIDTH	BOLT HOLE	DIMENSIONS IN INCHES	
						A	B
TAL5	1	#4	375, 162, 3/8, 37	11/16	7/16	2-3/16	7/8
TAL7	1	#2	239, 348, 1/2, 6A, 42	13/16	7/16	2-1/2	1
TAL8	1	#1	243, 296, 5/8, 8A, 49	7/8	7/16	3-3/16	1-1/4
TAL9	1	1/0	243, 296, BG, 5/8, 8A, 49	7/8	7/16	3-3/16	1-1/4
TAL9-2N	2	1/0	243, 296, BG, 5/8, 8A, 49	7/8	9/16	5-9/32	1-1/2
TAL10	1	2/0	245, 297, 5/8-1, 9A, 60	31/32	9/16	3-3/16	1-3/8
TAL10-2N	2	2/0	245, 297, 5/8-1, 9A, 60	31/32	9/16	5-1/2	1-1/2
TAL11	1	3/0	247, 467, 781, 10A, 66	1-1/16	9/16	3-7/16	1-1/2
TAL11-2N	2	3/0	247, 467, 781, 10A, 66	1-1/16	9/16	5-1/2	1-1/2
TAL12	1	4/0	298, 840, 11A, 71	1-1/4	9/16	3-9/16	1-1/2
TAL12-2N	2	4/0	298, 840, 11A, 71	1-1/4	9/16	5-15/16	1-3/4
TAL13	1	250	249, 840, 11A, 71	1-1/4	9/16	3-5/8	1-5/8
TAL13-2N	2	250	249, 840, 11A, 71	1-1/4	9/16	6	1-3/4
TAL14	1	300	251, 470, 1.00, 12A, 96	1-13/32	9/16	4	2-1/4
TAL14-2N	2	300	251, 470, 1.00, 12A, 96	1-13/32	9/16	6-9/16	2-1/4
TAL15	1	350	299, 321, 1-1/8, 13A, 96	1-9/16	9/16	4-1/4	2-1/4
TAL15-2N	2	350	299, 321, 1-1/8, 13A, 96	1-9/16	9/16	6-9/16	2-1/4

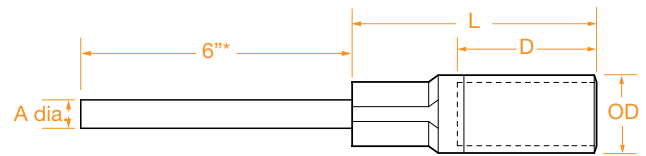
(continued)

PART NUMBER*	FIGURE	WIRE SIZE	INSTALLING DIES	PAD WIDTH	BOLT HOLE	DIMENSIONS IN INCHES	
						A	B
TAL16-2N	2	400	472, 523, 1-1/8, 14A, 106	1-21/32	9/16	6-7/8	2-1/2
TAL18-2N	2	500	300, 317, 1-5/16, 15A, 106	1-27/32	9/16	7-5/16	3
TAL20-2N	2	600	473, 525, 1-5/16, 125	2	9/16	7-1/2	3
TAL23-2N	2	750	301, 527, 1-1/2, 140	2-3/16	9/16	8-1/4	3-3/8
TAL24-2N	2	800	474, 725, 1-5/8, 140	2-9/32	9/16	8-1/4	3-3/8
TAL28-2N	2	1000	302, 292, 1-3/4, 150	2-17/32	9/16	9-5/8	4-5/8
TAL30-2N	2	1500	478, 189	3-3/32	9/16	10-13/16	5-1/2
TAL32-2N	2	2000	479, 225	3-19/32	9/16	11-7/8	6

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For untinned lugs, add "-NT" to the part number (example: TAL5-NT for a #4 untinned lug).

- For Aluminum and ACSR cable
- Accepts both aluminum and copper conductors
- Fabricated from high-conductivity aluminum and soft-drawn, solid tin-plated copper wire
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Available in a variety of cable and pin sizes

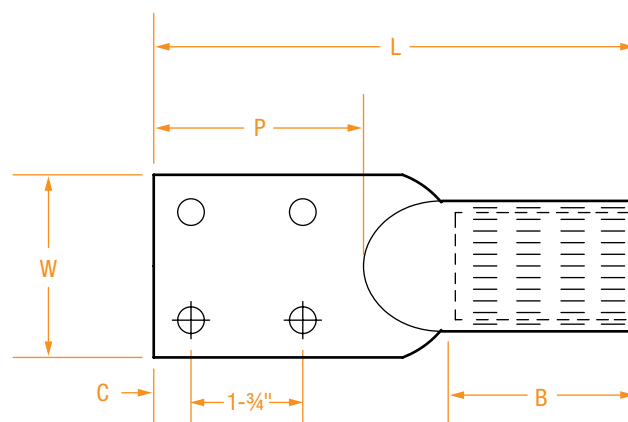


PART NUMBER	ALUMINUM CABLE SIZE	DIE INFORMATION	PIN DIAMETER A	DIMENSIONS IN INCHES		
				L	D	OD
APT3	#6	TWTY, 297, 5/8-1	0.25	3.25	1.75	0.65
APT7	#2	TWTY, 297, 5/8-1	0.25	3.25	1.78	0.65
APT9	1/0	TWTY, 297, 5/8-1	0.25	3.25	1.78	0.65
APT10	2/0	TX, 298, 840	0.31	4.22	2.28	0.91
APT11	3/0	TX, 298, 840	0.31	4.31	2.56	0.91
APT12	4/0	TX, 298, 840	0.38	4.22	2.28	0.91
APT13	250	TX, 298, 840	0.38	4.50	2.88	0.91
APT15	350	1-1/8, 299	0.46	5.25	3.00	1.12
APT18	500	106A, 300, 1-5/16	0.75	6.30	3.41	1.32
APT23	750	125H, 608, 1-1/2	0.75	6.30	3.41	1.60
APT28	1000	150H, 727, 1-3/4	0.88	6.30	3.41	1.84

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* Available with any length pin – standard pin length is 6".

- Made of high-conductivity aluminum – tin plated
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- In accordance with all NEMA standards



PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
			B	C	L	P	W
AL15-4N	350	96, 299, 655, 1-1/8	3	5/8	7-5/16	3	3
AL18-4N	500	106A, 300, 426 1-5/16	3	5/8	7-5/16	3	3
AL23-4N	750	140H, 301, 342, 1-1/2	4	5/8	8-1/2	3	3
AL24-4N	800	140H, 474, 724, 1-5/8	4	5/8	8-1/2	3	3
AL28-4N	1000	161, 302, 725, 1-3/4	5-5/8	5/8	10-3/8	3	3
AL28CR-4N	1000	161, 302, 725, 1-3/4	6	5/8	11-1/4	3	3
AL29-4N	1250	1-7/8, 727	6	5/8	11-1/8	3-3/8	3-1/8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

Copper Compression Lugs



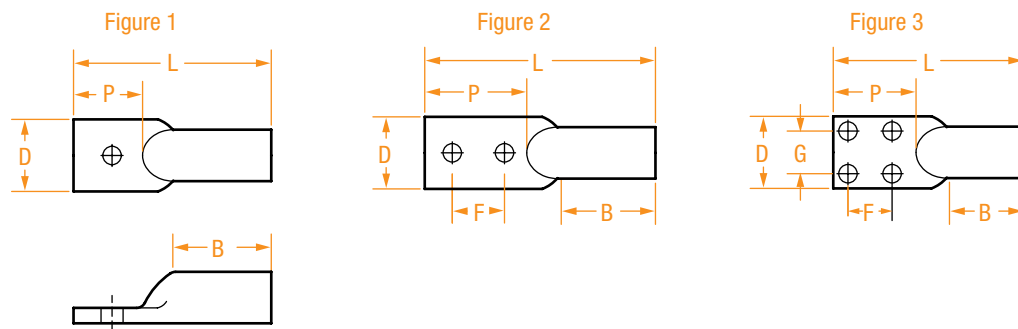
Copper Compression Lugs

	Series	Page
Short-Barrel Copper Lugs	SCL Series.....	17
Short-Barrel Copper Lugs	SCL Series (continued)	18
One-Hole Copper Lugs	CL Series	19
One-Hole Copper Lugs	CL Series (continued).....	20
Straight & Stacking Two-Hole Copper NEMA Lugs.....	CL-2N & CSL-2N Series.....	21
Straight & Stacking Two-Hole Copper NEMA Lugs.....	CL-2N & CSL-2N Series (continued)	22
Four-Hole Copper Lugs.....	CL-4N Series	23
Heavy-Duty Copper Lugs.....	HDCL Series	24
Tapered Copper Lugs.....	TCL Series.....	25
Tapered Copper Lugs.....	TCL Series (continued).....	26
One-Hole Peephole Copper Lugs	CL-P Series.....	27
One-Hole Peephole Copper Lugs	CL-P Series (continued)	28
Two- & Four-Hole Peephole Copper NEMA Lugs	CL-N-P Series.....	29
Mechanical Copper Lugs	ML Series	30
Angled Copper Lugs	CL-2N-90 Series.....	31
Shrouded Copper Lugs	CL-66 Series.....	32

Copper Pin Terminals.....CPT Series..... 33

Ring Bus Copper Lugs AssemblyMT Series..... 34

- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
-  UL listed



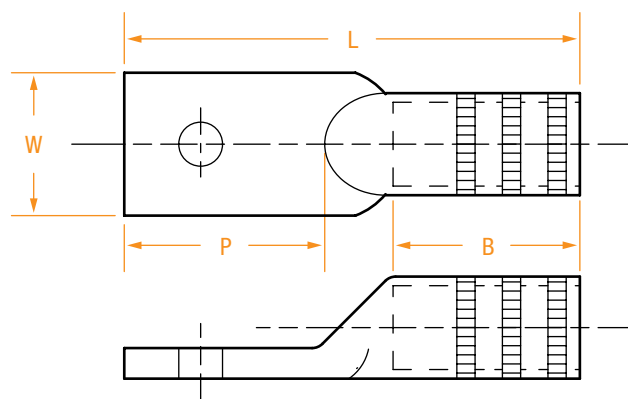
PART NUMBER	FIGURE	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
					L	B	P	D	F & G
SCL3	1	#6	8, 9, or 10	J, 7, TE, 24	1-17/32	13/16	17/32	13/32	—
SCL3-1/4	1	#6	1/4	J, 7, TE, 24	1-11/16	13/16	11/16	7/16	—
SCL3-5/16	1	#6	5/16	J, 7, TE, 24	1-25/32	13/16	23/32	1/2	—
SCL5	1	#4	8, 9 or 10	5/16, 8, TP, 29	1-1/2	13/16	1/2	1/2	—
SCL5-1/4	1	#4	1/4	5/16, 8, TP, 29	1-3/4	13/16	11/16	1/2	—
SCL5-3/8	1	#4	3/8	5/16, 8, TP, 29	1-15/16	13/16	7/8	19/32	—
SCL7-1/4	1	#2	1/4	3/8, 10, TL-TN, 33	1-7/8	7/8	7/8	5/8	—
SCL7-5/16	1	#2	5/16	3/8, 10, TL-TN, 33	1-7/8	7/8	7/8	5/8	—
SCL7-3/8	1	#2	3/8	3/8, 10, TL-TN, 33	1-7/8	7/8	7/8	5/8	—
SCL7-2(3/8)	2	#2	3/8	3/8, 10, TL-TN, 33	3	7/8	1-7/8	5/8	1
SCL7-390	1	#2	3/8	3/8, 10, TL-TN, 33	1-3/4	7/8	7/8	11/16	—
SCL8-5/16	1	#1	5/16	3/8, 11, TB, 37	1-31/32	7/8	25/32	11/16	—
SCL9-5/16	1	1/0	5/16	1/2, 12, TQ, 42	2-1/32	7/8	25/32	3/4	—
SCL9-3/8	1	1/0	3/8	1/2, 12, TQ, 42	2-5/32	7/8	29/32	3/4	—
SCL9-2(5/16)	2	1/0	5/16	1/2, 12, TQ, 42	2-15/16	7/8	1-21/32	3/4	7/8
SCL10-2(1/4)	2	2/0	1/4	9/16, 13, TS, 45	3-1/4	15/16	1-3/4	13/16	7/8
SCL10-2(3/8)	2	2/0	3/8	9/16, 13, TS, 45	3-1/4	15/16	1-3/4	13/16	7/8
SCL10-3/8	1	2/0	3/8	9/16, 13, TS, 45	2-9/32	15/16	29/32	13/16	—
SCL10	1	2/0	1/2	9/16, 13, TS, 45	3	1-1/8	1-3/8	13/16	7/8
SCL10-2N	2	2/0	1/2	9/16, 13, TS, 45	4-15/32	15/16	3	13/16	1-3/4
SCL11-2(3/8)	2	3/0	3/8	5/8, 14, TU, 50	3-1/4	1-1/4	1-7/8	15/16	7/8
SCL11-3/8	1	3/0	3/8	5/8, 14, TU, 50	2-3/8	1-1/4	29/32	29/32	—

(continued)

PART NUMBER	FIGURE	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
					L	B	P	D	F & G
SCL11-2N	2	3/0	1/2	5/8, 14, TU, 50	4-19/32	1-1/4	3	29/32	1-3/4
SCL12-3/8	1	4/0	3/8	5/8, 15, TW-TY, 54	2-1/2	1-1/4	7/8	1	—
SCL12	1	4/0	1/2	5/8, 15, TW-TY, 54	2-1/2	1-1/4	7/8	1	—
SCL12-2N	2	4/0	1/2	5/8, 15, TW-TY, 54	4-3/4	1-1/4	3	1-1/32	1-3/4
SCL13	1	250	1/2	11/16, 16, TR, 60	2 11/16	1-1/4	1-5/32	1-3/32	—
SCL13-2N	2	250	1/2	11/16, 16, TR, 60	4-3/4	1-1/4	3	1-3/32	1-3/4
SCL14	1	300	1/2	781, 17, TV, 66	2-15/16	1-1/4	1-5/32	1-3/16	—
SCL14-2N	2	300	1/2	781, 17, TV, 66	4-13/16	1-1/4	3	1-3/16	1-3/4
SCL15	1	350	1/2	840, 18, TX, 71	3	1-1/8	1-1/2	1-9/32	—
SCL15-2N	2	350	1/2	840, 18, TX, 71	4-29/32	1-1/8	3	1-9/32	1-3/4
SCL16	1	400	5/8	15/16, 19, TX, 76	3-11/32	1-13/32	1-13/32	1-3/16	—
SCL16-2N	2	400	1/2	15/16, 19, TX, 76	5-1/32	1-3/16	3	1-13/16	1-3/4
SCL18	1	500	5/8	1, 20, TH, 87	3-5/8	1-3/8	1-1/2	1-17/32	—
SCL18-2N	2	500	1/2	1, 20, TH, 87	5-5/16	1-3/8	3	1-17/32	1-3/4
SCL20	1	600	5/8	1-1/8, 22, 96	3-13/16	1-3/8	1-3/4	1-11/16	—
SCL20-2N	2	600	1/2	1-1/8, 22, 96	4-1/8	1-3/8	3	1-11/16	1-3/4
SCL23	1	750	5/8	1-5/16, 24, 106	4-11/32	1-5/8	1-15/16	1-29/32	—
SCL23-2N	2	750	1/2	1-5/16, 24, 106	5-3/4	1-5/8	3	1-29/32	1-3/4
SCL28	1	1000	5/8	1-1/2, 27, 125	4-7/8	1-7/8	2-1/8	2-3/16	—
SCL28-2N	2	1000	1/2	1-1/2, 27, 125	6-5/32	1-7/8	3	2-3/16	1-3/4
SCL28-4N	3	1000	3/8	1-1/2, 27, 125	4-15/16	1-7/8	2-3/16	2-3/16	1-1/8
SCL30	1	1500	3/4	31	5-15/32	2	2-1/4	2-11/16	—
SCL30-2N	2	1500	1/2	31	6-17/32	2	3	2-11/16	1-3/4
SCL30-4N	3	1500	1/2	31	5-27/32	2	2-5/8	2-11/16	1-3/8
SCL32	1	2000	3/4	34	5-15/16	2-1/4	2-3/8	3-1/16	—
SCL32-2N	2	2000	1/2	34	7	2-1/4	3	3-1/16	1-3/4
SCL32-4N	3	2000	1/2	34	6-5/16	2-1/4	2-3/4	3-1/16	1-3/4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
-  UL listed



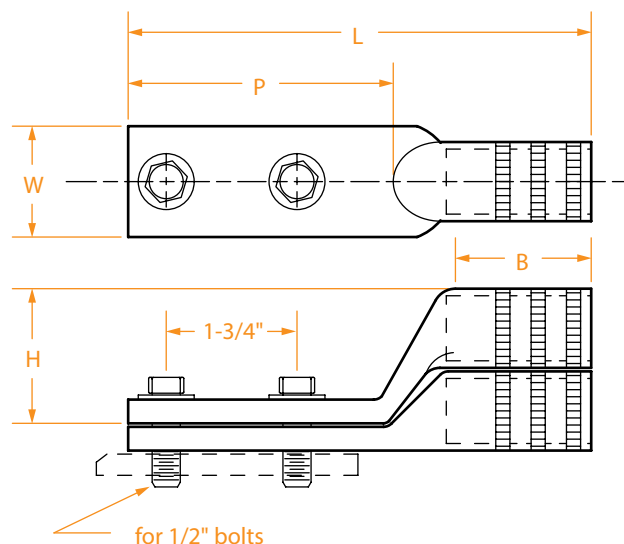
PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
				B	L	P	W
CL2-1/4	#8	1/4	1/4, 6, TC, 21	1	1-25/32	19/32	13/32
CL2-5/16	#8	5/16	1/4, 6, TC, 21	1	1-15/16	3/4	7/16
CL2-3/8	#8	3/8	1/4, 6, TC, 21	1	1-15/16	3/4	15/16
CL3-1/4	#6	1/4	J, 7, TE, 24	1-1/8	2-1/8	3/4	1/2
CL3-5/16	#6	5/16	J, 7, TE, 24	1-1/8	2-1/8	3/4	1/2
CL3-3/8	#6	3/8	J, 7, TE, 24	1-1/8	2-1/8	3/4	11/16
CL5-1/4	#4	1/4	5/16, 8, TP, 29	1-3/16	2-1/16	3/4	5/8
CL5-5/16	#4	5/16	5/16, 8, TP, 29	1-3/16	2-1/16	3/4	5/8
CL5-3/8	#4	3/8	5/16, 8, TP, 29	1-3/16	2-1/16	3/4	5/8
CL7-1/4	#2	1/4	3/8, 10, TL-TN, 33	1-1/4	2-1/4	3/4	11/16
CL7-5/16	#2	5/16	3/8, 10, TL-TN, 33	1-1/4	2-1/4	3/4	11/16
CL7-3/8	#2	3/8	3/8, 10, TL-TN, 33	1-1/4	2-1/4	3/4	11/16
CL7-1/2	#2	1/2	3/8, 10, TL-TN, 33	1-1/4	2-5/8	1	7/8
CL8-1/4	#1	1/4	3/8, 11, TB, 37	1-3/8	2-43/64	57/64	11/16
CL8-5/16	#1	5/16	3/8, 11, TB, 37	1-3/8	2-43/64	57/64	11/16
CL8-3/8	#1	3/8	3/8, 11, TB, 37	1-3/8	2-43/64	57/64	11/16
CL8-1/2	#1	1/2	3/8, 11, TB, 37	1-3/8	2-57/64	1-7/64	3/4
CL9-5/16	1/0	5/16	1/2, 12, TQ, 42	1-7/16	2-49/64	57/64	3/4
CL9-3/8	1/0	3/8	1/2, 12, TQ, 42	1-7/16	2-49/64	57/64	3/4
CL9-1/2	1/0	1/2	1/2, 12, TQ, 42	1-7/16	2-63/64	1-7/64	3/4
CL10-5/16	2/0	5/16	9/16, 13, TS, 45	1-1/2	2-57/64	57/64	13/16
CL10-3/8	2/0	3/8	9/16, 13, TS, 45	1-1/2	2-57/64	57/64	13/16
CL10-1/2	2/0	1/2	9/16, 13, TS, 45	1-1/2	3-7/64	1-7/64	13/16
CL11-5/16	3/0	5/16	5/8, 14, TU, 50	1-1/2	2-59/64	57/64	29/32

(continued)

PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES			
				B	L	P	W
CL11-3/8	3/0	3/8	5/8, 14, TU, 50	1-1/2	3-9/64	1-7/64	29/32
CL11-1/2	3/0	1/2	5/8, 14, TU, 50	1-1/2	3-9/64	1-7/64	29/32
CL12-5/16	4/0	5/16	5/8-1, 15, TW-TY, 54	1-9/16	3-1/64	57/64	1
CL12-3/8	4/0	3/8	5/8-1, 15, TW-TY, 54	1-9/16	3-15/64	1-7/64	1
CL12-1/2	4/0	1/2	5/8-1, 15, TW-TY, 54	1-9/16	3-15/64	1-7/64	1
CL13-5/16	250	5/16	11/16, 16, TR, 60	1-5/8	3-11/64	57/64	1-1/8
CL13-3/8	250	3/8	11/16, 16, TR, 60	1-5/8	3-25/64	1-7/64	1-1/8
CL13-1/2	250	1/2	11/16, 16, TR, 60	1-5/8	3-25/64	1-7/64	1-1/8
CL14-3/8	300	3/8	781, 17, TV, 66	2	3-51/64	1-7/64	1-7/32
CL14-1/2	300	1/2	781, 17, TV, 66	2	3-51/64	1-7/64	1-7/32
CL15-3/8	350	3/8	840, 18, TX, 71	2	3-55/64	—	1-9/32
CL15-1/2	350	1/2	840, 18, TX, 71	2	3-55/64	—	1-9/32
CL16-3/8	400	3/8	15/16, 19, TX, 76	2	3-59/64	—	1-13/32
CL16-1/2	400	1/2	15/16, 19, TX, 76	2	4-5/32	1-7/16	1-13/32
CL16-5/8	400	5/8	15/16, 19, TX, 76	2	4-5/32	1-7/16	1-13/32
CL18-1/2	500	1/2	1, 20, TH, 87	2-1/2	4-3/8	1-7/16	1-9/16
CL18-5/8	500	5/8	1, 20, TH, 87	2-1/2	4-3/8	1-7/16	1-9/16
CL20-1/2	600	1/2	1-1/8, 22, 96, 94H	2-11/16	5-1/8	1-3/4	1-11/16
CL20-5/8	600	5/8	1-1/8, 22, 96, 94H	2-11/16	5-1/8	1-3/4	1-11/16
CL23-1/2	750	1/2	1-5/16, 24, 106	2-7/8	5-11/16	1-15/16	1-29/32
CL23-5/8	750	5/8	1-5/16, 24, 106	2-7/8	5-11/16	1-15/16	1-29/32
CL23-3/4	750	3/4	1-5/16, 24, 106	2-7/8	5-11/16	1-15/16	1-29/32
CL28-1/2	1000	1/2	1-1/2, 27, 125	3	6-1/4	2-1/8	2-3/16
CL28-5/8	1000	5/8	1-1/2, 27, 125	3	6-1/4	2-1/8	2-3/16
CL28-3/4	1000	3/4	1-1/2, 27, 125	3	6-1/4	2-1/8	2-3/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of seamless copper tubing
- Tin-plated to resist corrosion
- The "CSL" lugs are offset to allow the connection of two lugs to a common surface
- The "offset" allows clearance between the lug barrels
-  UL listed



STRAIGHT PART NUMBER	STACKING PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
					B	H*	L	P	W
CL3-2N-1/4		#6	1/4	J, 7, TE, 24	1	—	4-1/2	3	15/32
CL3-2N-5/16		#6	5/16	J, 7, TE, 24	1	—	4-1/2	3	17/32
CL5-2N-1/4		#4	1/4	5/16, 8, TP, 29	1	—	4-1/2	3	1/2
CL5-2N-5/16		#4	5/16	5/16, 8, TP, 29	1	—	4-1/2	3	1/2
CL5-2N-1/2	CSL5-2N	#4	1/2	5/16, 8, TP, 29	1	—	4-1/2	3	1
CL7-2N-1/4		#2	1/4	3/8, 10, TL-TN, 33	1-1/4	—	4-9/16	3	3/4
CL7-2N-5/16		#2	5/16	3/8, 10, TL-TN, 33	1-1/4	—	4-9/16	3	3/4
CL7-2N-1/2	CSL7-2N	#2	1/2	3/8, 10, TL-TN, 33	1-1/4	—	4-9/16	3	3/4
CL8-2N-1/4		#1	1/4	3/8, 11, TB, 37	1-3/8	—	3-3/8	3	21/32
CL8-2N-5/16		#1	5/16	3/8, 11, TB, 37	1-1/2	—	3-3/8	3	21/32
CL9-2N-5/16		1/0	5/16	1/2, 12, TQ, 42	1-1/4	—	4-9/16	3	3/4
CL9-2N-3/8		1/0	3/8	1/2, 12, TQ, 42	1-1/4	—	4-9/16	3	3/4
CL9-2N-1/2	CSL9-2N	1/0	1/2	1/2, 12, TQ, 42	1-1/4	—	4-9/16	3	3/4
CL10-2N-3/8		2/0	3/8	9/16, 13, TS, 45	1-1/2	—	5-1/32	3	27/32
CL10-2N-1/2	CSL10-2N	2/0	1/2	9/16, 13, TS, 45	1-1/2	1-1/2	5-1/32	3	27/32
CL11-2N-3/8		3/0	3/8	5/8, 14, TU, 50	1-1/2	—	5-1/8	3	29/32
CL11-2N-1/2	CSL11-2N	3/0	1/2	5/8, 14, TU, 50	1-1/2	1-5/8	5-1/8	3	29/32
CL12-2N-3/8		4/0	3/8	5/8-1, 15, TW-TY, 54	1-5/8	—	5-3/16	3	1
CL12-2N-1/2	CSL12-2N	4/0	1/2	5/8-1, 15, TW-TY, 54	1-5/8	1-11/16	5-3/16	3	1
CL13-2N-3/8		250	3/8	11/16, 16, TR, 60	1-3/4	—	5-1/4	3	1-1/8
CL13-2N-1/2	CSL13-2N	250	1/2	11/16, 16, TR, 60	1-3/4	1-3/4	5-1/4	3	1-7/32

(continued)

STRAIGHT PART NUMBER	STACKING PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
					B	H*	L	P	W
CL14-2N-3/8		300	3/8	781, 17, TV, 66	2	—	5-3/4	3	1-7/32
CL14-2N-1/2	CSL14-2N	300	1/2	781, 17, TV, 66	2	1-13/16	5-3/4	3	1-7/32
CL15-2N-3/8		350	3/8	840, 18, TX, 71	2	—	5-3/4	3	1-5/16
CL15-2N-1/2	CSL15-2N	350	1/2	840, 18, TX, 71	2	1-7/8	5-3/4	3	1-5/16
CL16-2N-3/8		400	3/8	15/16, 19, TX, 76	2-1/8	—	6	3-1/16	1-13/32
CL16-2N-1/2	CSL16-2N	400	1/2	15/16, 19, TX, 76	2-1/8	1-15/16	6	3-3/32	1-13/32
CL18-2N-1/2	CSL18-2N	500	1/2	1, 20, TH, 87	2-1/4	2-1/16	6-1/16	3-1/8	1-9/16
CL20-2N-1/2	CSL20-2N	600	1/2	1-1/8, 22, 96	2-5/8	2-3/16	6-23/32	3-1/8	1-11/16
CL23-2N-1/2	CSL23-2N	750	1/2	1-5/16, 24, 106	2-7/8	2-5/16	6-3/4	3-1/8	1-3/4
CL28-2N-1/2	CSL28-2N	1000	1/2	1-1/2, 27, 125	2-15/16	2-5/8	7-1/4	3-1/4	2-5/32
CL28-2N-1-3/4	CSL28-2N-1-3/4	1000	1/2	1-1/2, 27, 125	2-15/16	2-5/8	7-1/4	3-1/4	1-3/4**
CL29-2N-1/2	CSL29-2N	1250	1/2	1-5/8, 29	2-1/2	—	7-1/4	3-1/16	1-11/16
CL30-2N-1/2	CSL30-2N	1500	1/2	1-3/4, 31, 150	3-3/16	—	7-1/2	3	2-11/16
CL32-2N-1/2	CSL32-2N	2000	1/2	2.00, 34, 175	3-3/16	—	8-1/16	3-3/16	3-1/16

* Only for stacking lugs.

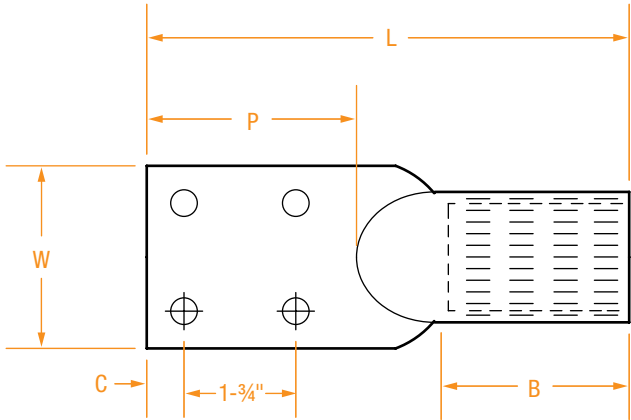
** Trimmed to 1-3/4" max. to fit side by side on NEMA spades.

*** Brazed pad.

FOUR-HOLE COPPER LUGS

CL-4N Series

- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
- Meets all NEMA standards
-  UL listed

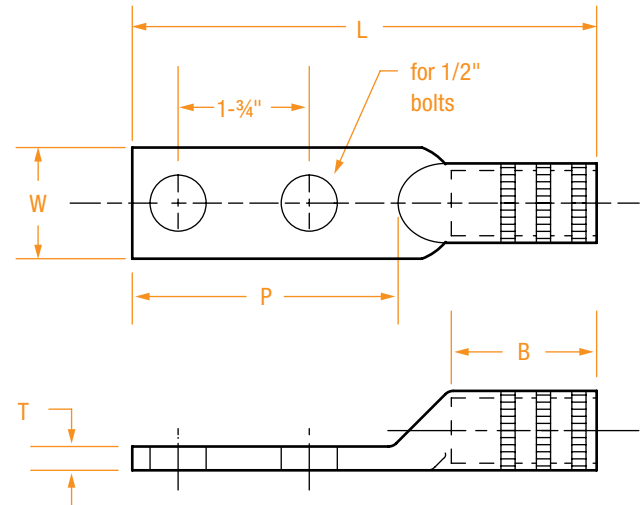


PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				B	C	L	P	W
CL18-4N-1/2	500	1/2	20, 1, 87	2-1/4	5/8	6-1/4	3-1/8	3
CL23-4N-1/2	750	1/2	24, 1-5/16, 106	2-7/8	5/8	7	3-1/8	3
CL28-4N-1/2	1000	1/2	1-1/2, 27, 125	3	5/8	7-1/4	3-1/4	3
CL29-4N-1/2	1250	1/2	1-5/8, 29	3-1/4	5/8	7-3/4	3	3
CL30-4N-1/2	1500	1/2	1-3/4, 31, 150	3-3/16	5/8	7-1/2	3	2-11/16
CL32-4N-1/2	2000	1/2	2.00, 34, 175	3-7/16	5/8	8-1/16	3-3/16	3-1/16
CL33-4N-1/2	2500	1/2	486, L486RT	3-5/8	5/8	8-3/4	3-1/8	3-3/4
CL371885-1/2	2750	1/2	729	3-3/4	5/8	9	3-1/8	3

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

COPPER LUGS

- Designed for heavy-duty applications
- Features include heavy wall barrel and thicker contact pad
- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
-  UL listed

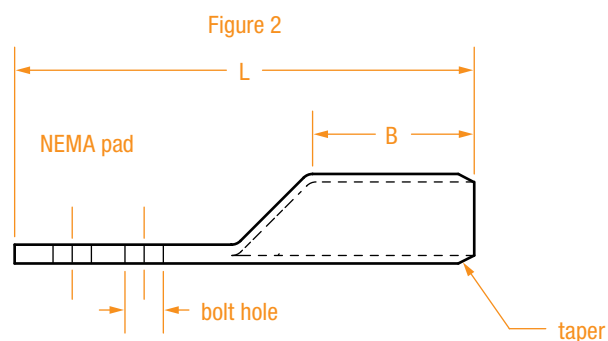
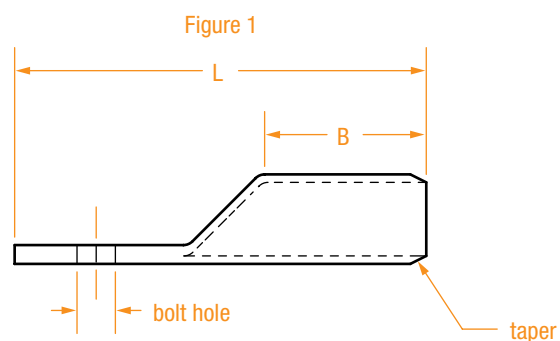


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
			B	T	L	P	W
HDCL7-2N	#2	TQ, 42, 164, 9/16	1-1/2	0.17	5	3	15/16
HDCL8-2N	#1	TS, 45, 165, 5/8	1-1/2	0.18	5-1/4	3	15/16
HDCL9-2N	1/0	TU, 50, 165, 5/8	1-1/2	0.19	5-1/4	3	15/16
HDCL10-2N	2/0	TZ, 166, 5/8	1-1/2	0.26	5-1/2	3	15/16
HDCL11-2N	3/0	62, 167, 737	1-1/2	0.29	5-1/2	3	1
HDCL12-2N	4/0	71, 168, 840	1-5/8	0.30	5-1/2	3	1-1/4
HDCL13-2N	250	80, 169	1-5/8	0.34	5-5/8	3	1-1/4
HDCL14-2N	300	87, 170, 1	3	0.39	6-9/16	3-1/4	1-1/2
HDCL15-2N	350	94, 299, 1-1/8	2-1/4	0.43	6-9/16	3-1/4	1-7/16
HDCL16-2N	400	209, 1-1/4	3	0.44	6-3/4	3-1/4	1-3/4
HDCL18-2N	500	112, 210, 1-5/16	3	0.48	7-5/16	3-1/4	1-3/4
HDCL20-2N	600	125, 608, 1-1/2	3	0.51	7-1/2	3-5/8	1-15/16
HDCL23-2N	750	138, 627, 1-5/8	3-3/8	0.64	8-1/4	3-5/8	2-3/16
HDCL28-2N	1000	160, 345, 2	4-5/8	0.62	9-5/8	3-5/8	2-5/8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For heavy-duty one-hole lug, delete the "-2N" from the part number. For use with a different bolt size, add the bolt size to the part number (example: HDCL9-2N-3/8 will have two 7/16" holes for 3/8" bolts). For four-hole lugs, change "-2N" to "-4N".

- Made of seamless pure copper tubing
- Tin-plated to resist corrosion
- Tapered for high-voltage connections
- One-hole and two-hole NEMA standard
-  UL listed



PART NUMBER*	FIGURE	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				L	B	PAD WIDTH	PAD THICKNESS	BOLT HOLE
TCL5	1	#4	5/16, 8, TP, 29	2-3/16	1-1/4	5/8	3/32	7/16
TCL7	1	#2	3/8, 10, TL-TN, 33	2-5/16	1-3/8	5/8	7/64	7/16
TCL8	1	#1	3/8, 11, TB, 37	2-1/2	1-3/8	11/16	7/64	7/16
TCL9	1	1/0	1/2, 12, TQ, 42	2-5/8	1-3/8	13/16	1/8	7/16
TCL9-2N	2	1/0	1/2, 12, TQ, 42	4-7/8	1-3/8	13/16	1/8	9/16
TCL10	1	2/0	9/16, 13, TS, 45	3	1-1/2	7/8	1/8	9/16
TCL10-2N	2	2/0	9/16, 13, TS, 45	5	1-1/2	7/8	1/8	9/16
TCL11	1	3/0	5/8, 14, TU, 50	3-1/8	1-1/2	15/16	1/8	9/16
TCL11-2N	2	3/0	5/8, 14, TU, 50	5-1/8	1-1/2	15/16	1/8	9/16
TCL12	1	4/0	5/8-1, 15, TW-TY	3-5/16	1-5/8	1	9/64	9/16
TCL12-2N	2	4/0	5/8-1, 15, TW-TY	5-1/4	1-5/8	1	9/64	9/16
TCL13	1	250	11/16, 16, TR, 60	3-3/8	1-5/8	1-1/8	5/32	9/16
TCL13-2N	2	250	11/16, 16, TR, 60	5-5/16	1-5/8	1-1/8	5/32	9/16
TCL14	1	300	781, 17, TV, 66	3-3/4	2	1-3/16	5/32	9/16
TCL14-2N	2	300	781, 17, TV, 66	5-3/4	2	1-3/16	5/32	9/16
TCL15	1	350	840, 18, TX, 71	3-13/16	2	1-5/16	15/16	9/16

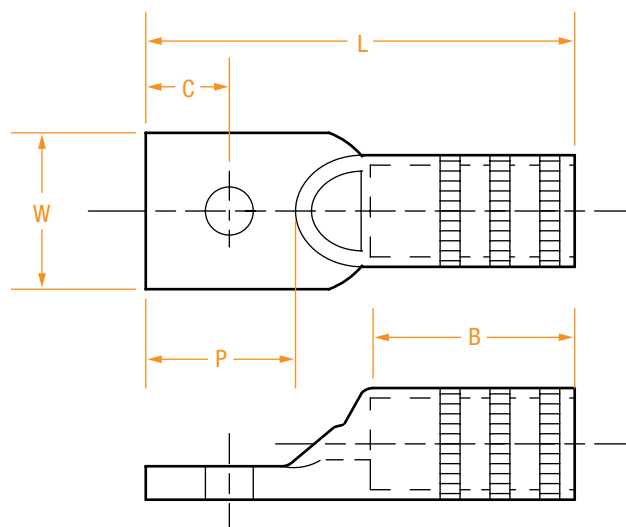
(continued)

PART NUMBER*	FIGURE	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				L	B	PAD WIDTH	PAD THICKNESS	BOLT HOLE
TCL15-2N	2	350	840, 18, TX, 71	5-13/16	2	1-5/16	15/16	9/16
TCL16-2N	2	400	15/16, 19, 76	6	2-1/8	1-7/16	3/16	9/16
TCL18-2N	2	500	1, 20, 87	6-3/16	2-1/4	1-9/16	15/64	9/16
TCL20-2N	2	600	1-1/8, 22, 94H	6-11/16	2-11/16	1-11/16	17/64	9/16
TCL23-2N	2	750	1-5/16, 24, 106	7	2-7/8	1-15/16	19/64	9/16
TCL24-2N	2	800	1-5/16, 25, 106	7-1/8	2-15/16	2	19/64	9/16
TCL28-2N	2	1000	1-1/2, 27, 125	7-1/4	3	2-3/16	21/64	9/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* "-2N" indicates a two-hole NEMA pad.

- Opening allows inspection to ensure complete cable insertion
- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
-  UL listed



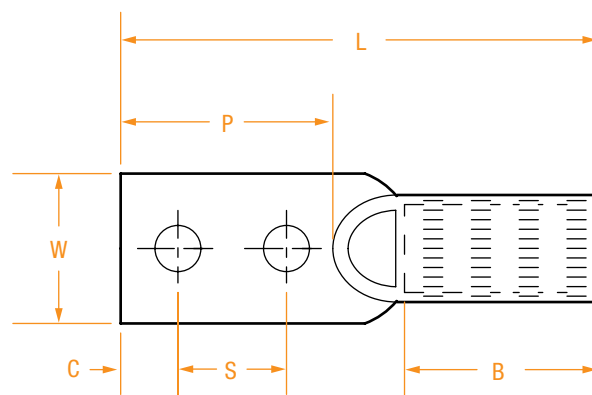
PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				B	C	L	P	W
CL2-1/4-P	#8	1/4	1/4, 6, TC, 21	1/2	5/16	1-7/32	19/32	13/32
CL3-1/4-P	#6	1/4	J, 7, TE, 24	13/16	3/8	1-3/4	3/4	1/2
CL3-5/16-P	#6	5/16	J, 7, TE, 24	13/16	3/8	1-3/4	3/4	1/2
CL3-3/8-P	#6	3/8	J, 7, TE, 24	13/16	3/8	1-3/4	3/4	9/16
CL5-1/4-P	#4	1/4	5/16, 8, TP, 29	29/32	3/8	1-63/64	57/64	19/32
CL5-5/16-P	#4	5/16	5/16, 8, TP, 29	29/32	3/8	1-63/64	57/64	19/32
CL5-3/8-P	#4	3/8	5/16, 8, TP, 29	29/32	3/8	1-63/64	57/64	19/32
CL7-1/4-P	#2	1/4	3/8, 10, TL-TN, 33	7/8	3/8	2	57/64	5/8
CL7-5/16-P	#2	5/16	3/8, 10, TL-TN, 33	7/8	3/8	2	57/64	5/8
CL7-3/8-P	#2	3/8	3/8, 10, TL-TN, 33	7/8	3/8	2	57/64	5/8
CL7-1/2-P	#2	1/2	3/8, 10, TL-TN, 33	7/8	17/32	2-5/32	1-7/64	3/4
CL8-1/4-P	#1	1/4	3/8, 11, TB, 37	7/8	3/8	2-9/64	57/64	11/16
CL8-5/16-P	#1	5/16	3/8, 11, TB, 37	7/8	3/8	2-9/64	57/64	11/16
CL8-3/8-P	#1	3/8	3/8, 11, TB, 37	7/8	3/8	2-9/64	57/64	11/16
CL8-1/2-P	#1	1/2	3/8, 11, TB, 37	7/8	17/32	2-15/64	1-7/64	3/4
CL9-5/16-P	1/0	5/16	1/2, 12, TQ, 42	7/8	3/8	2-9/64	57/64	3/4
CL9-3/8-P	1/0	3/8	1/2, 12, TQ, 42	7/8	3/8	2-9/64	57/64	3/4
CL9-P	1/0	1/2	1/2, 12, TQ, 42	7/8	17/32	2-15/64	1-7/64	3/4
CL10-5/16-P	2/0	5/16	9/16, 13, TS, 45	15/16	3/8	2-5/64	57/64	13/16
CL10-3/8-P	2/0	3/8	9/16, 13, TS, 45	15/16	3/8	2-5/64	57/64	13/16
CL10-P	2/0	1/2	9/16, 13, TS, 45	15/16	17/32	2-9/32	1-7/64	13/16
CL11-5/16-P	3/0	5/16	5/8, 14, TU, 50	1-1/8	3/8	2-17/64	57/64	29/32

(continued)

PART NUMBER	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES				
				B	C	L	P	W
CL11-3/8-P	3/0	3/8	5/8, 14, TU, 50	1-1/8	17/32	2-1/2	1-7/64	29/32
CL11-P	3/0	1/2	5/8, 14, TU, 50	1-1/8	17/32	2-1/2	1-7/64	29/32
CL12-5/16-P	4/0	5/16	5/8-1, 15 TW-TY, 54	1-3/16	3/8	2-7/16	57/64	1
CL12-3/8-P	4/0	3/8	5/8-1, 15 TW-TY, 54	1-3/16	17/32	2-9/16	1-7/64	1
CL12-1/2-P	4/0	1/2	5/8-1, 15 TW-TY, 54	1-3/16	17/32	2-9/16	1-7/64	1
CL13-3/8-P	250	3/8	11/16, 16, TR, 60	1-1/4	17/32	2-13/16	1-7/64	1-1/8
CL13-P	250	1/2	11/16, 16, TR, 60	1-1/4	17/32	2-13/16	1-7/64	1-1/8
CL14-P	300	1/2	781, 17, TV, 66	1-1/4	17/32	2-13/16	1-7/64	1-7/32
CL14-5/8-P	300	5/8	781, 17, TV, 66	1-1/4	21/32	3-1/32	1-11/32	1-7/32
CL15-P	350	1/2	840, 18, TX, 71	1-1/4	17/32	2-15/16	1-7/64	1-9/32
CL15-5/8-P	350	5/8	840, 18, TX, 71	1-1/4	21/32	3-3/32	1-11/32	1-9/32
CL16-P	400	1/2	15/16, 19, TX 76	1-1/2	21/32	3-9/32	1-11/32	1-13/32
CL16-5/8-P	400	5/8	15/16, 19, TX 76	1-1/2	21/32	3-9/32	1-11/32	1-13/32
CL18-P	500	1/2	1, 20, TH, 87	1-3/4	21/32	3-17/32	1-11/32	1-17/32
CL18-5/8-P	500	5/8	1, 20, TH, 87	1-3/4	21/32	3-17/32	1-11/32	1-17/32
CL20-P	600	1/2	1-1/8, 22, 96	1-7/16	7/8	3-7/8	1-3/4	1-11/16
CL20-5/8-P	600	5/8	1-1/8, 22, 96	1-7/16	7/8	3-7/8	1-3/4	1-11/16
CL23-P	750	1/2	1-5/16, 24, 106	1-5/8	7/8	4-3/8	1-15/16	1-7/8
CL23-5/8-P	750	5/8	1-5/16, 24, 106	1-5/8	7/8	4-3/8	1-15/16	1-7/8
CL23-3/4-P	750	3/4	1-5/16, 24, 106	1-5/8	31/32	4-3/8	1-15/16	1-7/8
CL28-P	1000	1/2	1-1/2, 27, 125	1-15/16	15/16	4-15/16	2-1/8	2-5/32
CL28-5/8-P	1000	5/8	1-1/2, 27, 125	1-15/16	15/16	4-15/16	2-1/8	2-5/32
CL28-3/4-P	1000	3/4	1-1/2, 27, 125	1-15/16	1-1/16	4-15/16	2-1/8	2-5/32
CL30-3/4-P	1500	3/4	1-3/4, 31, 150	2	1-1/8	5-15/32	2-1/4	2-43/64
CL32-3/4-P	2000	3/4	2.00, 34, 150	2-1/4	1-3/16	5-15/16	2-3/8	3-1/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of seamless copper tubing
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
-  UL listed

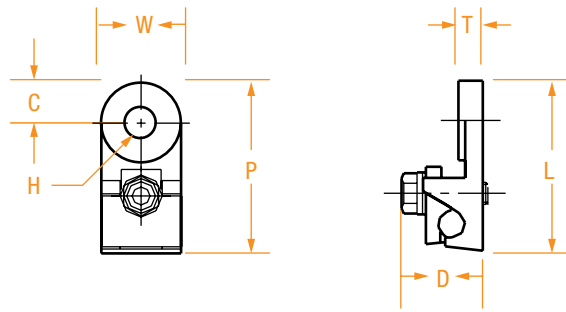


PART NUMBER*	WIRE SIZE	BOLT SIZE	INSTALLING DIES	DIMENSIONS IN INCHES					
				B	C	L	P	S	W
CL10-2N-P	2/0	1/2	9/16, 13, TS, 45	15/16	5/8	4-15/32	3	1-3/4	13/16
CL11-2N-P	3/0	1/2	5/8, 14, TU, 50	1	5/8	4-5/8	3	1-3/4	29/32
CL12-2N-P	4/0	1/2	5/8-1, 15, TW-TY, 54	1	5/8	4-11/16	3	1-3/4	1
CL13-2N-P	250	1/2	11/16, 16, TR, 60	1-1/16	5/8	4-3/4	3	1-3/4	1-3/32
CL14-2N-P	300	1/2	7/8, 17, TV, 66	1-1/16	5/8	4-13/16	3	1-3/4	1-3/16
CL15-2N-P	350	1/2	840, 18, TX, 71	1-1/8	5/8	4-15/16	3	1-3/4	1-9/32
CL16-2N-P	400	1/2	15/16, 19, TX, 76	1-3/16	5/8	5-1/8	3	1-3/4	1-3/8
CL18-2N-P	500	1/2	1, 20, TH, 87	1-3/8	5/8	5-5/16	3	1-3/4	1-17/32
CL20-2N-P	600	1/2	1-1/8, 22, 96	1-3/8	5/8	5-1/2	3	1-3/4	1-11/16
CL23-2N-P	750	1/2	1-5/16, 24, 106	1-5/8	5/8	5-3/4	3	1-3/4	1-29/32
CL28-2N-P	1000	1/2	1-1/2, 27, 125	1-7/8	5/8	6-5/32	3	1-3/4	2-11/64
CL30-2N-P	1500	1/2	1-3/4, 31, 150	2	5/8	6-17/32	3	1-3/4	2-43/64
CL32-2N-P	2000	1/2	2.00, 34, 150	2-1/4	5/8	7	3	1-3/4	3-1/16
CL30-4N-P	1500	1/2	1-3/4, 31, 150	2	5/8	6-17/32	3	1-3/4	3-1/16
CL32-4N-P	2000	1/2	2.00, 34, 150	2-1/4	5/8	7	3	1-3/4	3-1/16

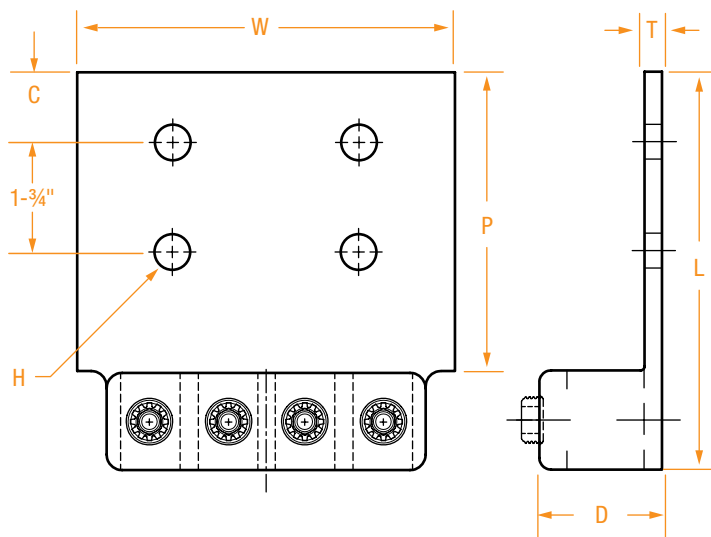
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* "-2N" indicates a two-hole NEMA pad. — "-4N" indicates a four-hole NEMA pad.

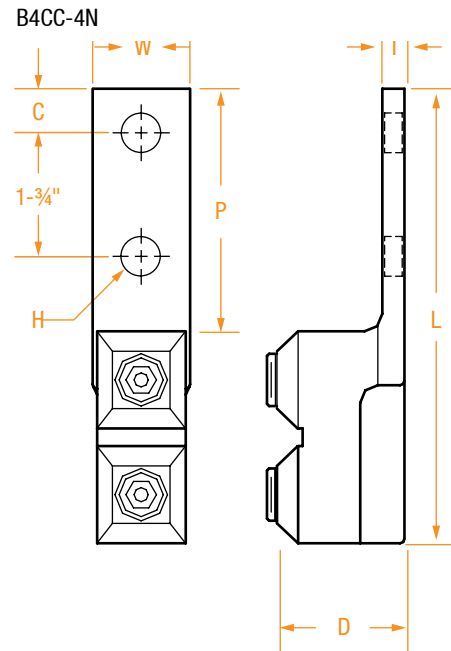
- Made from high-conductivity copper alloy
- Designed to accept a range of conductor sizes



ML8-10



B4CC-4N



ML13-18

* B3CC-4N (not shown in the above photo) has 1-3/4" hole spacing front to back and side to side.
 ** B4CC-4N has 3" side-to-side hole spacing and 1-3/4" hole spacing front to back as shown in the drawing.

PART NUMBER	CABLE SIZE	CABLE PORTS	BOLTS PER CABLE PORT	HOLES IN PAD	DIMENSIONS IN INCHES							DRIVE SIZE
					L	W	C	H	D	T	P	
ML13-18	250-500	1	2	2	6-7/16	1-1/2	5/8	9/16	1-3/4	3/8	3-1/4	3/8 Socket
ML13-18-HEX	250-500	1	2	2	6-7/16	1-1/2	5/8	9/16	1-3/4	3/8	3-1/4	1-1/8 Hex
ML13-18-SL	250-500	1	1	2	5	1-1/2	5/8	9/16	1-3/4	3/8	3-1/4	3/8 Socket
ML13-18-SL-HEX	250-500	1	1	2	5	1-1/2	5/8	9/16	1-3/4	3/8	3-1/4	1-1/8 Hex
ML8-10	#1-2/0	1	1	1	2-3/8	1-13/32	9/16	9/16	1-3/32	11/32	1-3/8	--
B3CC-4N*	250-500	3	1	4	6	4	7/8	9/16	2 to 2-1/4	1/4	4-3/8	3/8 Socket
B4CC-4N**	250-500	4	1	4*	6-3/8	6	1-1/8	9/16	2 to 2-1/4	5/16	4-3/4	3/8 Socket
ML23-28-BD	750-1000	1	1	2	5	1-7/8	5/8	9/16	1-3/4	1/2	3	1-5/16 Hex
ML23-28-SL	750-1000	1	1	2	6-1/2	1-3/4	5/8	9/16	2-1/2	7/16	3-1/2	3/8 Socket
ML23-28-SL-HEX	750-1000	1	1	2	6-1/2	1-3/4	5/8	9/16	2-1/2	7/16	3-1/2	1-1/8 Hex
ML23-28	750-1000	1	2	2	6-1/2	1-3/4	5/8	9/16	2-1/2	7/16	3-1/2	3/8 Socket
ML23-28-HEX	750-1000	1	2	2	6-1/2	1-3/4	5/8	9/16	2-1/2	7/16	3-1/2	1-1/8 Hex

* B3CC-4N (not shown in the above photo) has 1-3/4" hole spacing front to back and side to side.

** B4CC-4N has 3" side-to-side hole spacing and 1-3/4" hole spacing front to back as shown in the drawing.

- Made of seamless copper tubing
- Lugs available with a "BEND" or a "TWIST"
- Specify the angle in the part number
- Tin-plated to resist corrosion
- Marked with conductor sizes and die information
- Meets all NEMA standards

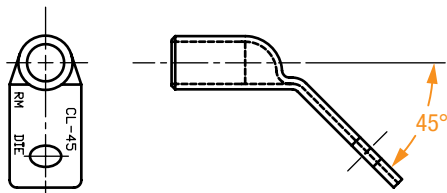


Figure 1
45° Bend
Add "-45" to part #

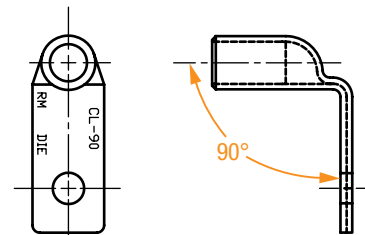


Figure 2
90° Bend
Add "-90" to part #

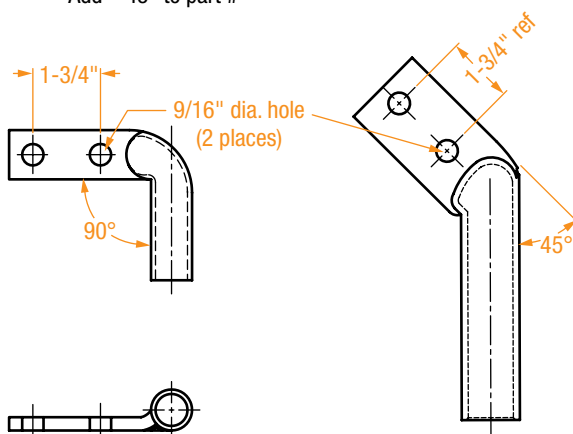


Figure 3
90° Left Twist
Add "-90L" to part #

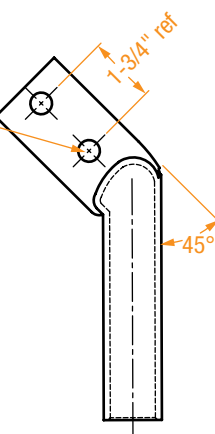


Figure 4
45° Left Twist
Add "-45L" to part #

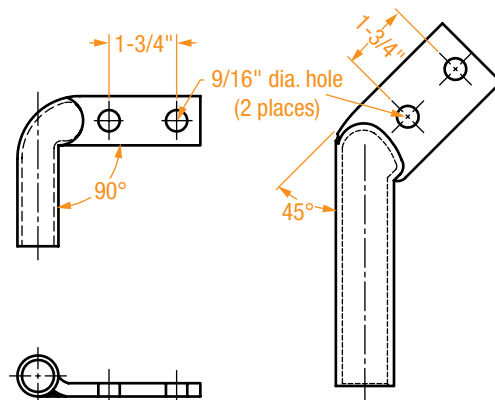


Figure 5
90° Right Twist
Add "-90R" to part #

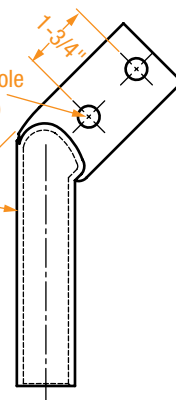


Figure 6
45° Right Twist
Add "-45R" to part #

To determine the correct part number, use the part numbers of the basic copper lug and add the following suffixes.

- "-45" = 45° bend straight up – Figure 1.
- "-90" = 90° bend straight up – Figure 2
- "-90L" = 90° twist to the LEFT – Figure 3
- "-45L" = 45° twist to the LEFT – Figure 4.
- "-90R" = 90° twist to the RIGHT – Figure 5
- "-45R" = 45° twist to the RIGHT – Figure 6.

FOR OTHER ANGLES AND CONFIGURATIONS, PLEASE CONTACT THE FACTORY.

- Made of seamless copper tubing
- Hot tin dipped
- The shroud prevents water from seeping into the copper conductor strands and minimizes taping
- Contact the factory for other sizes

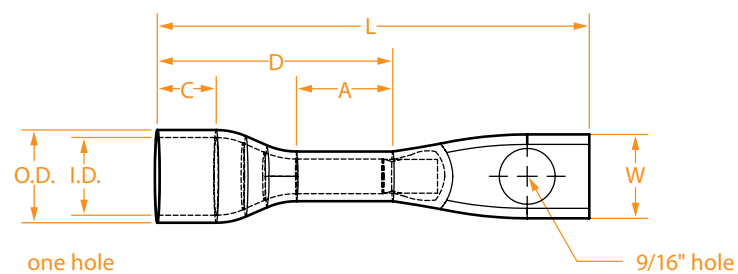


Figure 1

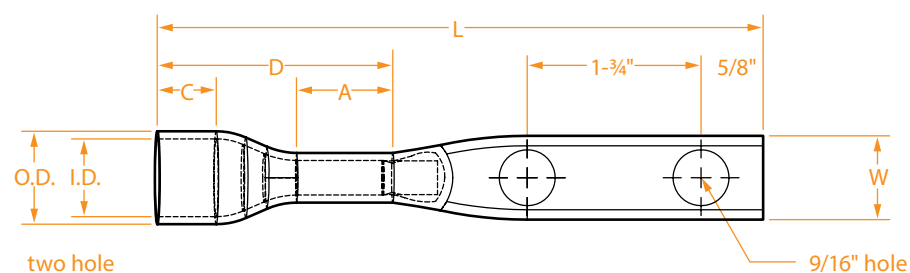


Figure 2

PART NUMBER	FIG	CONDUCTOR	APPROXIMATE DIMENSIONS IN INCHES							DIE INDEX
			O.D.	I.D.	A	C	D	L	w	
CL5-1-66PS	1	#4 STR	0.72	.625	1.25	.625	2.125	3.5	.875	½, 12
CL5-2N-066	2	#4 STR	.72	.55	1.625	.625	2.50	6	.875	½, 12
CL7-2N-066	2	#2 STR	.95	.80	1.25	.80	2.50	6-1/8	.875	164

- The barrel is made of seamless copper tubing
- The pin is made of solid copper rod
- Connection brazed watertight
- Crimp with standard dies
- Hot tin dipped
- Contact the factory for other sizes

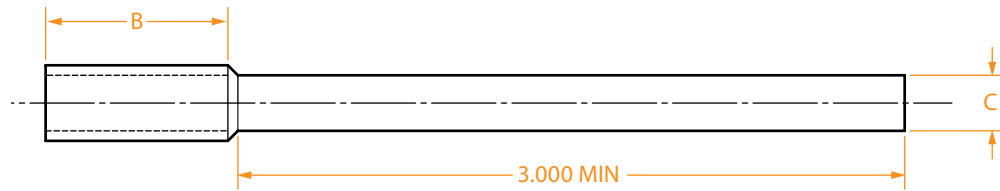


Figure 1

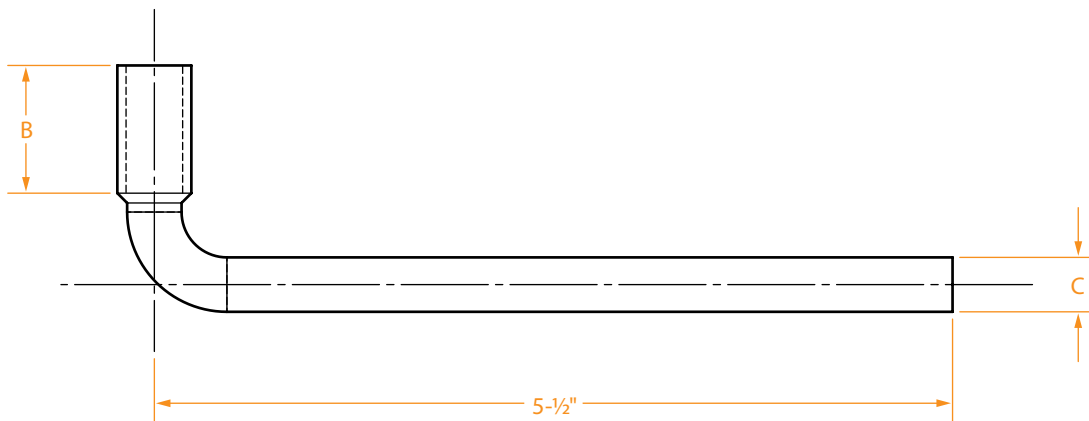
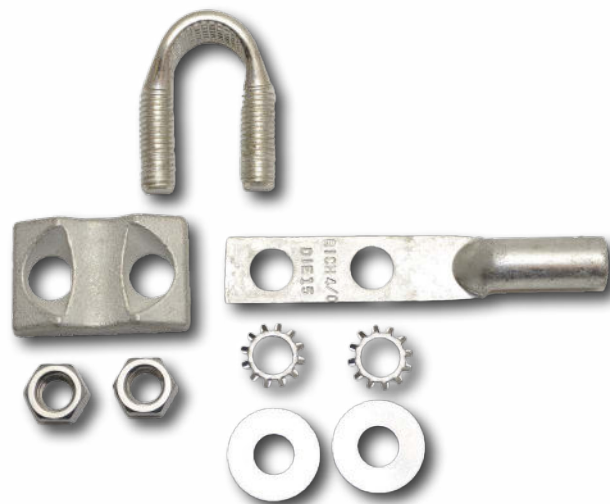
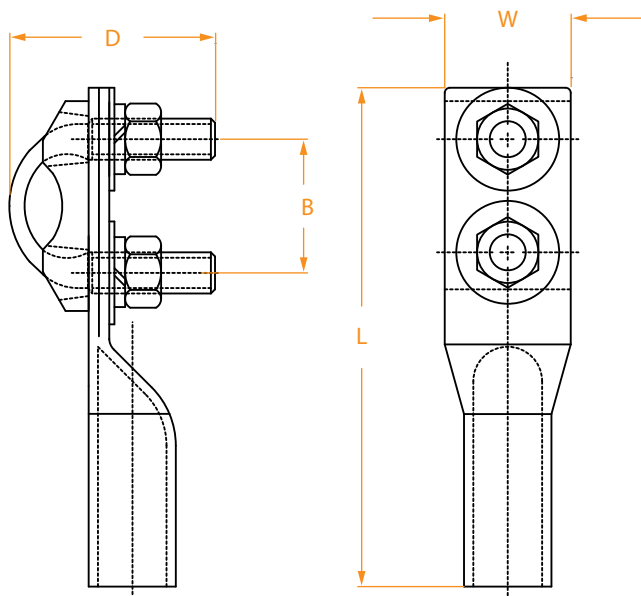


Figure 2

PART NUMBER	FIG	CONDUCTOR			DIE INDEX
			B (min)	C (Pin O.D.)	
CPT5	1	#4 Cu str	.82	0.250	5/16, 8
CPT9	1	1/0 Cu str	.88	0.375	1/2, 12
CPT10	1	2/0 Cu str	.94	0.375	9/16, 13
CPT12	1	4/0 Cu str	1.00	0.460	5/8-1, 15
CPT15	1	350 Cu str	1.12	0.562	840, 18
CPT18	1	500 Cu str	1.38	0.562	1, 20
CPT5-90	2	#4 Cu str	.81	0.375	5/16, 8
CPT9-90	2	1/0 Cu str	.88	0.375	1/2, 12
CPT12-90	2	4/0 Cu str	1.00	0.460	5/8-1, 15
CPT15-90	2	350 Cu str	1.12	0.562	840, 18
CPT18-90	2	500 Cu str	1.38	0.562	1, 20

- Designed to connect secondary cable to the "ring bus" of a network system
- Commonly used for:
 - Network system "ring bus" tap connections
 - Manhole/vault neutral tap connections
- Lug, U-Bolt and Bronze Saddle are tin-plated
- Hardware includes star and flat washers and nuts to tighten down U-Bolt



PART NUMBER	U BOLT WIRE SIZE (RUN)	LUG SIZE (TAP)	APPROXIMATE DIMENSIONS IN INCHES			
			D	B	L	w
MT18-12	350-800 MCM	4/0 AWG	2 3/8	1-3/8	5-1/8	1 17/32
MT18	350-800 MCM	500 MCM	2-3/8	1-3/8	6-1/16	1 17/32
MT23	500-800 MCM	750 MCM	2-1/2	1-5/8	7	1-29/32
MT18-12-N	500-1000 MCM	4/0 AWG	2-1/2	1-3/4	5-3/16	1
MT18-N	500-1000 MCM	500 MCM	2-1/2	1-3/4	6-1/16	1-9/16
MT23-18-N	500-1000 MCM	500 MCM	2-1/2	1-3/4	6-1/16	1-9/16
MT23-N	500-1000 MCM	750 MCM	2-1/2	1-3/4	6-3/4	1-3/4

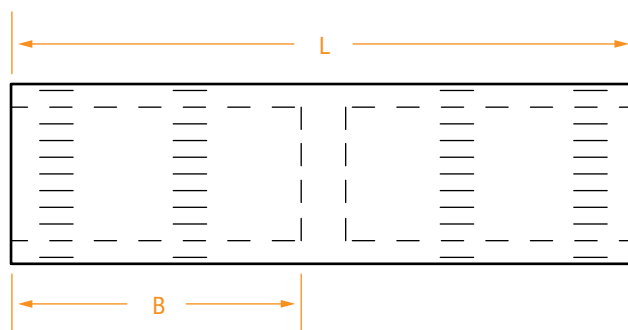
Aluminum Compression Connectors



Aluminum Compression Connectors

	Series	Page
Short Aluminum Splices.....	SALC Series	37
Aluminum Splices.....	ALC Series.....	38
Aluminum Splices – Common Die	ALCCD Series.....	39
Tapered Aluminum Splices.....	OATC Series	40
Tapered Aluminum Splices – Common Die	OATCCD Series.....	41
Aluminum Tees	ALT Series	42
Aluminum Tapered Tees.....	ALTT Series.....	43
Aluminum Tapered Tees.....	ALTT Series (continued).....	44
Aluminum Reducers	ALCR Series	45
Tapered Aluminum Reducers	OATCR Series	46
Aluminum Reducers – Common Die	ALCRCD Series.....	47

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information

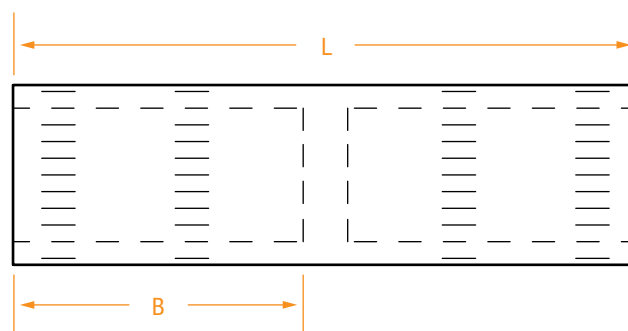


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
SALC3	#6	TP, 29, 346, 161, 5/16	3/4	1-5/8
SALC5	#4	TB, 37, 375, 162	7/8	1-7/8
SALC7	#2	TQ, 45, 348, 6A, 1/2, 163	15/16	2
SALC8	#1	TQ, 45, 348, 6A, 1/2, 163	15/16	2
SALC9	1/0	TU, BG, 8A, 5/8, 52, 243	1	2-1/8
SALC10	2/0	TWTY, 297, 9A, 5/8-1, 58	1-3/32	2-5/16
SALC11	3/0	TV, 10A, 781, 66, 247	1-1/4	2-5/8
SALC12	4/0	TX, 298, 11A, 840, 71H	1-5/16	2-3/4
SALC13	250	TX, 11A, 840, 76, 249	1-3/8	2-15/16
SALC14	300	TX, 12A, 87H, 251	1-15/32	3-1/8
SALC15	350	96, 299, 13A, 94A	1-19/32	3-3/8
SALC16	400	96, 13A, 655, 99H	1-25/32	3-3/4
SALC18	500	106A, 14A, 300, 317	1-27/32	3-7/8
SALC20	600	115H, 473, 786, 936, 112H	1-15/16	4-1/8
SALC23	750	140H, 301	2-3/16	4-5/8
SALC24	800	140H, 474	2-1/4	4-3/4
SALC28	1000	302, 161	2-1/2	5-1/4
SALC29	1250	422	3-1/16	6-1/2
SALC30	1500	478, 189	3-1/16	6-1/2
SALC31	1750	204, 729, 40AH	3-1/16	6-1/2
SALC32	2000	479, 735, 214	3-9/16	7-1/2

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned splices, add "-TN" to the part number (example: SALC3-TN for #6 tinned splice).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information

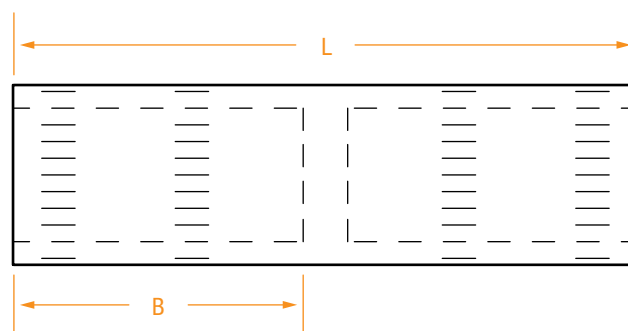


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
ALC5	#4	TB, 37, 375, 162	1-7/16	3-1/8
ALC7	#2	TQ, 45, 348, 6A, 1/2	1-5/8	3-13/32
ALC8	#1	TQ, 45, 348, 6A, 1/2	1-5/8	3-13/32
ALC9	1/0	TU, BG, 8A, 5/8, 52, 243	1-7/16	3-11/16
ALC10	2/0	TWTY, 297, 9A, 5/8-1, 58	1-3/4	3-11/16
ALC11	3/0	TV, 10A, 781, 66, 247	1-13/16	3-15/16
ALC12	4/0	TX, 298, 11A, 840, 71H	1-7/8	4-3/16
ALC13	250	TX, 11A, 840, 76, 249	2-7/16	5-3/16
ALC14	300	TX, 12A, 87H, 251	2-11/16	5-11/16
ALC15	350	96, 299, 13A, 94A	3-1/4	6-5/8
ALC16	400	96, 13A, 655, 99H	3-7/16	7-7/32
ALC18	500	106, 106A, 14A, 300, 317	3-5/8	7-17/32
ALC20	600	115H, 473, 112H	3-3/4	7-25/32
ALC23	700-750	140H, 301	4	8-9/32
ALC24	800	140H, 474	4-1/16	8-7/16
ALC28	1000	302, 161	4-11/32	9-7/8
ALC29	1250	422	4-5/8	10
ALC30	1500	478, 189	6-11/32	13
ALC31	1750	204, 729, 40AH	6-5/16	13
ALC32	2000	735, 214	7-11/32	15

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned splices, add "-TN" to the part number (example: ALC5-TN for #4 tinned splice). For a different length connector, add the length in inches to the part number (example: ALC28-8in for an 8" connector).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion

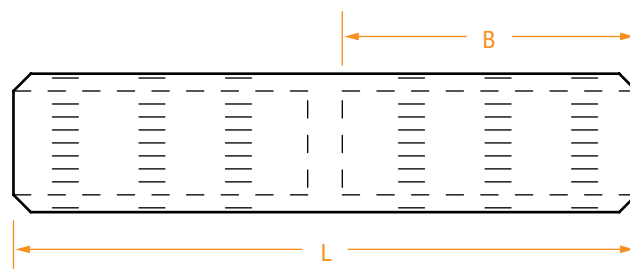


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
ALCCD5	#4	8A, TU, 5/8, 243, BG, 52	1-7/16	3
ALCCD7	#2		1-7/16	3
ALCCD8	#1		1-7/16	3
ALCCD9	1/0		1-7/16	3
ALCCD10	2/0	249, 840, TX, 11A, 76	1-7/8	4
ALCCD11	3/0		1-7/8	4
ALCCD12	4/0		1-7/8	4
ALCCD13	250		1-7/8	4
ALCCD14	300	299, 1-1/8, 96, 13A	2-5/16	5
ALCCD15	350		2-5/16	5
ALCCD16	400	15A, 1-5/16, 115H, 300, 317	2-21/32	5-11/16
ALCCD18	500		2-21/32	5-11/16
ALCCD20	600	301, 1-1/2, 140	3-3/8	6-31/32
ALCCD23	700-750		3-3/8	6-31/32
ALCCD24	800		3-3/8	6-31/32
ALCCD28	1000	302, 1-3/4, 161	3-5/16	8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned splices, add "-TN" to the part number (example: ALCCD5-TN for a #4 tinned splice).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Tapered ends for easy taping
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion
- Designed for 5kV and higher

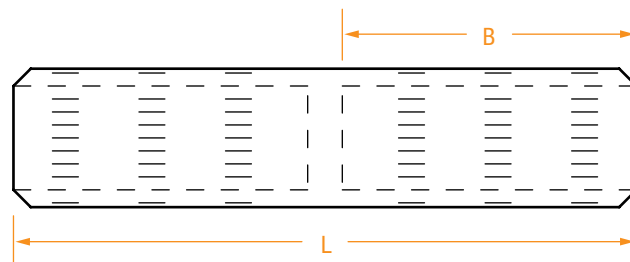


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
OATC7	#2	TQ, 45, 348, 6A	1-9/32	2-11/16
OATC9	1/0	TU, 8A, 52, 243	1-7/16	3
OATC10	2/0	TWTY, 245, 9A, 58	1-7/16	3-1/16
OATC11	3/0	TV, 10A, 66, 247	1-7/16	3
OATC12	4/0	TX, 298, 11A, 71	1-3/4	3-21/32
OATC13	250	TX, 11A, 76, 249	1-3/4	3-21/32
OATC14	300	TH, 12A, 87, 251	2-3/32	4-5/16
OATC15	350	96, 299, 13A	2-9/32	4-5/16
OATC16	400	96, 13A, 472	2-9/16	5-7/32
OATC18	500	106, 14A, 300, 317	2-11/16	5-1/2
OATC20	600	115, 473	2-31/32	6-1/32
OATC23	700-750	140, 301	3-3/8	6-27/32
OATC24	800	140, 474	3-5/8	7-5/16
OATC28	1000	302, 161	4-11/32	8-27/32
OATC29	1250	422	4-5/8	9-3/4
OATC30	1500	478, 189	4-5/8	9-3/4
OATC31	1750	204, 729, 40AH	5-1/2	11-1/2
OATC32	2000	479, 225	5-11/16	11-7/8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned splices, add "-TN" to the part number (example: OATC7-TN for a #2 tinned splice). For a different length connector, add the length in inches to the part number (example: OATC28-8in for an 8" connector).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Tapered ends for easy taping
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion
- Designed for 5kV and higher

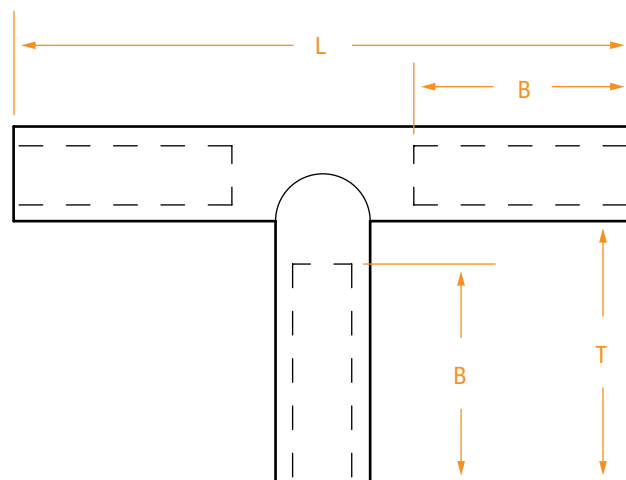


PART NUMBER*	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
OATCCD5	#4	TU, 8A, 52, 243, 296, 5/8	1-7/16	3
OATCCD7	#2		1-7/16	3
OATC9	1/0		1-7/16	3
OATCCD10	2/0	11A, 76, 249, 840, 298	1-7/8	4
OATCCD11	3/0		1-7/8	4
OATC12	4/0		1-7/8	4
OATC13	250		1-7/8	4
OATCCD14	300	96, 299, 13A, 1-1/8, 321, 705	2-5/16	5
OATC15	350		2-5/16	5
OATCCD16	400	115, 15A, 300, 1-5/16, 317	2-5/8	5-1/2
OATC18	500		3-5/16	7
OATC20	600	1-5/16, 473, 1154	3-5/16	7
OATC23	700-750	1-1/2, 140, 301	3-3/8	6-27/32

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned splices, add "-TN" to the part number (example: OATCCD-5-TN for a #4 tinned splice).

- Made of high-conductivity aluminum
- Available in different run and tap sizes
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information



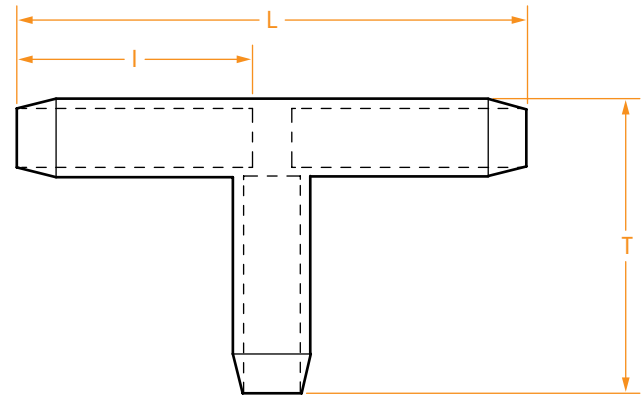
PART NUMBER*	WIRE SIZE		DIMENSIONS IN INCHES		
	RUN	TAP	L	B	T
ALT7	#2	#2	4-1/4	2	2-1/2
ALT9-7	1/0	2	5-1/2	2-1/4	2-1/2
ALT9	1/0	1/0	5-1/2	2-1/4	2-1/2
ALT10-9	2/0	1/0	6	2-1/4	2-1/2
ALT10	2/0	2/0	6	2-1/4	2-1/2
ALT11	3/0	3/0	6-5/8	2-5/8	3
ALT12-10	4/0	2/0	6-5/8	2-5/8	3
ALT12	4/0	4/0	6-5/8	2-5/8	3
ALT13	250	250	6-5/8	2-5/8	3
ALT14	300	300	6-5/8	2-5/8	3
ALT15-9	350	1/0	6-5/8	2-5/8	3
ALT15-12	350	4/0	6-5/8	2-5/8	3
ALT15	350	350	6-5/8	2-5/8	3

PART NUMBER*	WIRE SIZE		DIMENSIONS IN INCHES		
	RUN	TAP	L	B	T
ALT16	400	400	7-3/4	3-1/8	3-1/2
ALT18-12	500	4/0	8	3-1/8	3-1/2
ALT18-15	500	350	8	3-1/8	3-1/2
ALT18	500	500	8	3-1/8	3-1/2
ALT23-12	750	4/0	8	3-1/8	3-1/2
ALT23-15	750	350	8	3-1/8	3-1/2
ALT23-18	750	500	9	3-1/2	4
ALT23	750	750	9	3-1/2	4
ALT28-15	1000	350	9-7/8	4	4-1/2
ALT28-18	1000	500	9-7/8	4	4-1/2
ALT28-23	1000	750	9-7/8	4	4-1/2
ALT28	1000	1000	9-7/8	4	4-1/2

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned tees, add "-TN" to the part number (example: ALT7-TN for a #2 tinned Aluminum Tee).

- Made of high-conductivity aluminum
- Available in different run and tap sizes
- Designed for 5kV and higher
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information



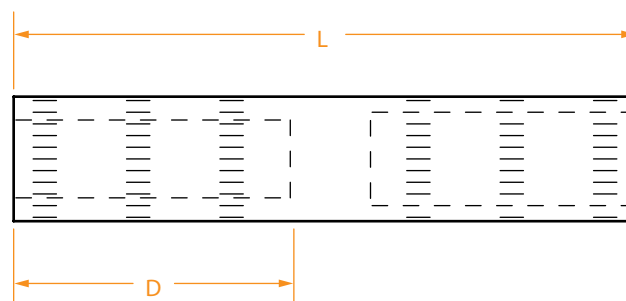
PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES			INSTALLING DIES
	RUN	TAP	L	I	T	
ALTT7-5	#2	#4	5-1/4	2-9/16	2-21/32	348, 6A, 45, TQ
ALTT7	#2	#2	5-1/4	2-9/16	2-23/32	348, 6A, 45, TQ
ALTT9-7	1/0	#2	5-1/8	2-1/2	2-25/32	243, 52, 8A, TU
ALTT9	1/0	1/0	5-1/8	2-1/2	2-25/32	243, 52, 8A, TU
ALTT10-7	2/0	2	5-3/8	2-5/8	2-7/8	297, 58, 9A, TWTY
ALTT10-8	2/0	1	5-3/8	2-5/8	2-3/4	297, 58, 9A, TWTY
ALTT10-9	2/0	1/0	5-1/2	2-11/16	2-7/8	297, 58, 9A, TWTY
ALTT10	2/0	2/0	5-1/2	2-11/16	3-1/16	297, 58, 9A, TWTY
ALTT12-9	4/0	1/0	5-7/8	2-7/8	3-1/32	298, 71, 11A, TX
ALTT12-10	4/0	2/0	6	2-15/16	3-7/32	298, 71, 11A, TX
ALTT12	4/0	4/0	6-1/8	3	3-15/32	298, 71, 11A, TX
ALTT14-9	300	1/0	6-5/8	3-1/4	3-3/16	251, 87, 12A
ALTT14-10	300	2/0	6-5/8	3-1/4	3-3/8	251, 87, 12A
ALTT15-9	350	1/0	7-5/8	3-3/4	3-5/16	96, 299, 1-1/8
ALTT15-10	350	2/0	7-5/8	3-3/4	3-1/2	96, 299, 1-1/8
ALTT15-12	350	4/0	7-7/8	3-7/8	3-3/4	96, 299, 1-1/8
ALTT15-14	350	300	8	3-15/16	4	96, 299, 1-1/8
ALTT15	350	350	8-1/8	4	4-9/16	96, 299, 1-1/8
ALTT18-9	500	1/0	9-1/8	4-1/2	3-1/2	106A, 300, 1-5/16
ALTT18-10	500	2/0	9-1/8	4-1/2	3-11/16	106A, 300, 1-5/16
ALTT18-12	500	4/0	9-1/4	4-9/16	3-15/16	106A, 300, 1-5/16
ALTT18-14	500	300	9-3/8	4-5/8	4-3/16	106A, 300, 1-5/16
ALTT18-15	500	350	9-1/2	4-11/16	4-3/4	106A, 300, 1-5/16
ALTT18	500	500	9-3/4	4-13/16	5-7/16	106A, 300, 1-5/16

(continued)

PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES			INSTALLING DIES
	RUN	TAP	L	I	T	
ALTT23-12	750	4/0	9-3/4	4-13/16	4-3/16	301, 140, 1-1/2, 527
ALTT23-14	750	300	9-7/8	4-7/8	4-7/16	301, 140, 1-1/2, 527
ALTT23-15	750	350	10	4-15/16	5	301, 140, 1-1/2, 527
ALTT23-18	750	500	10-1/8	5	5-5/8	301, 140, 1-1/2, 527
ALTT23	750	750	10-3/8	5-1/8	6	301, 140, 1-1/2, 527
ALTT28-12	1000	4/0	10-7/8	5-3/8	4-7/16	302, 161, 1-3/4, 150
ALTT28-14	1000	300	11	5-7/16	4-11/16	302, 161, 1-3/4, 150
ALTT28-15	1000	350	11-1/8	5-1/2	5-1/4	302, 161, 1-3/4, 150
ALTT28-18	1000	500	11-1/4	5-9/16	5-15/16	302, 161, 1-3/4, 150
ALTT28-23	1000	750	11-5/8	5-3/4	6-1/4	302, 161, 1-3/4, 150
ALTT28	1000	1000	10-7/8	5-7/8	6-13/16	302, 161, 1-3/4, 150

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion



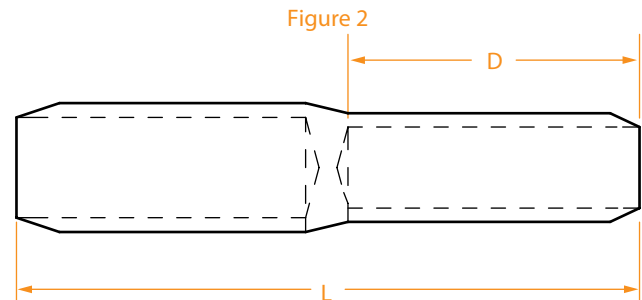
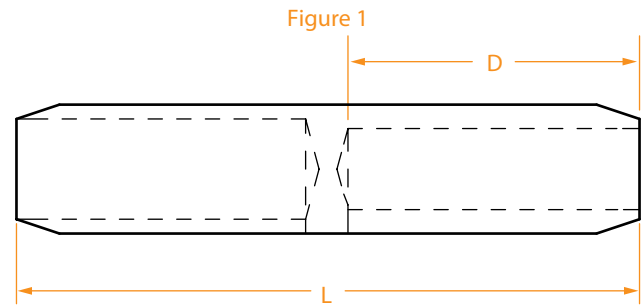
Part numbers should be formatted **ALCRA-B**, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

PART NUMBER*	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES	
	A	B (select from range)		D	L
ALCR7-	#2	#3 - #8	TQ, 45, 348, 6A, 1/2	1-7/8	4-9/16
ALCR9-	1/0	#1 - #8	TU, BG, 8A, 5/8	1-7/8	4-9/16
ALCR10-	2/0	1/0 - #6	TWTY, 60, 245, 9A, 5/8-1	1-7/8	4-9/16
ALCR11-	3/0	2/0 - #6	TU, 781, 56	2	5
ALCR12-	4/0	3/0 - #4	TX, 298, 11A, 840, 71H	2-1/8	5-1/4
ALCR13-	250	4/0 - #4	TX, 11A, 840, 249	2-5/8	6-5/16
ALCR14-	300	250 - #4	96, 299, 1-1/8	3-17/32	8-3/16
ALCR15-	350	300 - #4	96, 299, 1-1/8	3-17/32	8-3/16
ALCR16-	400	350 - #2	96, 472, 1-1/8	3-11/16	8-19/32
ALCR18-	500	450 - #2	106, 300, 1-5/16	3-13/16	8-19/32
ALCR20-	600	550 #2	115H, 473, 1-5/16	3-15/16	8-7/8
ALCR23-	750	700 - 1/0	140, 301, 1-1/2	4-7/32	9-5/8
ALCR28-	1000	950 - 2/0	302, 161, 1-3/4	4-5/8	9-7/8
ALCR29-	1250	1000 - 500	422	4-3/4	10

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned reducers, add "-TN" to the part number (example: ALCR7-5-TN for a #2 to #4 tinned reducer). For a different length connector, add the length in inches to the part number (example: ALCR28-23-7in for a 7" connector).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Designed for 5kV and higher
- Filled with a high-voltage oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion
- When ordering, specify both cable sizes in the part numbers listed below
- Figure 1 or Figure 2 will be supplied depending on the amount of reduction



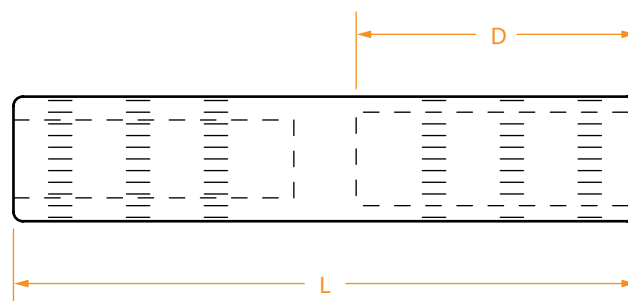
Part numbers should be formatted OATCRA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

PART NUMBER*	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES	
	A	B (select from range)		D	L
OATCR3-2	#6	#8	346, 161, TP, 29, 5/16	1-3/8	3
OATCR5-	#4	#6 - #8	375, 162, TB, 37	1-5/8	3-1/2
OATCR7-	#2	#4 - #8	348, 1/2, 45, TQ, 6A	1-5/8	3-1/2
OATCR8-	#1	#2 - #8	348, 1/2, 45, TQ, 6A	1-5/8	3-1/2
OATCR9-	1/0	#1 - #8	243, 52, TU, 5/8, 8A	1-5/8	3-1/2
OATCR10-	2/0	1/0 - #6	297, 58, TWTY, 5/8, 9A	1-5/8	3-1/2
OATCR11-	3/0	2/0 - #4	247, 66, 781, TV, 10A	1-7/8	4
OATCR12-	4/0	3/0 - #4	298, 840, 71H, 11A, TX	2-3/8	5
OATCR13-	250	4/0 - #4	249, 840, 76, TX, 11A	2-3/8	5
OATCR14-	300	250 - #2	251, 12A, 87H, TX	2-1/2	5-1/4
OATCR15-	350	300 - #2	299, 1-1/8, 96	2-15/16	6-1/4
OATCR18-	500	450 - #2	300, 1-5/16, 106	3-5/8	7-5/8
OATCR23-	750	700 - 1/0	301, 1-1/2, 140	4	8-1/2
OATCR28-	1000	950 - 2/0	302, 1-3/4, 161	4-3/4	10
OATCR29-	1250	1000 - 500	422	5-3/8	11

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned reducers, add "-TN" to the part number (example: OATCR6-8-TN for a #6 to #8 tinned reducer). For a different length connector, add the length in inches to the part number (example: OATC28-8in for an 8" connector).

- Made of high-conductivity aluminum
- Accepts both aluminum and copper conductors
- Filled with an oxide-inhibiting compound
- Marked with conductor size and die information
- Solid center stop to ensure proper cable insertion



Part numbers should be formatted ALCRCDA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

PART NUMBER*	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES	
	A	B (select from range)		D	L
ALCRCD5-3	#4	#6	243, TU, 5/8, 8A, BG, 52	1-7/16	3
ALCRCD7-	#2	#6 - #8		1-7/16	3
ALCRCD9-	1/0	#1 - #8		1-7/16	3
ALCRCD10-	2/0	1/0 - #6	249, 840, TX, 11A, 76	1-7/8	4
ALCRCD11-	3/0	2/0 - #6		1-7/8	4
ALCRCD12-	4/0	3/0 - #4		1-7/8	4
ALCRCD13-	250	4/0 - #4		1-7/8	4
ALCRCD14-	300	250 - #2	299, 1-1/8, 96, 13A	2-13/32	5
ALCRCD15-	350	300 - #2		2-13/32	5
ALCRCD18-	500	450 - #2	15A, 1-5/16, 106	2-21/32	5-11/16
ALCRCD23-	750	700 - 1/0	301, 1-1/2, 140	3-3/8	6-3/16
ALCRCD28-	1000	950 - 2/0	302, 1-3/4, 161	3-5/16	8
ALCRCD29-	1250	1000 - 500	352, 161	4-3/8	9

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tinned reducers, add "-TN" to the part number (example: ALCRC5-3-TN for a #4 to #6 tinned reducer). For a different length connector, add the length in inches to the part number (example: ALCRC28-18-8in for an 8" connector).

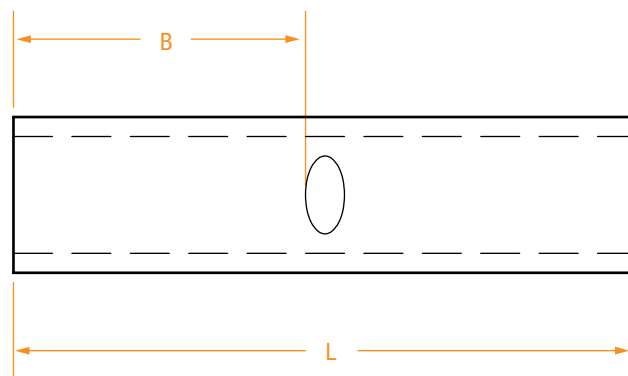
Copper Compression Connectors



Copper Compression Connectors

	Series	Page
Short Copper Splices	SCC Series	51
Copper Splices	CC Series	52
Tapered Copper Splices	TCC Series	53
Straight Oil-Stop Copper Splices	OCC Series	54
Tapered Oil-Stop Copper Splices	OTCC Series	55
Copper Compression Tees	CCT Series	56
Tapered Copper Compression Tees	TCCT Series	57
Copper Compression Reducers	CCR Series	58
Tapered Copper Compression Reducers	TCCR Series	59
Oil-Stop Copper Compression Reducers	OCCR Series	60
Oil-Stop Tapered Copper Compression Reducers	OTCCR Series	61
Corrugated Copper Reducing Adapters	CRA Series	62

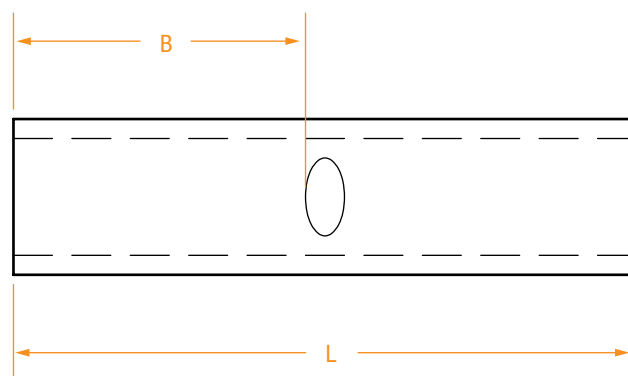
- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Indentation in the center of the connector provides a cable stop to ensure proper installation
-  UL listed



PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
SCC3	#6	J, 7, TE, 24, 5/16, 161	13/16	1-3/4
SCC4	#5	J, 7, TE, 24	13/16	1-3/4
SCC5	#4	5/16, 8, TP, 29	13/16	1-3/4
SCC7	#2	3/8, 10, TL-TN, 33, M, 162	7/8	1-7/8
SCC8	#1	3/8, 11, TB, 37, M, 162	7/8	1-7/8
SCC9	1/0	1/2, 12, TQ, 42	7/8	1-7/8
SCC10	2/0	9/16, 13, TS, 45	15/16	2
SCC11	3/0	5/8, 14, TU, 50	1	2-1/8
SCC12	4/0	5/8-1, 15, TW-TY, 54	1	2-1/8
SCC13	250	11/16, 16, TR, 60	1-1/16	2-1/4
SCC14	300	781, 17, TV, 66	1-1/16	2-1/4
SCC15	350	840, 18, TX, 71	1-1/8	2-3/8
SCC16	400	15/16, 19, TX, 76	1-3/16	2-1/2
SCC18	500	1, 20, TH, 87H	1-3/8	2-7/8
SCC20	600	1-1/8, 22, 96, 94H	1-3/8	2-7/8
SCC23	750	1-5/16, 24, 106	1-5/8	3-3/8
SCC28	1000	1-1/2, 27, 125	1-7/8	3-7/8
SCC29	1250	29	2	4-1/8
SCC30	1500	1-3/4, 31, 150	2	4-1/8
SCC32	2000	2.00, 34, 175	2-1/4	4-5/8
SCC33	2500	Y60 Press, L486 RT Die	2-7/16	5

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

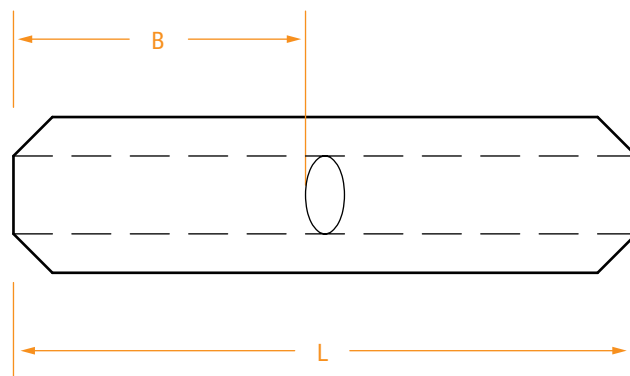
- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Indentation in the center of the connector provides a cable stop to ensure proper installation
-  UL listed



PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
CC3	#6	J, 7, TE, 24	1-1/8	2-3/8
CC4	#5	J, 7, TE, 24	1-1/8	2-3/8
CC5	#4	5/16, 8, TP, 29	1-1/8	2-3/8
CC7	#2	3/8, 10, TL-TN, 33	1-1/4	2-5/8
CC8	#1	3/8, 11, TB, 37	1-3/8	2-7/8
CC9	1/0	1/2, 12, TQ, 42	1-3/8	2-7/8
CC10	2/0	9/16, 13, TS, 45	1-1/2	3-1/8
CC11	3/0	5/8, 14, TU, 50	1-1/2	3-1/8
CC12	4/0	5/8-1, 15, TW-TY, 54	1-5/8	3-3/8
CC13	250	11/16, 16, TR, 60	1-5/8	3-3/8
CC14	300	7/8, 17, TV, 66	2	4-1/8
CC15	350	840, 18, TX, 71	2	4-1/8
CC16	400	15/16, 19, TX, 76	2-1/8	4-3/8
CC18	500	1, 20, TH, 87H	2-1/4	4-5/8
CC20	600	1-1/8, 22, 96, 94H	2-11/16	5-1/2
CC23	750	1-5/16, 24, 106	2-7/8	5-7/8
CC28	1000	1-1/2, 27, 125	3	6-1/8
CC29	1250	29	3-3/16	6-1/2
CC30	1500	1-3/4, 31, 150	3-3/16	6-1/2
CC32	2000	2.00, 34, 175	3-7/16	7
CC33	2500	1/60 Press, L486RT	3-15/16	8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

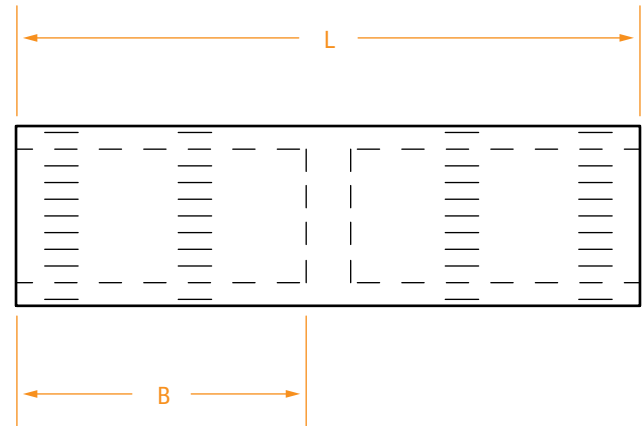
- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Tapered ends for high-voltage use
- Indentation in the center of the connector provides a cable stop to ensure proper installation
- 12° taper
-  UL listed



PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
TCC3	#6	J, 7, TE, 24	7/8	1-29/32
TCC5	#4	5/16, 8, TP, 29	7/8	1-29/32
TCC7	#2	3/8, 10, TL-TN, 33	31/32	2-1/16
TCC8	#1	3/8, 11, TB, 37	31/32	2-1/16
TCC9	1/0	1/2, 12, TQ, 42	31/32	2-1/16
TCC10	2/0	9/16, 13, TS, 45	1-1/32	2-7/32
TCC11	3/0	5/8, 14, TU, 50	1-1/8	2-13/32
TCC12	4/0	5/8-1, 15, TW-TY, 54	1-1/8	2-3/8
TCC13	250	11/16, 16, TR, 60	1-7/32	2-9/16
TCC14	300	781, 17, TV, 66	1-1/4	2-5/8
TCC15	350	840, 18, TX, 71	1-5/16	2-25/32
TCC16	400	15/16, 19, TX, 76	1-7/16	2-31/32
TCC18	500	1, 20, TH, 87H	1-11/16	3-17/32
TCC20	600	1-1/8, 22, 96, 94H	2-1/16	4-7/32
TCC23	750	1-5/16, 24, 106	2-1/16	4-7/32
TCC28	1000	1-1/2, 27, 125	2-7/16	4-31/32
TCC29	1250	29	3-7/32	6-1/2
TCC30	1500	1-3/4, 31, 150	3-3/16	6-1/2
TCC32	2000	2.00, 34, 175	3-15/32	6-11/16
TCC33	2500	Y60 Press, L486RT	3-15/16	8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Solid copper barriers are brazed in the center to insure an oil-tight seal
- Long enough for double crimping to add mechanical strength
-  UL listed



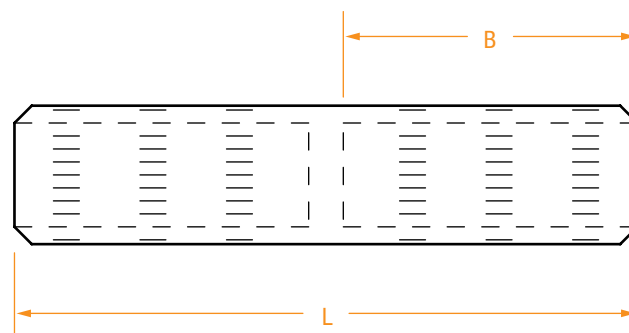
PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
OCC3	#6	7, TE, 24	1-1/8	2-3/8
OCC5	#4	5/16, 8, TP, 29, 161	1-1/8	2-3/8
OCC7	#2	3/8, 10, TL-TN, 162	1-1/4	2-5/8
OCC8	#1	3/8, 11, TB, 37, 276	1-3/8	2-7/8
OCC9	1/0	1/2, 12, TQ, 42, 163	1-3/8	2-7/8
OCC10	2/0	9/16, 13, TS, 164	1-1/2	3-1/8
OCC11	3/0	5/8, 14, TU, 243	1-1/2	3-1/8
OCC12	4/0	5/8-1, 15, 165	1-5/8	3-3/8
OCC13	250	11/16, 16, TR, 166	1-5/8	3-3/8
OCC14	300	781, 17, TV, 167	2	4-1/8
OCC15	350	840, 18, TX, 168	2	4-1/8
OCC16	400	15/16, 19, TX, 169	2-1/8	4-3/8
OCC18	500	1, 20, 170	2-1/4	4-5/8
OCC20	600	1-1/8-2, 22, 96, 316, 94H	2-11/16	5-1/2
OCC23	750	1-5/16, 24, 106, 317	2-7/8	5-7/8
OCC24	800	1-5/16, 25, 112, 300	2-15/16	6
OCC28	1000	1-1/2, 27, 125	3	6-1/8
OCC29	1250	29	3-1/4	7

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

TAPERED OIL-STOP COPPER SPLICES

OTCC Series

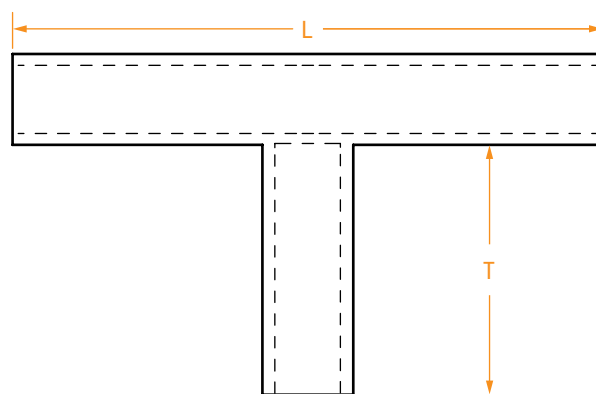
- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Tapered ends for high-voltage use
- Solid copper barriers are brazed in the center to insure an oil-tight seal
- 12° taper
-  UL listed



PART NUMBER	WIRE SIZE	INSTALLING DIES	DIMENSIONS IN INCHES	
			B	L
OTCC3	#6	J, 7, TE, 24	7/8	1-29/32
OTCC5	#4	5/16, 8, TP, 29	7/8	1-29/32
OTCC7	#2	3/8, 10, TL-TN, 33	31/32	2-1/16
OTCC8	#1	3/8, 11, TB, 37	31/32	2-1/16
OTCC9	1/0	1/2, 12, TQ, 42	31/32	2-1/16
OTCC10	2/0	9/16, 13, TS, 45	1-1/32	2-7/32
OTCC11	3/0	5/8, 14, TU, 50	1-1/8	2-13/32
OTCC12	4/0	5/8-1, 15, TW-TY, 54	1-1/8	2-3/8
OTCC13	250	11/16, 16, TR, 60	1-7/32	2-9/16
OTCC14	300	781, 17, TV, 66	1-1/4	2-5/8
OTCC15	350	840, 18, TX, 71	1-5/16	2-25/32
OTCC16	400	15/16, 19, TX, 76	1-7/16	2-31/32
OTCC18	500	1, 20, TH, 87H	1-11/16	3-17/32
OTCC20	600	1-1/8, 22, 96, 94H	2-1/16	4-7/32
OTCC23	750	1-5/16, 24, 106	2-1/16	4-7/32
OTCC28	1000	1-1/2, 27, 125	2-7/16	4-31/32
OTCC29	1250	29	3-7/32	6-1/2
OTCC30	1500	1-3/4, 31, 150	3-7/32	6-1/2
OTCC32	2000	2.00, 34, 175	3-15/32	6-11/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Available in different run and tap sizes
- Marked with conductor size and die information
-  UL listed



PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES	
	RUN	TAP	L	T
CCT9-3	1/0	#6	3-3/4	1-1/2
CCT9-5	1/0	#4	3-13/16	1-1/2
CCT9-7	1/0	#2	3-7/8	1-1/2
CCT9-8	1/0	#1	3-15/16	1-1/2
CCT9	1/0	1/0	4	1-1/2
CCT10-3	2/0	#6	3-29/32	1-5/8
CCT10-5	2/0	#4	3-31/32	1-5/8
CCT10-7	2/0	#2	4-1/32	1-5/8
CCT10-8	2/0	#1	4-3/32	1-5/8
CCT10-9	2/0	1/0	4-5/32	1-5/8
CCT10	2/0	2/0	4-5/32	1-5/8
CCT12-7	4/0	#2	4-3/16	1-3/4
CCT12-8	4/0	#1	4-3/16	1-3/4
CCT12-9	4/0	1/0	4-1/4	1-3/4
CCT12-10	4/0	2/0	4-5/16	1-3/4
CCT12	4/0	4/0	4-7/16	1-3/4
CCT13-7	250	#2	4-1/4	1-3/4
CCT13-8	250	#1	4-1/4	1-3/4
CCT13-9	250	1/0	4-5/16	1-3/4
CCT13-10	250	2/0	4-3/8	1-3/4
CCT13-12	250	4/0	4-1/2	1-3/4
CCT13	250	250	4-9/16	1-3/4
CCT15-9	350	1/0	5-37/64	2-3/16
CCT15-10	350	2/0	5-37/64	2-3/16
CCT15-12	350	4/0	5-23/32	2-3/16
CCT15	350	350	5-29/32	2-3/16

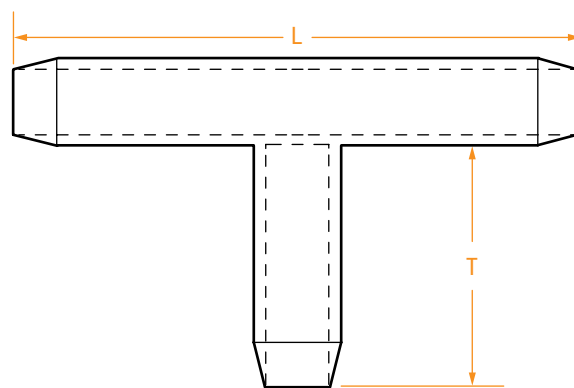
PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES	
	RUN	TAP	L	T
CCT16-9	400	1/0	5-21/32	2-3/8
CCT16-10	400	2/0	5-21/32	2-3/8
CCT16-12	400	4/0	5-25/32	2-3/8
CCT16-13	400	250	5-27/32	2-3/8
CCT16-14	400	300	5-29/32	2-3/8
CCT16-15	400	350	5-31/32	2-3/8
CCT16	400	400	6-1/32	2-3/8
CCT18-9	500	1/0	6-23/64	2-19/32
CCT18-10	500	2/0	6-23/64	2-19/32
CCT18-12	500	4/0	6-15/32	2-19/32
CCT18-13	500	250	6-17/32	2-19/32
CCT18-15	500	350	6-21/32	2-19/32
CCT18-16	500	400	6-23/32	2-19/32
CCT18	500	500	6-23/32	2-19/32
CCT20-10	600	2/0	7-3/16	3-3/32
CCT20-12	600	4/0	7-7/16	3-3/32
CCT20-13	600	350	7-9/16	3-3/32
CCT20-18	600	500	7-11/16	3-3/32
CCT20	600	600	7-7/8	3-3/32
CCT23-15	750	350	7-7/8	3-3/8
CCT23-18	750	500	7-7/8	3-3/8
CCT23	750	750	7-7/8	3-3/8
CCT28-18	1,000	500	9-1/2	4
CCT28-20	1,000	600	9-1/2	4
CCT28-23	1,000	750	9-1/2	4
CCT28	1,000	1,000	9-1/2	4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

TAPERED COPPER COMPRESSION TEES

TCCT Series

- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Available in different run and tap sizes
- Marked with conductor size and die information
-  UL listed

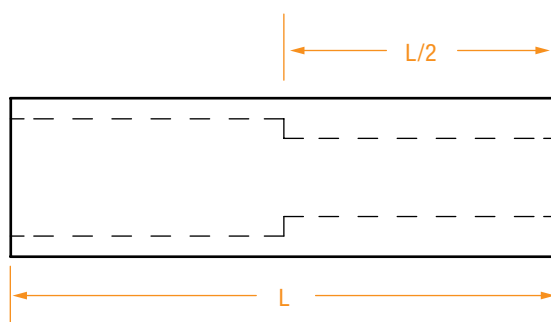


PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES	
	RUN	TAP	L	T
TCCT9-3	1/0	#6	3-3/4	1-1/2
TCCT9-5	1/0	#4	3-13/16	1-1/2
TCCT9-7	1/0	#2	3-7/8	1-1/2
TCCT9-8	1/0	#1	3-15/16	1-1/2
TCCT9	1/0	1/0	4	1-1/2
TCCT10-3	2/0	#6	3-29/32	1-5/8
TCCT10-5	2/0	#4	3-31/32	1-5/8
TCCT10-7	2/0	#2	4-1/32	1-5/8
TCCT10-8	2/0	#1	4-3/32	1-5/8
TCCT10-9	2/0	1/0	4-5/32	1-5/8
TCCT10	2/0	2/0	4-5/32	1-5/8
TCCT12-7	4/0	#2	4-3/16	1-3/4
TCCT12-8	4/0	#1	4-3/16	1-3/4
TCCT12-9	4/0	1/0	4-1/4	1-3/4
TCCT12-10	4/0	2/0	4-5/16	1-3/4
TCCT12	4/0	4/0	4-7/16	1-3/4
TCCT13-7	250	#2	4-1/4	1-3/4
TCCT13-8	250	#1	4-1/4	1-3/4
TCCT13-9	250	1/0	4-5/16	1-3/4
TCCT13-10	250	2/0	4-3/8	1-3/4
TCCT13-12	250	4/0	4-1/2	1-3/4
TCCT13	250	250	4-9/16	1-3/4
TCCT15-9	350	1/0	5-37/64	2-3/16
TCCT15-10	350	2/0	5-37/64	2-3/16
TCCT15-12	350	4/0	5-23/32	2-3/16
TCCT15	350	350	5-29/32	2-3/16

PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES	
	RUN	TAP	L	T
TCCT16-9	400	1/0	5-21/32	2-3/8
TCCT16-10	400	2/0	5-21/32	2-3/8
TCCT16-12	400	4/0	5-25/32	2-3/8
TCCT16-13	400	250	5-27/32	2-3/8
TCCT16-14	400	300	5-29/32	2-3/8
TCCT16-15	400	350	5-31/32	2-3/8
TCCT16	400	400	6-1/32	2-3/8
TCCT18-9	500	1/0	6-23/64	2-19/32
TCCT18-10	500	2/0	6-23/64	2-19/32
TCCT18-12	500	4/0	6-15/32	2-19/32
TCCT18-13	500	250	6-17/32	2-19/32
TCCT18-15	500	350	6-21/32	2-19/32
TCCT18-16	500	400	6-23/32	2-19/32
TCCT18	500	500	6-23/32	2-19/32
TCCT20-10	600	2/0	7-3/16	3-3/32
TCCT20-12	600	4/0	7-7/16	3-3/32
TCCT20-13	600	350	7-9/16	3-3/32
TCCT20-18	600	500	7-11/16	3-3/32
TCCT20	600	600	7-7/8	3-3/32
TCCT23-15	750	350	7-7/8	3-3/8
TCCT23-18	750	500	7-7/8	3-3/8
TCCT23	750	750	7-7/8	3-3/8
TCCT28-18	1,000	500	9-1/2	4
TCCT28-20	1,000	600	9-1/2	4
TCCT28-23	1,000	750	9-1/2	4
TCCT28	1,000	1,000	9-1/2	4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Below is a list of common conductor sizes and the range of reduction sizes available. When ordering, specify both cable sizes in the part numbers listed below.
- All connectors are marked with conductor size and die information



Part numbers should be formatted CCRA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

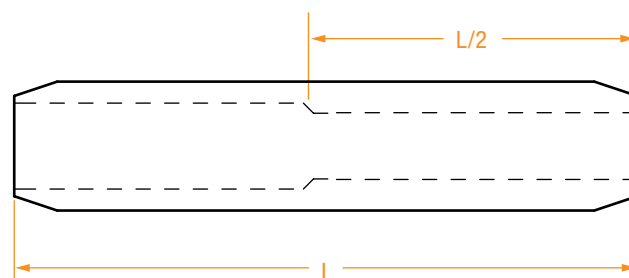
PART NUMBER	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES
	A	B (select from range)		L
CCR3-	#6	#8 - #10	7, TE, 24	2
CCR5-	#4	#6 - #8	5/16, 8, TP, 29, 161	2
CCR7-	#2	#4 - #8	3/8, 10, TL-TN, 162	2
CCR8-	#1	#2 - #8	3/8, 11, TB, 37, 276	2-1/4
CCR9-	1/0	#1 - #6	1/2, 12, TQ, 42, 163	2-1/4
CCR10-	2/0	1/0 - #6	9/16, 13, TS, 164	2-1/4
CCR11-	3/0	2/0 - #6	5/8, 14, TU, 243	3-1/2
CCR12-	4/0	3/0 - #6	5/8-1, 15, 165	3-1/2
CCR13-	250	4/0 - #4	11/16, 16, TR, 166	3-3/4
CCR14-	300	250 - #4	781, 17, TV, 167	3-3/4
CCR15-	350	300 - #4	840, 18, TX, 168	3-3/4
CCR18-	500	450 - 1/0	1, 20, 170	4-1/4
CCR23-	750	700 - 1/0	1-5/16, 24, 106, 317	4-3/4
CCR28-	1000	950 - 2/0	1-1/2, 27, 125	6
CCR29-	1250	1000 - 4/0	29	7

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

TAPERED COPPER COMPRESSION REDUCERS

TCCR Series

- Made of pure seamless copper tubing
- Tin-plated to resist corrosion
- Below is a list of common conductor sizes and the range of reduction sizes available. When ordering, specify both cable sizes in the part numbers listed below.
- All connectors are marked with conductor size and die information

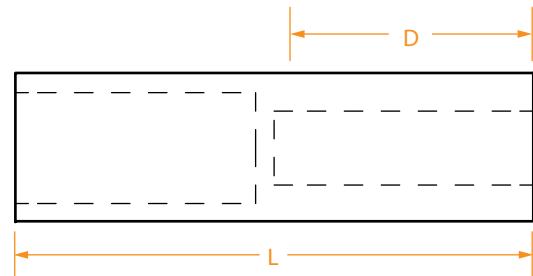


Part numbers should be formatted TCCRA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

PART NUMBER	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES
	A	B (select from range)		L
TCCR3-	#6	#8 - #10	7, TE, 24	2
TCCR5-	#4	#6 - #8	5/16, 8, TP, 29, 161	2
TCCR7-	#2	#4 - #8	3/8, 10, TL-TN, 162	2
TCCR8-	#1	#2 - #8	3/8, 11, TB, 37, 276	2-1/4
TCCR9-	1/0	#1 - #6	1/2, 12, TQ, 42, 163	2-1/4
TCCR10-	2/0	1/0 - #6	9/16, 13, TS, 164	2-1/4
TCCR11-	3/0	2/0 - #4	5/8, 14, TU, 243	3-1/2
TCCR12-	4/0	3/0 - #6	5/8-1, 15, 165	3-1/2
TCCR13-	250	4/0 - #4	11/16, 16, TR, 166	3-3/4
TCCR14-	300	250 - #4	781, 17, TV, 167	3-3/4
TCCR15-	350	300 - #4	840, 18, TX, 168	3-3/4
TCCR18-	500	450 - 1/0	1, 20, 170	4-1/4
TCCR23-	750	700 - 1/0	1-5/16, 24, 106, 317	4-3/4
TCCR28-	1000	950 - 2/0	1-1/2, 27, 125	6
TCCR29-	1250	1000 - 4/0	29	8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Made of high-conductivity copper
- Tin-plated to resist corrosion
- Below is a list of common conductor sizes and the range of reduction sizes available. When ordering, specify both cable sizes in the part numbers listed below. All connectors are marked with conductor size and die information



Part numbers should be formatted OCCRA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

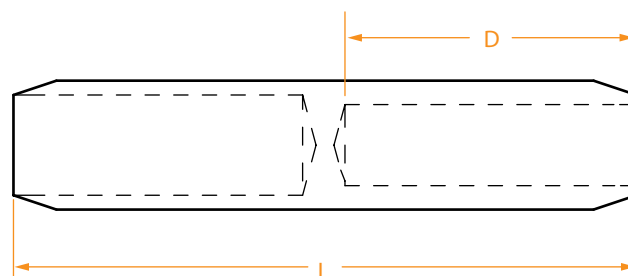
PART NUMBER	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES	
	A	B (select from range)		L	D
OCCR3-	#6	#8 - #10	7, TE, 24	2	7/8
OCCR5-	#4	#6 - #8	5/16, 8, TP, 29, 161	2	7/8
OCCR7-	#2	#4 - #8	3/8, 10, TL-TN, 162	2	7/8
OCCR8-	#1	#2 - #8	3/8, 11, TB, 37, 276	2-1/4	1
OCCR9-	1/0	#1 - #6	1/2, 12, TQ, 42, 163	2-1/4	1
OCCR10-	2/0	1/0 - #6	9/16, 13, TS, 164	2-1/4	1
OCCR11-	3/0	2/0 - #6	5/8, 14, TU, 243	3-1/2	1-5/8
OCCR12-	4/0	3/0 - #6	5/8-1, 15, 165	3-1/2	1-5/8
OCCR13-	250	4/0 - #4	11/16, 16, TR, 166	3-3/4	1-3/4
OCCR14-	300	250 - #4	781, 17, TV, 167	3-3/4	1-3/4
OCCR15-	350	300 - #4	840, 18, TX, 168	3-3/4	1-11/16
OCCR18-	500	450 - 1/0	1, 20, 170	4-1/4	1-15/16
OCCR23-	750	700 - 1/0	1-5/16, 24, 106, 317	4-3/4	2-1/8
OCCR28-	1000	950 - 2/0	1-1/2, 27, 125	6	2-3/4
OCCR29-	1250	1000 - 4/0	29	8	3-3/4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

OIL-STOP TAPERED COPPER COMPRESSION REDUCERS

OTCCR Series

- Made of high-conductivity copper
- Tin-plated to resist corrosion
- Below is a list of common conductor sizes and the range of reduction sizes available. When ordering, specify both cable sizes in the part numbers listed below. All connectors are marked with conductor size and die information

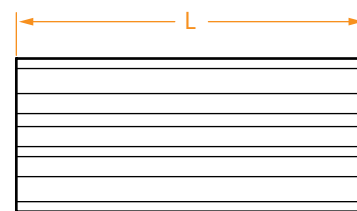
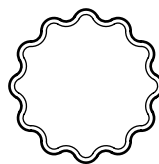


Part numbers should be formatted OTCCRA-B, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

PART NUMBER	WIRE SIZE		INSTALLING DIES	DIMENSIONS IN INCHES	
	A	B (select from range)		L	D
OTCCR3-	#6	#8 - #10	7, TE, 24	2	7/8
OTCCR5-	#4	#6 - #8	5/16, 8, TP, 29, 161	2	7/8
OTCCR7-	#2	#4 - #8	3/8, 10, TL-TN, 162	2	7/8
OTCCR8-	#1	#2 - #8	3/8, 11, TB, 37, 276	2-1/4	1
OTCCR9-	1/0	#1 - #6	1/2, 12, TQ, 42, 163	2-1/4	1
OTCCR10-	2/0	1/0 - #6	9/16, 13, TS, 164	2-1/4	1
OTCCR11-	3/0	2/0 - #4	5/8, 14, TU, 243	3-1/2	1-5/8
OTCCR12-	4/0	3/0 - #6	5/8-1, 15, 165	3-1/2	1-5/8
OTCCR13-	250	4/0 - #4	11/16, 16, TR, 166	3-3/4	1-3/4
OTCCR14-	300	250 - #4	781, 17, TV, 167	3-3/4	1-3/4
OTCCR15-	350	300 - #4	840, 18, TX, 168	3-3/4	1-11/16
OTCCR18-	500	450 - 1/0	1, 20, 170	4-1/4	1-15/16
OTCCR23-	750	700 - 1/0	1-5/16, 24, 106, 317	4-3/4	2-1/8
OTCCR28-	1000	950 - 2/0	1-1/2, 27, 125	6	2-3/4
OTCCR29-	1250	1000 - 4/0	29	8	3-3/4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Used to reduce the socket size of a standard compression connector – enabling the use of a smaller wire size
- Fabricated from pure soft copper
- Hot-tinned to resist corrosion
- Some sizes are not available with corrugation and have a smooth I.D and O.D.



PART NUMBER	CABLE SIZE		DIMENSIONS IN INCHES
	FROM	TO	L
CRA12-3	4/0	#6	1-3/4
CRA12-5	4/0	#4	1-3/4
CRA12-7	4/0	#2	1-3/4
CRA12-8	4/0	#1	1-3/4
CRA12-9	4/0	1/0	1-3/4
CRA12-10	4/0	2/0	1-3/4
CRA12-11	4/0	3/0	1-3/4
CRA15-3	350	#6	1-3/4
CRA15-5	350	#4	1-3/4
CRA15-7	350	#2	1-3/4
CRA15-9	350	1/0	1-3/4
CRA15-11	350	3/0	1-3/4
CRA15-12	350	4/0	1-3/4
CRA15-13	350	250	1-3/4
CRA15-14	350	300	1-3/4

PART NUMBER	CABLE SIZE		DIMENSIONS IN INCHES
	FROM	TO	L
CRA18-3	500	#6	2-1/2
CRA18-5	500	#4	2-1/2
CRA18-7	500	#2	2-1/2
CRA18-8	500	#1	2-1/2
CRA18-9	500	1/0	2-1/2
CRA18-10	500	2/0	2-1/2
CRA18-11	500	3/0	2-1/2
CRA18-13	500	250	2-1/2
CRA18-14	500	300	2-1/2
CRA18-15	500	350	2-1/2
CRA18-16	500	400	2-1/2
CRA23-12	750	4/0	2-1/2
CRA23-15	750	350	2-1/2
CRA23-16	750	400	2-1/2
CRA23-18	750	500	2-1/2
CRA23-20	750	600	2-1/2

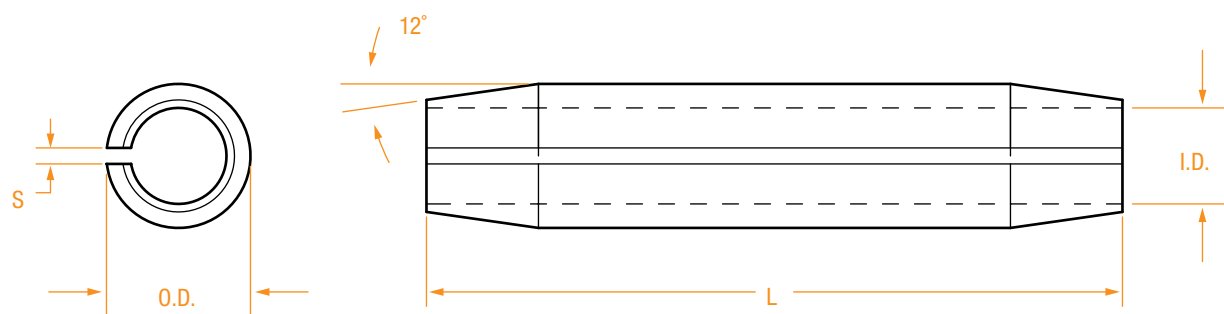
NOTE: Many other sizes available.
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

Split Tinned Connectors



Split Tinned Connectors	Series	Page
Split Tinned Straight Connectors	RSS Series	65
Split Tinned Concentric Reducing Connectors.....	CR Series	66
Split Tinned Branch Connectors – Full Duplex.....	FD Series.....	67
Split Tinned Branch Connectors – Half Duplex.....	HD Series	68
Split Tinned Tee Connectors	ST Series.....	69
Lead Splicing Sleeves.....	LSV Series.....	70

- Made of pure copper
- Tin-plated to resist corrosion
- Fabricated in accordance with EEL specifications

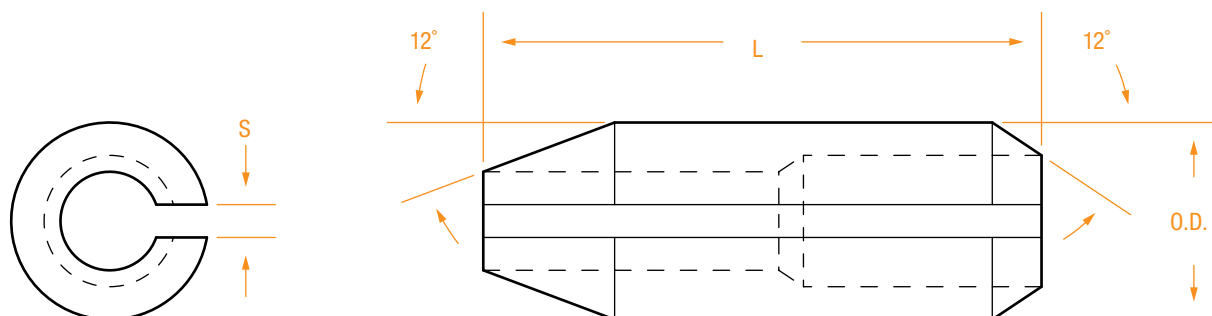


PART NUMBER*	WIRE SIZE	DIMENSIONS IN INCHES			
		L	S	I.D.	O.D.
RSS3	#6	1.5	0.030	0.189	0.251
RSS5	#4	2.0	0.060	0.247	0.337
RSS7	#2	2.0	0.030	0.297	0.395
RSS8	#1	2.0	0.070	0.337	0.449
RSS9	1/0	2.0	0.070	0.378	0.504
RSS10	2/0	2.0	0.070	0.423	0.565
RSS11	3/0	2.0	0.070	0.475	0.635
RSS12	4/0	2.5	0.070	0.533	0.713
RSS13	250	2.5	0.120	0.581	0.778
RSS14	300	2.5	0.120	0.635	0.849
RSS15	350	2.5	0.120	0.690	0.920
RSS16	400	3.0	0.120	0.740	0.986
RSS17	450	3.0	0.120	0.784	1.046
RSS18	500	3.0	0.120	0.826	1.102
RSS19	550	3.0	0.175	0.868	1.154

PART NUMBER*	WIRE SIZE	DIMENSIONS IN INCHES			
		L	S	I.D.	O.D.
RSS20	600	3.5	0.175	0.906	1.206
RSS21	650	3.5	0.175	0.948	1.260
RSS22	700	3.5	0.175	0.983	1.307
RSS23	750	3.5	0.175	1.018	1.356
RSS24	800	4.0	0.175	1.050	1.400
RSS25	850	4.0	0.220	1.083	1.441
RSS26	900	4.0	0.220	1.115	1.483
RSS27	950	4.0	0.220	1.145	1.525
RSS28	1,000	4.5	0.220	1.175	1.565
RSS29	1,250	4.5	0.220	1.320	1.754
RSS30	1,500	5.0	0.280	1.440	1.912
RSS31	1,750	5.5	0.280	1.560	2.074
RSS32	2,000	6.0	0.280	1.664	2.214
RSS33	2,500	6.5	0.280	1.885	2.455

* For "weak back" connectors, add "-WB" to the part number.

- Made of pure copper
- Tin-plated to resist corrosion
- Fabricated in accordance with EEL specifications
- The larger wire size dictates the price of the connector
- When ordering, specify a second wire size after the part number shown below
- 12° taper



Part numbers should be formatted **CRA-B**, where **A** is the conductor code for side A (larger side) and **B** is the conductor code for side B (reduced side).

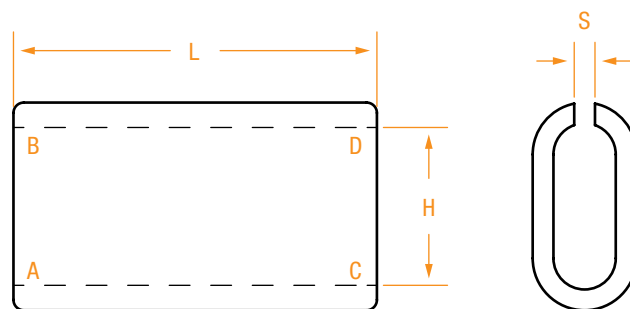
PART NUMBER*	WIRE SIZE	DIMENSIONS IN INCHES		
	A	L	S	O.D.
CR3-	#6	1.5	0.030	0.251
CR4-	#5	1.5	0.030	0.295
CR5-	#4	2.0	0.030	0.315
CR6-	#3	2.0	0.030	0.353
CR7-	#2	2.0	0.030	0.395
CR8-	#1	2.0	0.070	0.449
CR9-	1/0	2.0	0.070	0.504
CR10-	2/0	2.0	0.070	0.565
CR11-	3/0	2.0	0.070	0.635
CR12-	4/0	2.5	0.070	0.713
CR13-	250	2.5	0.120	0.778
CR14-	300	2.5	0.120	0.849
CR15-	350	2.5	0.120	0.920
CR16-	400	3.0	0.120	0.986
CR17-	450	3.0	0.120	1.046

PART NUMBER*	WIRE SIZE	DIMENSIONS IN INCHES		
	A	L	S	O.D.
CR18-	500	3.0	0.120	1.102
CR19-	550	3.0	0.175	1.154
CR20-	600	3.5	0.175	1.206
CR21-	650	3.5	0.175	1.260
CR22-	700	3.5	0.175	1.307
CR23-	750	3.5	0.175	1.356
CR24-	800	4.0	0.175	1.400
CR26-	900	4.0	0.220	1.483
CR28-	1,000	4.5	0.220	1.565
CR29-	1,250	4.5	0.220	1.754
CR30-	1,500	5.0	0.280	1.912
CR31-	1,750	5.5	0.280	2.074
CR32-	2,000	6.0	0.280	2.214
CR33-	2,500	6.5	0.280	2.455

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* Add second wire size to the part number when ordering (example: CR23-18 is a concentric reducer for 750 to 500 mcm copper cables).

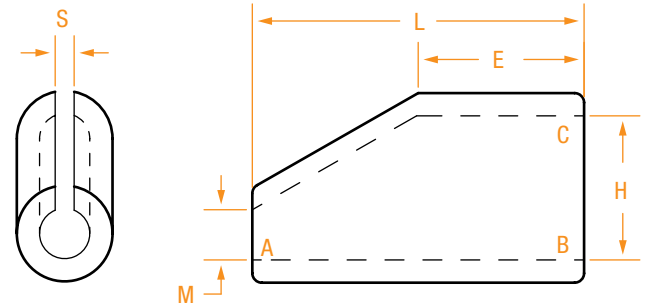
- Available in any combination of wire sizes
- Made of pure copper
- Tin-plated to resist corrosion
- Fabricated in accordance with EEL specifications
- Price is governed by the largest wire size
- When ordering, specify sizes as A & B to C & D



PART NUMBER	WIRE SIZE	DIMENSIONS IN INCHES		
		L	H	S
FD3	#6	1.5	0.378	0.050
FD5	#4	2.0	0.474	0.070
FD6	#3	2.0	0.530	0.070
FD7	#2	2.0	0.594	0.070
FD8	#1	2.0	0.647	0.070
FD9	1/0	2.0	0.756	0.070
FD10	2/0	2.0	0.846	0.070
FD11	3/0	2.0	0.950	0.070
FD12	4/0	2.5	1.066	0.120
FD13	250	2.5	1.162	0.120
FD14	300	2.5	1.270	0.120
FD15	350	2.5	1.380	0.120
FD16	400	3.0	1.480	0.175
FD17	450	3.0	1.560	0.175
FD18	500	3.0	1.652	0.175
FD19	550	3.0	1.736	0.175
FD20	600	3.5	1.812	0.175
FD21	650	3.5	1.896	0.175

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

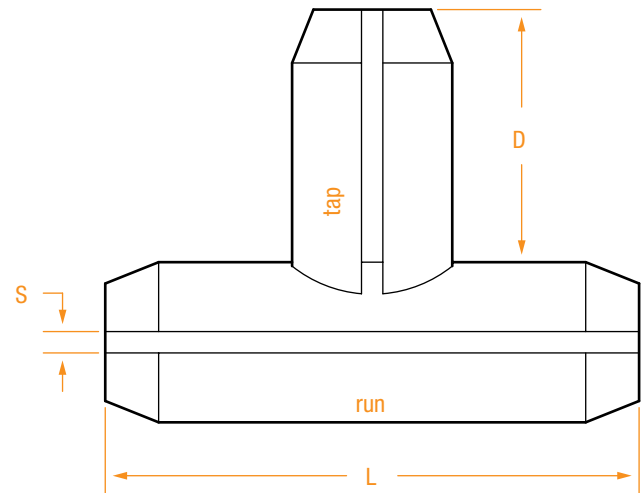
- Available in any combination of wire sizes
- Made of pure copper
- Tin-plated to resist corrosion
- Fabricated in accordance with EEI specifications
- Price is governed by the largest wire size
- When ordering, specify sizes A and B & C



PART NUMBER	WIRE SIZE	DIMENSIONS IN INCHES				
		M	H	E	L	S
HD3	#6	0.189	0.378	0.75	1.5	0.050
HD5	#4	0.237	0.474	1.00	2.0	0.070
HD6	#3	0.265	0.530	1.00	2.0	0.070
HD7	#2	0.297	0.594	1.00	2.0	0.070
HD8	#1	0.337	0.674	1.00	2.0	0.070
HD9	1/0	0.378	0.756	1.00	2.0	0.070
HD10	2/0	0.423	0.846	1.00	2.0	0.070
HD11	3/0	0.475	0.950	1.00	2.0	0.070
HD12	4/0	0.533	1.066	1.25	2.5	0.120
HD13	250	0.581	1.162	1.25	2.5	0.120
HD14	300	0.635	1.270	1.25	2.5	0.120
HD15	350	0.690	1.380	1.25	2.5	0.120
HD16	400	0.740	1.480	1.50	3.0	0.175
HD17	450	0.784	1.568	1.50	3.0	0.175
HD18	500	0.826	1.652	1.50	3.0	0.175
HD19	550	0.868	1.736	1.50	3.0	0.175
HD20	600	0.906	1.812	1.75	3.5	0.175
HD21	650	0.948	1.896	1.75	3.5	0.175
HD23	750	1.018	2.036	1.75	3.5	0.220
HD24	800	1.052	2.104	2.00	4.0	0.220
HD25	850	1.083	2.166	2.00	4.0	0.220
HD28	1000	1.2	2.32	2.35	4.5	0.150
HD32	2000	1.7	3.4	3.2	6.0	0.260

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Available in any combination of wire sizes
- Made of pure copper
- Tin-plated to resist corrosion
- Silver solder is used as a brazing material for mechanical strength and conductivity
- The larger wire size dictates the price of the connector.
- Fabricated in accordance with EEL specifications
- When ordering, specify a "tap" wire size after the part number shown below



PART NUMBER	WIRE	DIMENSIONS IN INCHES			
	RUN	L	D	S	
ST1-	#10	1.5	3/4	0.030	
ST2-	#8	1.5	3/4	0.030	
ST3-	#6	1.5	3/4	0.030	
ST5-	#4	2.0	1	0.030	
ST6-	#3	2.0	1	0.030	
ST7-	#2	2.0	1	0.030	
ST8-	#1	2.0	1	0.070	
ST9-	1/0	2.0	1	0.070	
ST10-	2/0	2.0	1	0.070	
ST11-	3/0	2.0	1	0.070	
ST12-	4/0	2.5	1-1/4	0.070	
ST13-	250	2.5	1-1/4	0.120	
ST14-	300	2.5	1-1/4	0.120	
ST15-	350	2.5	1-1/4	0.120	
ST16-	400	3.0	1-1/2	0.120	

PART NUMBER	WIRE	DIMENSIONS IN INCHES			
	RUN	L	D	S	
ST17-	450	3.0	1-1/2	0.120	
ST18-	500	3.0	1-1/2	0.120	
ST19-	550	3.0	1-1/2	0.175	
ST20-	600	3.5	1-3/4	0.175	
ST21-	650	3.5	1-3/4	0.175	
ST22-	700	3.5	1-3/4	0.175	
ST23-	750	3.5	1-3/4	0.175	
ST24-	800	4.0	2	0.175	
ST26-	900	4.0	2	0.220	
ST28-	1,000	4.5	2-1/4	0.220	
ST29-	1,250	4.5	2-1/4	0.220	
ST30-	1,500	5.0	2-1/2	0.280	
ST31-	1,750	5.5	2-3/4	0.280	
ST32-	2,000	6.0	3	0.280	
ST33-	2,500	6.5	3-1/4	0.280	

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Used in conjunction with split tinned connectors when splicing PILC cable
- Bridges lead neutral
- When ordering, specify length (L), inside diameter (ID) and thickness (T)

INSIDE DIAMETER (ID)	THICKNESS (T)
2.00"	.125"
2.50"	.125"
2.50"	.150"
3.00"	.125"
3.50"	.150"
4.00"	.200"
4.50"	.200"
6.00"	.200"

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

Distribution Equipment



Distribution Equipment

	Series	Page
Bronze Vise Connectors – Jaws Overlap	VC Series	73
Aluminum Hot-Line Clamps	AHLC Series	74
Bronze Hot-Line Clamps	BHLC Series	75
Aluminum Hot-Line Clamps	AHLC-397 Series	76
Aluminum Parallel Clamps With Plastic Covers	APC Series	77
Aluminum & Bronze Stirrup Connectors	ASC & BSC Series	78
Aluminum Clamshell Stirrups	BCASC Series	79
Bronze Vise Connectors – Jaws Meet	VC-H Series	80
Tank Ground Connectors	RTG Series	81
Service Drop Connectors	RSD Series	82
Mid-Span Clamps	SDC & SEC Series	83
Neutral Dead Ends	RDE Series	84
Stirrups	RST Series	85
Overhead Bail Clamps	RB Series	86
Bolted Wedge Connectors	RBWC Series	87
Bronze Parallel Vise Connectors	VC-80XX Series	88

Pedestal Connectors.....PC371105 Series.....89

Acorn Ground Clamps.....ACRN Series 90

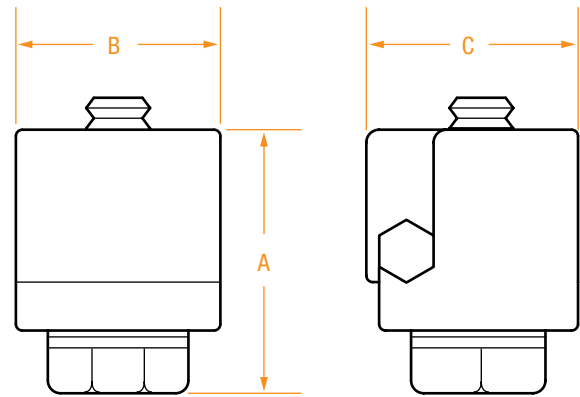
Neutral-Span ClampsR07-1285 Series.....91

Fiber Optic ClampRFB Series..... 92

Fiber Optic Offset Bracket.....RFB Series..... 93

Aluminum Bolted Wedge Connector.....ABWC Series 94

- Made of high-strength silicon bronze
- Accepts a range of conductors
- RUS Approved



PART NUMBER*	CLAMPS 2 CABLES TOGETHER: THIS SIZE CABLE COMBINED WITH ANY CABLE LESS THAN OR EQUAL IN DIAMETER	DIMENSIONS IN INCHES			BOLT HEAD SIZE
		A	B	C	
VC3	6 Solid or 8 Stranded	7/8	5/8	3/4	3/8 (Slot)
VC5	4 Solid or Stranded	1-1/8	3/4	13/16	9/16
VC7	2 Solid or 3 Stranded	1-3/8	13/16	15/16	9/16
VC10	2/0 Solid or 1/0 Stranded	1-5/8	13/16	1	9/16
VC10S	3/0 Solid or 2/0 Stranded	2	7/8	1-1/4	9/16
VC12	4/0 Solid or Stranded	2-1/8	1	1-3/8	9/16
VC15	350 Stranded	3	1-1/4	1-3/4	3/4
VC18	500 Stranded	3-1/2	1-3/8	2	3/4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tin plated connectors, add "-P" to the part number. For a shear head bolt, add "-SH" to the part number. For a washer under the bolt, add "-W" to the part number.

- Designed to be used for distribution service connections with hot sticks
- Eyebolts are made from forged stainless steel
- Eyelets and keepers are made from aluminum bronze
- Bodies are made from high-strength aluminum
- Wide jaws provide a greater surface contact, reducing twisting of the conductor during installation
- Spring-loaded with a sturdy steel spring to compensate for temperature changes

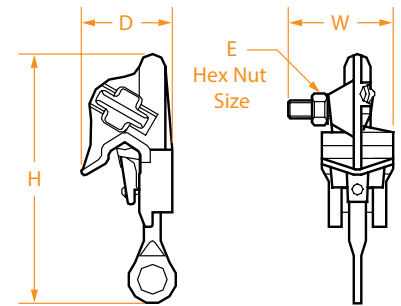


Figure 2

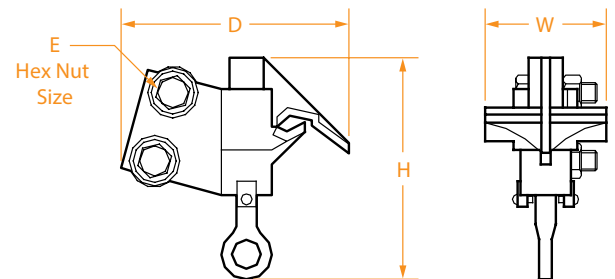


Figure 2

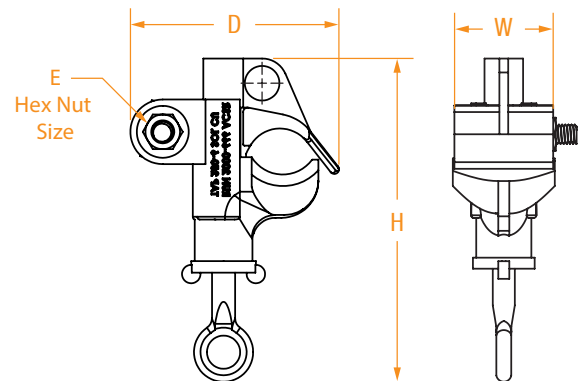


Figure 3

PART NUMBER*	FIGURE	WIRE SIZE - RUN		WIRE SIZE - TAP		DIMENSIONS IN INCHES			
		MIN.	MAX.	MIN.	MAX.	H	D	W	E***
AHLC-100-TN	1	#8	2/0	#8	2/0	5	2-3/4	2	9/16"
AHLC-300-TN**	1	#6	400	#6	4/0	6	2-1/4	1-3/4	11/16"
AHLC-18-9	2	1/0	500	two-hole NEMA Spade		6-1/2	4-1/2	3	3/4"
AHLC-700-TN	1	#4 Str	800	#4 Sol	300	7	3	3	3/4"
AHLC-2000	3	666 ACSR	2000 ACSR	#6 Sol Cu	250	7	4-5/16	2-1/2	11/16"

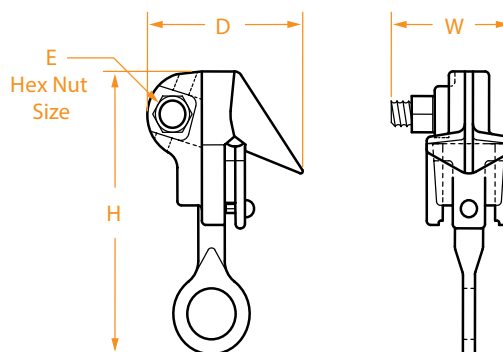
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tin plated connectors, add "-TN" to the part number. For pre-applied inhibitor in the clamp's jaws (individually bagged) add "-IB" to the part number.

** For 3/4" eyelet nut add "-3/4" to the part number.

*** Hex dimension is flat to flat.

- Designed to be used for distribution service connections with hot sticks
- Bodies are made from silicon bronze
- Eyebolts are made from forged stainless steel
- Eyelets and keepers are made from aluminum bronze
- Wide jaws provide a greater area of surface contact reducing twisting of the conductor during installation
- Spring-loaded with a sturdy steel spring to compensate for temperature change



PART NUMBER*	WIRE SIZE - RUN		WIRE SIZE - TAP		DIMENSIONS IN INCHES			
	MIN.	MAX.	MIN.	MAX.	H	D	W	E***
BHLC-100	#8	2/0	#8	2/0	4	2-3/4	2	9/16"
BHLC-100-LI	#8	2/0	#8	2/0	5-1/8	2-3/4	2	9/16"
BHLC-101	#6	400	#6	4/0	5-3/4	3-5/8	2-3/8	9/16"
BHLC-102	#6	400	2/0 - 300 (U-Bolt Tap)		5-3/4	4-1/2	2-3/4	9/16"
BHLC-201	#4	2/0	#6	2/0	3-7/8	4-1/2	1-7/8	9/16"
BHLC-300	#6	400	#6	4/0	6-1/2	2-1/2	2-1/2	11/16"
BHLC-400	#6	400	two-hole NEMA Spade		6-3/8	4-1/2	2-3/8	3/4"
BHLC-401	#6	400	two-hole NEMA Spade		5-1/4	4-5/8	1-7/8	3/4"



NOW AVAILABLE

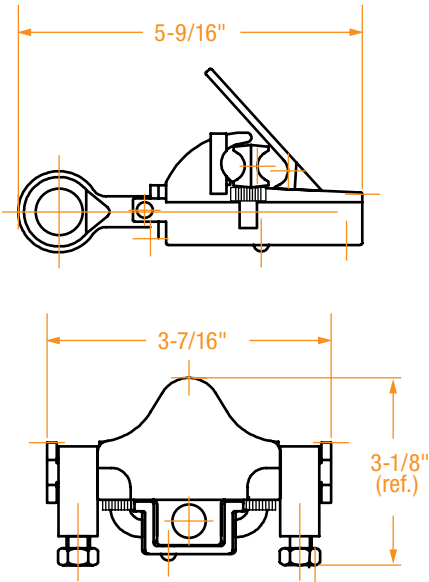
BHLC-100 is now available with extended tongue which facilitates landing the clamp onto the overhead conductor. To order, use part number BHLC-100-XT.

* For tin plated connectors, add "-TN" to the part number. For pre-applied inhibitor in the clamp's jaws (individually bagged) add "-IB" to the part number.
 ** For 3/4" eyelet nut add "-3/4" to the part number.
 *** Hex dimension is flat to flat.

- A full duty connector designed to replace the function of hot-line taps in heavily loaded applications
- Acorn clamps allow secure taps to exit from either side
- Clamp is made of high-strength aluminum
- Center piece is made from soft, high-conductive pure aluminum.
- Filled with oxide-inhibiting grease
- Easily installed using a hot stick



AHLC-397



PART NUMBER	WIRE SIZE - RUN		WIRE SIZE - TAP	
	Min	Max	Min	Max
AHLC-397	3/0 ACSR / 4/0 Str. Al	336,400 ACSR / 397,500 Al	3/0 ACSR / 4/0 Str. Al	336,400 ACSR / 397,500 Al

- Taps overhead for connection to customer
- Easily installed on energized or de-energized cables
- Designed to withstand vibrations
- Low torque provides high pressure on conductor



APC with cover

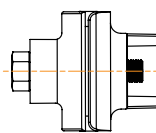


Figure 1

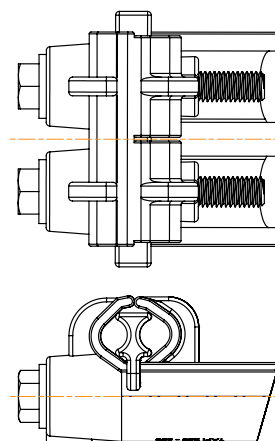
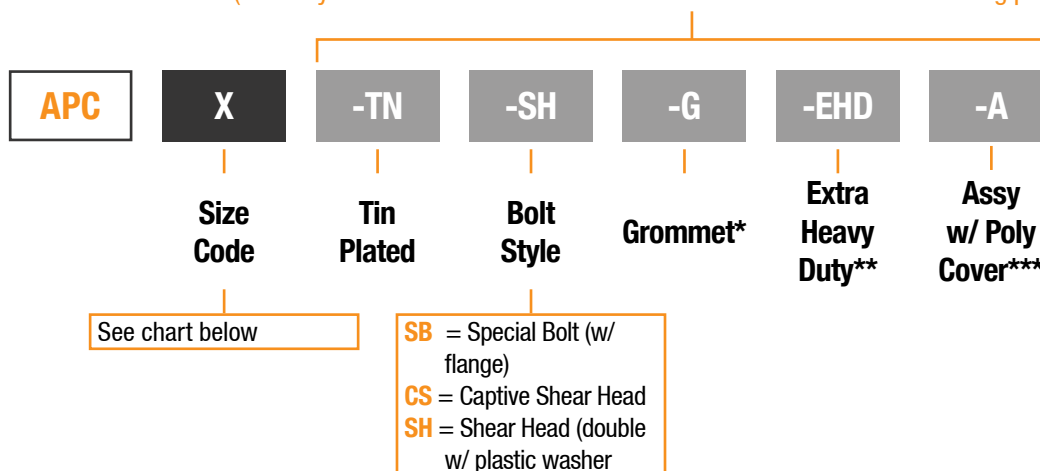


Figure 2

Part Number Selection

Optional Add-ons

(omit any suffix not needed and maintain order shown below when building part number)



X	FIGURE	WIRE SIZE - RUN (AWG OR KCMIL)		WIRE SIZE - TAP (AWG OR KCMIL)		SNAP-ON COVER*
		ACSR	AL	ACSR	AL or CU	
5	1	#4-#6 ACSR	#2 SOL.-#8 SOL. AL	#4-#6 ACSR	#2 SOL.-#8 SOL. AL/CU	APCC-1
7	1	#6-#2 ACSR	#6 SOL.-#1 STR. AL	#6-#2 ACSR	#12 SOL.-#1 STR. AL/CU	APCC-1
10	1	#6-1/0 ACSR	#6 SOL.-2/0 STR. AL	#6-1/0 ACSR	#6 SOL.-2/0 STR. AL/CU	APCC-1
11	1	#2-4/0 ACSR	#1 STR.-4/0 STR. AL	#2-4/0 ACSR	#1 STR.-4/0 STR. AL/CU	APCC-2
12	1	#2-4/0 ACSR	#1 STR.-4/0 STR. AL	#6-2/0 ACSR	#6 SOL.-2/0 STR. AL/CU	APCC-2
132	1	4/0-666 ACSR	266.8-800 AL	#6-2/0 ACSR	#6 SOL.-2/0 STR. AL/CU	APCC-2
13	1	4/0-666 ACSR	266.8-800 AL	#2-4/0 ACSR	#1 STR.-4/0 AL/CU	APCC-2
14	1	3/0-336.4 ACSR	4/0-397.5 STR. AL	#6-4/0 ACSR	#6 SOL.-266.8 STR. AL/CU	APCC-2
15	1	3/0-336.4 ACSR	4/0-397.5 STR. AL	3/0-336.4 ACSR	4/0-397.5 STR. AL/CU	APCC-2
17	2	4/0-477 ACSR	250-600 AL	4/0-477 ACSR	250-600 AL/CU	—
18	2	336.4-795 ACSR	477-800 AL	336.4-795 ACSR	477-800 AL/CU	—

* Grommets provide grip between the APC body and center keeper, preventing the keeper from unrestricted sliding and facilitating insertion of wires.

** Class AA ANSI-C119.4 Rating.

*** Cover can be ordered assembled with APC (by adding "-A" to the part number) or ordered separately (by using the part number in the "Snap-On Cover" column).

- ASC connector has a pure aluminum body and pure copper bail
- BSC connector has a bronze body and pure copper bail
- Bail is knurled prior to insertion into aluminum connector to prevent pull-out

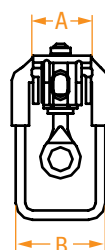
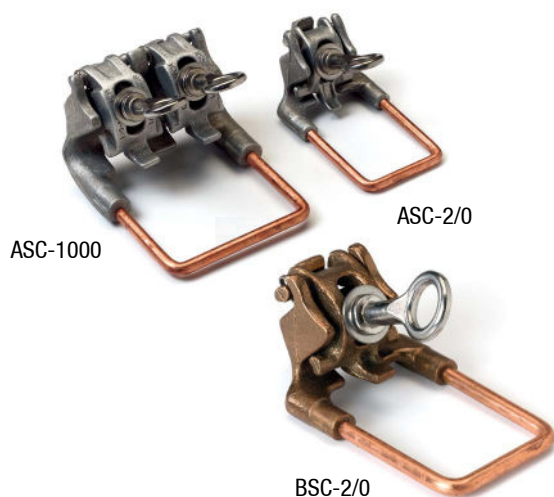


Figure 1

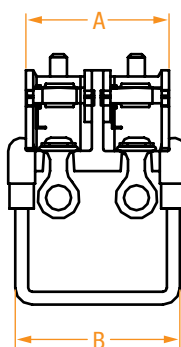
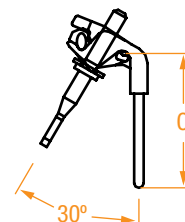
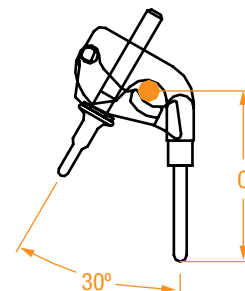


Figure 2



PART NUMBER*	WIRE SIZE	# OF EYEBOLTS	DIMENSIONS IN INCHES			BAIL DIA.
			A	B	C	
ASC-2/0**	AAC: #6 Sol. – 2/0 ACSR : #8 – 2/0	1	1-13/16	2-5/8	4-1/8	.289"
BSC-2/0***	#6 Sol. – 2/0 Cu #8 – 2/0 Cu	1	1-7/8	2-5/8	4-1/4	.289"
ASC-500**	AAC: 1/0 – 500 MCM ACSR: 1/0 – 397.5 MCM	2	4	4-3/8	4-13/16	.332"
ASC-1000**	AAC: 350 – 1000 MCM ACSR: 336.4 – 954 MCM	2	4-1/4	4-13/16	5-1/8	.385"

* For tin plated bails, add "-TN" to the part number.

** ASC-2/0, ASC-500 and ASC-1000 come with inhibitor applied to the clamp and individually bagged.

*** BSC-2/0 is not greased or bagged. Please add "-I" for inhibitor, "-B" for individually bagged or "-IB" for both.

- Connector has a pure A356T6 aluminum body and pure copper bail
- Bail is knurled prior to insertion into aluminum connector to prevent pull-out
- Bail is tin-plated for better electrical connection

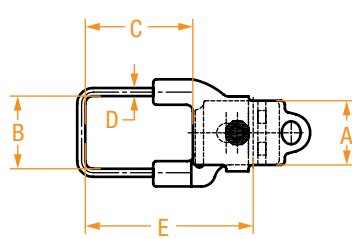


Figure 1

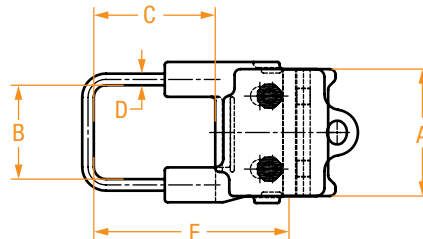


Figure 2

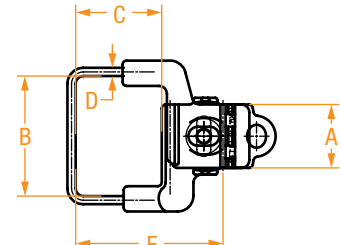


Figure 3

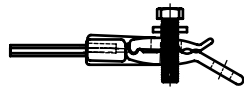


Figure 4

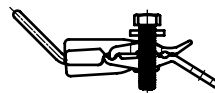


Figure 5

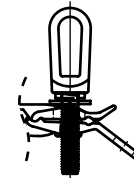


Figure 6

PART NUMBER*	FIGURE	WIRE SIZE		DIMENSIONS IN INCHES				
		AAC	ACSR	A	B	C	D	E
BCASC2/0	1&4	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	2-1/4	3-3/8	#2 Cu	5-5/16
BCASC2/0-E-W	3&4	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	2-1/4	3-3/8	#2 Cu	5-5/16
BCASC2/0-E-45	1&5	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	2-1/4	3-1/8	#2 Cu	4-7/8
BCASC2/0-W	3&4	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	3-3/4	3-3/8	#2 Cu	5-5/16
BCASC2/0-W-45	3&5	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	3-3/4	3-1/8	#2 Cu	4-7/8
BCASC2/0-45	1&5	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	3-3/4	3-1/8	#2 Cu	4-7/8
BCASC2/0-E-W-45	3&5	4-2/0 (.232" - .414")	6-2/0 (.198" - .447")	2	3-3/4	3-1/8	#2 Cu	4-7/8
BCASC397	2&4	2/0-477 (.414" - .795")	1/0-477 18/1 (.398" - .814")	4	3-1/8	4-1/4	2/0 Cu	6-1/8
BCASC397-45	2&5	2/0-477 (.414" - .795")	1/0-477 18/1 (.398" - .814")	4	3-1/8	4-1/4	2/0 Cu	6-1/8
BCASC397-E-45	2&5	2/0-477 (.414" - .795")	1/0-477 18/1 (.398" - .814")	4	3-1/8	4	2/0 Cu	5-3/4
BCASC397-L	2&4	2/0-477 (.414" - .795")	1/0-477 18/1 (.398" - .814")	4	3-1/8	4-1/8	1/0 Cu	6-1/8
BCASC397-E-45-L	2&5	2/0-477 (.414" - .795")	1/0-477 18/1 (.398" - .814")	4	3-1/8	3-7/8	1/0 Cu	5-3/4

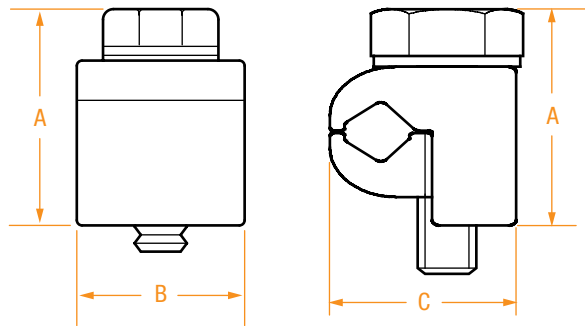
* The following is a key for part number suffixes:

E=Eye Bolt
(See figure 6)

W=Wide Bail
(See figures 2 & 3)

45=45° Bail
(See figure 5)

- Made of high-strength silicon bronze
- Accepts a range of conductors

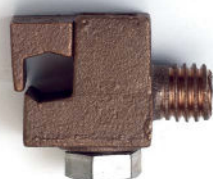


PART NUMBER*	CLAMPS 2 CABLES TOGETHER: THIS SIZE CABLE COMBINED WITH ANY CABLE LESS THAN OR EQUAL IN DIAMETER	DIMENSIONS IN INCHES			BOLT HEAD SIZE
		A	B	C	
VC3-H	#6	15/16	9/16	5/8	3/8 Slotted
VC5-H	#2	1-1/8	11/16	13/16	9/16
VC7-H	1/0	1-1/2	13/16	1-1/16	9/16
VC10S-H	2/0	1-5/8	1	1-1/8	9/16
VC12-H	4/0	1-3/4	1	1-7/16	9/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tin plated, add "-P" to the part number. For a shear head bolt, add "-SH" to the part number.

- Used for grounding connections on distribution transformer tanks.
- Recommended for copper ground conductors
- Made of high-strength silicon bronze
- Provided with standard 1/2 - 13 thread studs with a 9/16" bolt head



RTG512



RTG512F

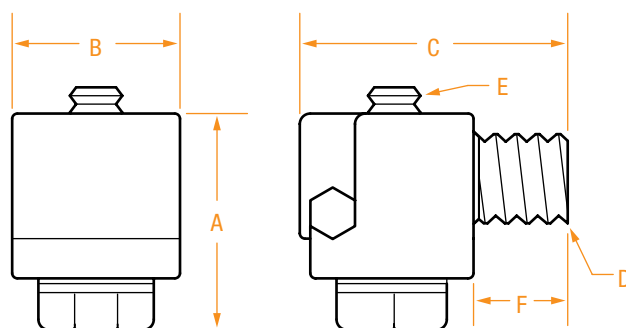


Figure 1

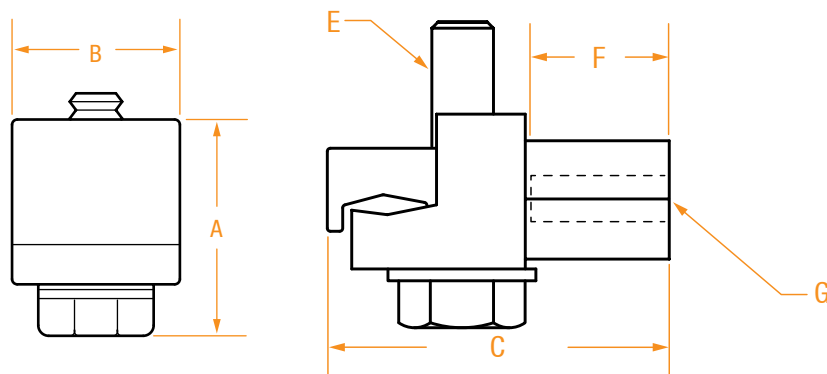


Figure 2

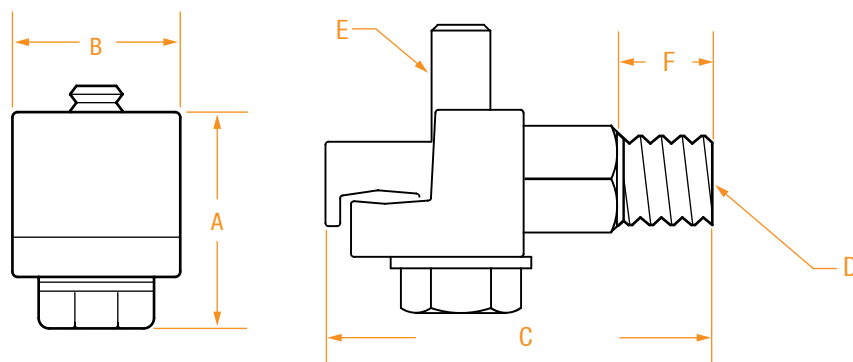


Figure 3

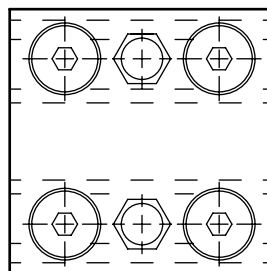
PART NUMBER*	CONDUCTOR RANGE	FIGURE #	DIMENSIONS IN INCHES							BOLT HEAD SIZE
			A	B	C	D	E	F	G	
RTG512	6 Sol. to 1/0	1	1-1/4	3/4	1-3/8	1/2-13	5/16	1/2	—	1/2
RTG512-XL	6 Sol. to 1/0	1	1-1/4	3/4	2-3/16	1/2-13	5/16	1-1/16	—	9/16
RTG512-F	6 Sol. to 1/0	2	7/8	7/8	1-11/16	—	5/16	1/2	Threaded hole 5/16 -18	9/16
RTG512-F-3/8	6 Sol. to 1/0	2	7/8	7/8	1-11/16	—	5/16	3/4	Threaded hole 3/8 -16	9/16
RTG512-M	6 Sol. to 1/0	3	1	13/16	2-1/8	1/2-13	5/16	1/2	—	9/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For plated connectors, add "-TN" to the part number.

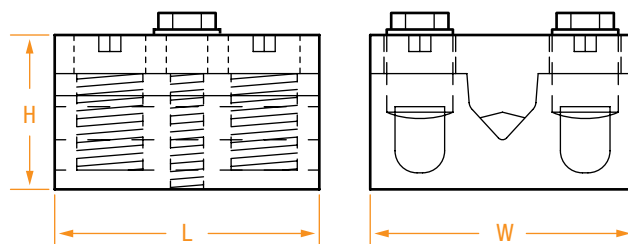
** Note: All RTG designs are available with eyebolt shown in Figure 4. To order add "E" to the part number.

- Designed for multiple service connections
- Provides a compact, readily accessible, reliable secondary connection
- Allows for one main run and four service drop connections
- Each service drop is individually connected, which allows easy installation and removal
- The body is made of high-strength aluminum
- Cable ports are prefilled with an oxide-inhibiting compound
- For use with copper or aluminum conductor



Cover:

- The cover is designed to protect the connector from contact with other phases
- Holes for the service drops are precut to allow installation and removal of each service without having to remove the cover
- Contains UV stabilizers



RSD262

PART NUMBER	WIRE SIZE		DIMENSIONS IN INCHES		
	RUN	TAP	L	W	H
RSD262*	2 Str. – 350 MCM	#4 Sol. – 3/0 Str.	3-1/16	2-7/8	1-3/4
RSD262C	2 Str. – 350 MCM	#4 Sol. – 3/0 Str.	3-15/16	3-9/16	3

RSD262C IS THE COVER FOR THE RSD262 CONNECTOR

* Comes with the black cover RSD262C.

- Mid-span clamps are designed for use on bare cable and triplex secondaries for single or multiple service connections away from the pole
- Fabricated from high-strength, high-conductivity aluminum
- Features a four-tap connection block and an aluminum base with side loop that attach to service dead ends
- Cable ports are pre-filled with an oxide-inhibiting compound
- The service tap block enables the joining of one through four cables
- Each cable is held by a separate bolt allowing for easy installation and removal
- High-strength washer bolts are used to secure the neutrals
- These bolts are anodized to prevent the aluminum from galling when installing and removing cables
- Plastic cover contains UV stabilizers

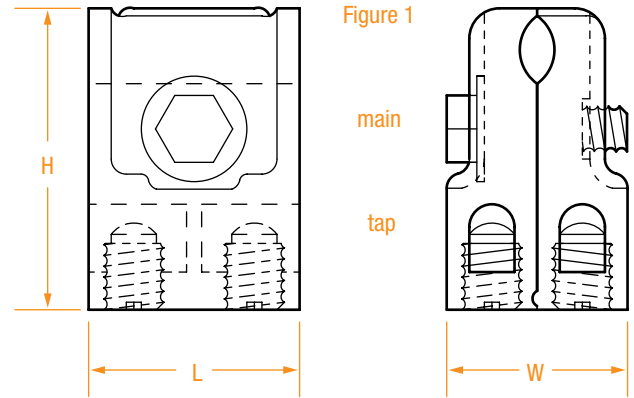


Figure 1

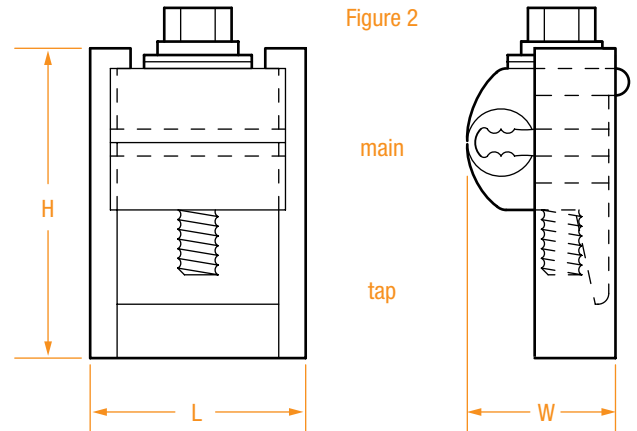


Figure 2



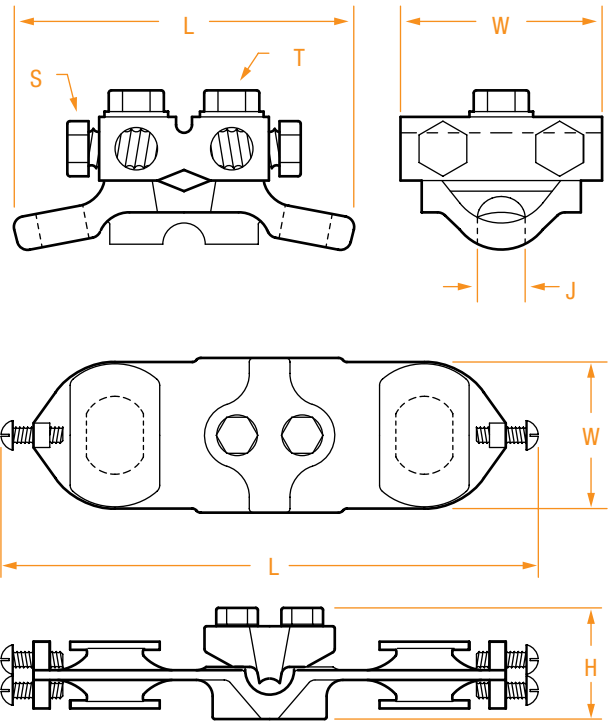
SDC495



SEC3-12

PART NUMBER	WIRE SIZE		FIG.	DIMENSIONS IN INCHES		
	MAIN	TAP		L	W	H
SDC495	#2 Str. – 3/0 Str.	#6 – 1/0 Str.	1	2	1-9/16	2-7/8
SEC3-12	#6 Sol. Cu – 2/0 Str. #6 Str. Al – 4/0 Str. Al	#6 Sol. Cu – 2/0 Str. #6 Str. Al – 4/0 Str. Al	2	1-3/4	1-1/2	2-1/2

- The RICHARDS NSC-547 and RSPTAP use an aluminum connector block with four taps to join neutrals from one through four services
- Designed for neutral dead-end connections
- High-strength aluminum washer head bolts are used to provide easy installations on bare wire or triplex secondary neutrals away from the pole
- Side loops allow service dead ends to be attached at any angle
- Each service is individually connected, which provides easy removal and installation
- When installed on triplex secondaries, the fitted grooves protect the covered phase wires
- Each cable port is pre-filled with an oxide-inhibiting compound



RSPTAP



NSC-547

PART NUMBER	WIRE SIZE				DIMENSIONS IN INCHES					
	RUN		TAP							
	Min	Max	Min	Max	H	J	L	W	T	S
NSC-547	#4	4/0	#6	2/0	2-1/4	5/8	4-1/8	2-7/8	3/8	1/2
RSPTAP	—	—	—	—	1-1/2	—	8-1/8	2-3/8	—	—

- Stirrups allow the attachment of hot-line clamps and grounding connectors to different system components (all figures)
- Stirrup holes are spaced such that they will be accepted on standard NEMA pads (figure 1 only)
- The flange on the end of the stirrup prevents any clamps from sliding off during installation (figure 1 only)

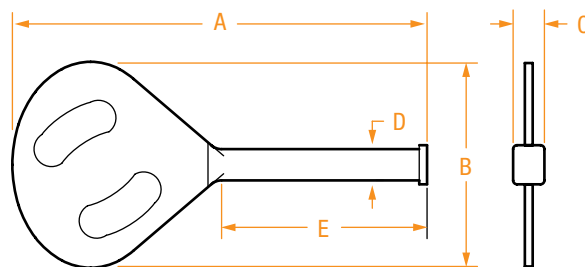


Figure 1

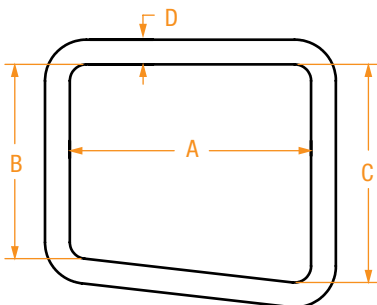


Figure 2

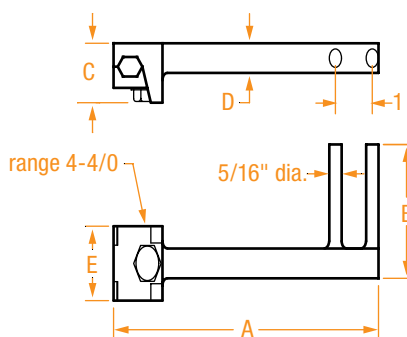
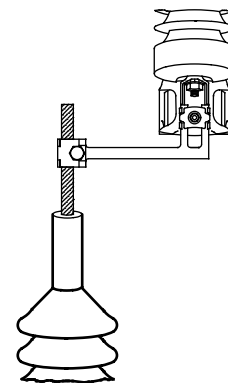


Figure 3



PART NUMBER	FIGURE	DIMENSIONS IN INCHES				
		A	B	C	D	E
RST-275*	1	7	3-1/2	1-1/4	3/4	3-1/4
R124214**	2	4-1/4	3-3/8	4-1/8	0.460 (4/0)	N/A
RST-356***	3	7	2-1/4	1-1/2	1/2	1-1/4

* RST-275 is made of high-strength cast aluminum.

** R124214 is made of high-conductivity copper rod.

*** RST-356 is made of cast bronze.

- Designed to be used for distribution service connections with standard hot sticks
- Bail size ranges from #1 to 4/0 solid
- The body is made of high-strength aluminum
- Large area of compression between the aluminum body and the bail makes an extremely reliable connection
- The wide jaws provide a greater area of surface contact, reducing twisting of the conductor during installation
- Jaws are pre-coated with an oxide-inhibiting compound

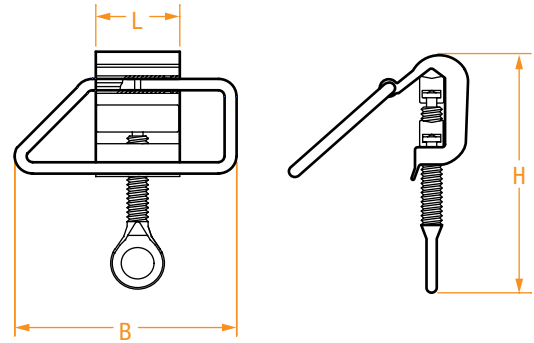
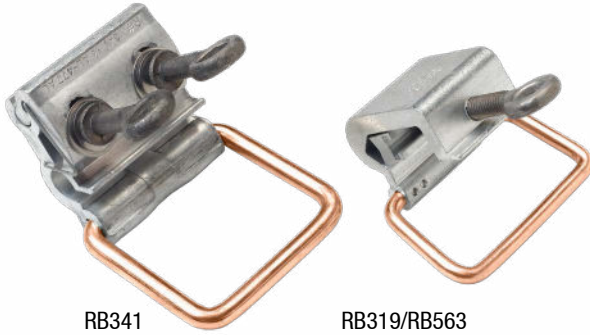


Figure 1

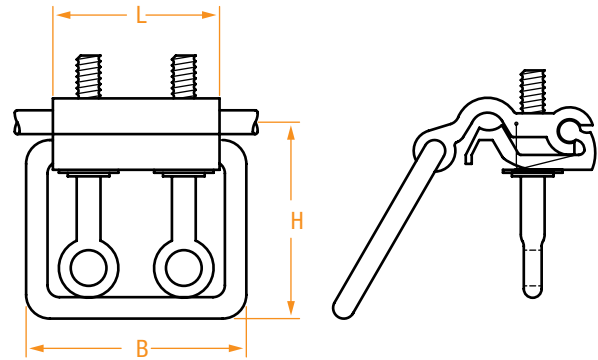
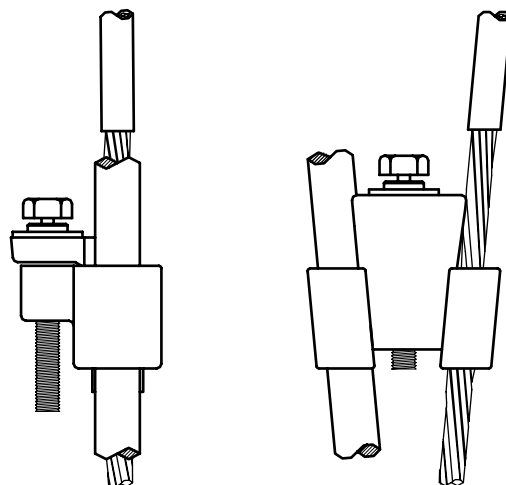


Figure 2

PART NUMBER*	FIGURE	WIRE SIZE		BAIL SIZE	DIMENSIONS IN INCHES		
		MIN.	MAX.		L	B	H
RB563-NTN	1	#4	4/0	#1	1-3/4	4-1/2	4-1/2
RB319-NTN	1	1/0	477	1/0	2-1/2	5	4-1/2
RB341-NTN	2	1/0 Al	477 Al	4/0 Cu	3-1/2	4-5/8	5

* "-NTN" indicates a non-tin plated bail. For tin plated bail contact the factory. Add -SS for stainless steel eyebolt.

- Made of high-strength silicon bronze
- Wedge design keeps constant compression
- Shear-head bolt ensures proper torque
- Forces in excess of 4,000 lbs. on each cable or ground rod



PART NUMBER	WIRE SIZE		BOLT	BOLT HEAD
	MIN	MAX		
RBWC-L-9-7	#2	1/0	5/16	9/16
RBWC-L-9-5	#4	1/0	5/16	9/16
RBWC-L-9	1/0	1/0	5/16	9/16
RBWC-M-5/8-7	#2	5/8" Ground Rod	5/16	9/16
RBWC-M-5/8-9	1/0	5/8" Ground Rod	5/16	9/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

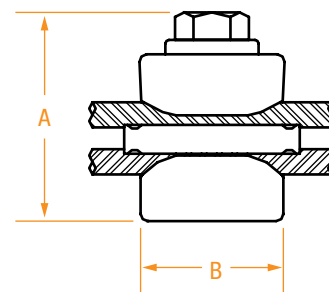
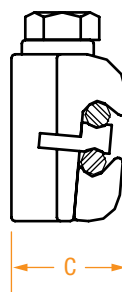
- Made of high-strength silicon bronze
- Accepts a range of conductors
- Size overlapping allows for smaller inventory requirements
- Interlocking design provides resistance to vibration loosening
- Spacer provides additional contact area for lower resistance



VC-8020-G



VC-8020-P



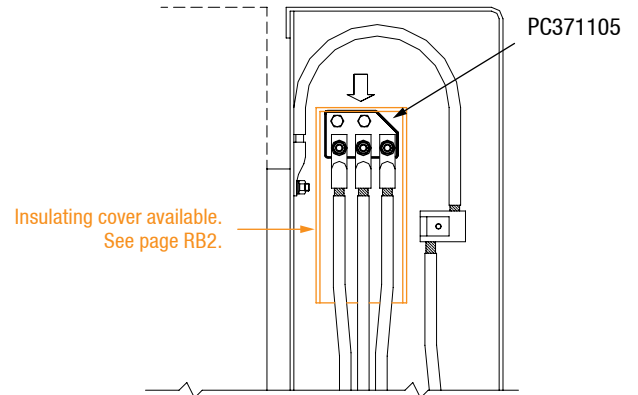
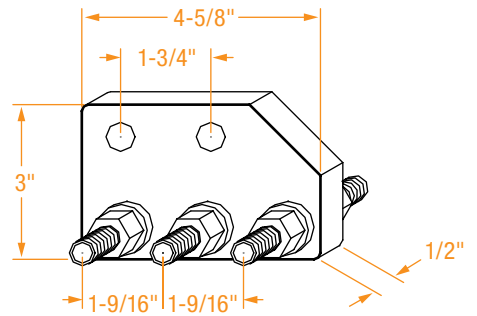
VC-8058-SH

PART NUMBER*	WIRE SIZE		DIMENSIONS IN INCHES			BOLT	BOLT HEAD
	MIN	MAX	A	B	C		
VC-8002	#8	#2 Sol	1-3/16	1	3/4	5/16	9/16
VC-8010	#8	#1	1-7/16	1	1	5/16	9/16
VC-8020	#8	2/0 Str/ 3/0 Sol	1-9/16	1	1	5/16	9/16
VC-8058-SH	#6 - #2	5/8 Ground Rod	2-1/4	1-3/16	1-3/16	3/8	9/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* For tin-plated connectors, add "-P" to the part number. For a shear-head bolt, add "-SH" to the part number. For a rubber grommet on the spacer, add "-G" to the part number.

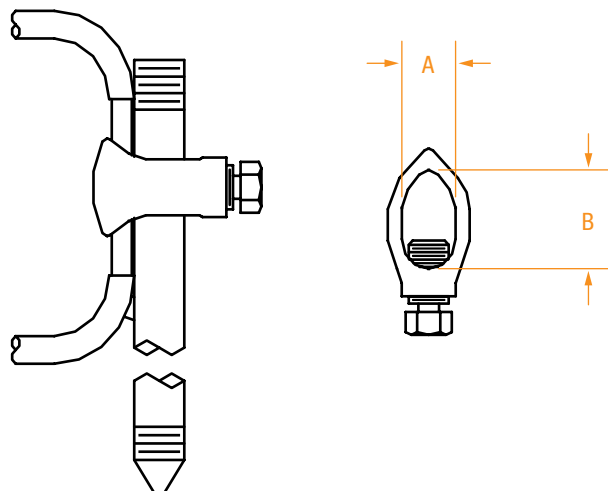
- Plate is tin-plated aluminum
- Stainless steel studs
- Zinc dichromate-plated washer nuts



PART NUMBER	STUD SIZE
PC371105	1/2"

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Used for grounding copper conductor to copper ground
- Made from bronze alloy



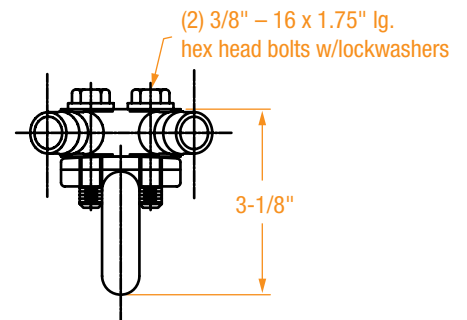
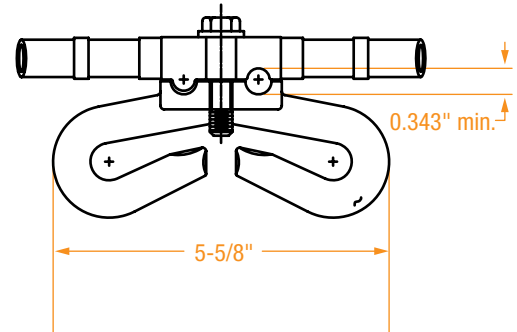
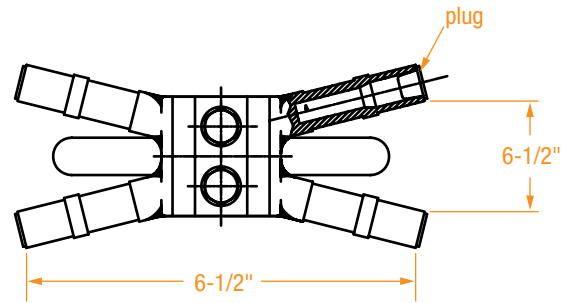
PART NUMBER	WIRE SIZE	ROD SIZE	DIMENSIONS IN INCHES	
			A	B
ACRN-5/8*	#8-1/0	5/8"	11/16	1-1/16
ACRN-5/8-CPS	#2-14	5/8"	5/8	1-1/16

* For a shear-head bolt, add "-SH" to the part number.

NEUTRAL-SPAN CLAMPS

R07-1285 Series

- Used for mid-span taps
- Made of high-strength aluminum
- Filled with oxide-inhibiting grease



PART NUMBER	HEIGHT
R07-1285	3-1/8"

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

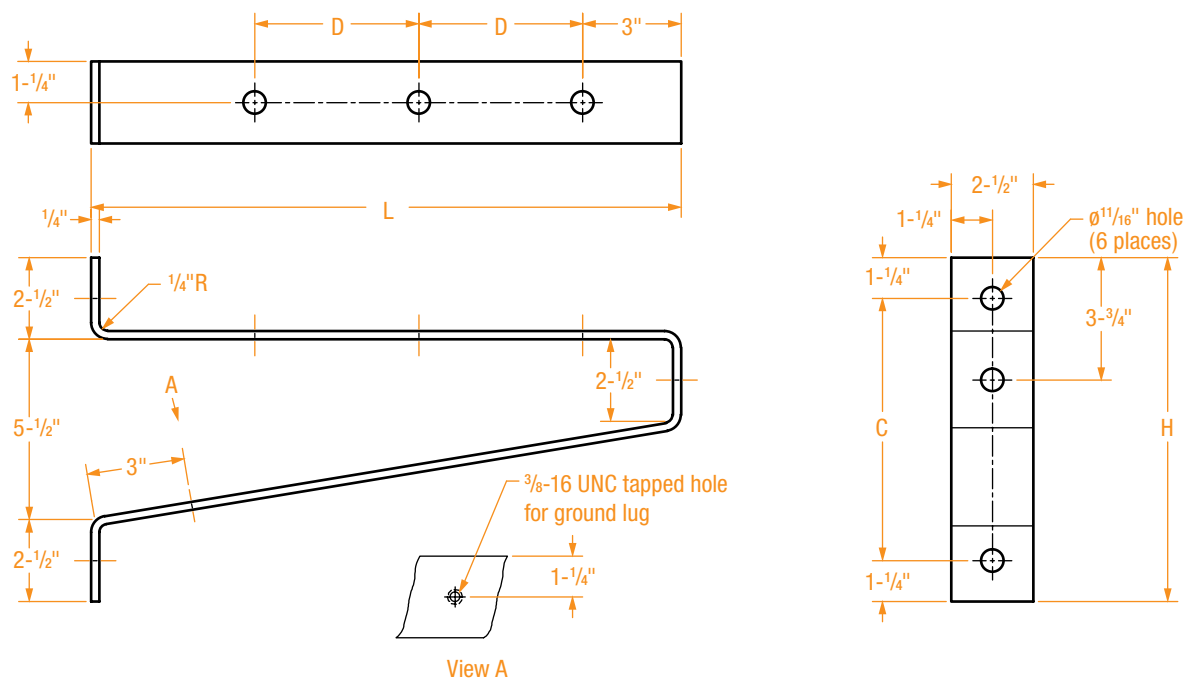
- Unit clamps onto fiber optic cable
- Rubber “O” ring keeps bolt captive to bracket
- EPDM Rubber insert withstands the toughest environmental conditions, including extreme temperature fluctuations and ozone exposure
- Multiple insert sizes are offered to house a variety of cable diameters
- Offset bracket is available to attach and offset fiber optic bracket
- Body constructed from high strength Aluminum



PART NUMBER FOR CLAMP AND INSERT	CABLE RANGE IN INCHES	PART NUMBER FOR CLAMP ONLY	PART NUMBER FOR INSERT ONLY
RAFOB-6045	0.426 – 0.475	RAFOB	FORS-6045
RAFOB-6050	0.476 – 0.525	RAFOB	FORS-6050
RAFOB-6055	0.526 – 0.575	RAFOB	FORS-6055
RAFOB-6065	0.626 – 0.675	RAFOB	FORS-6065
RAFOB-6080	0.776 – 0.825	RAFOB	FORS-6080
RAFOB-6085	0.826 – 0.875	RAFOB	FORS-6085
RAFOB-6100	0.976 – 1.025	RAFOB	FORS-6100

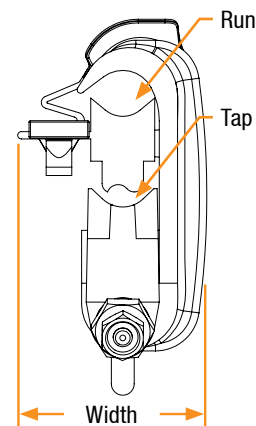
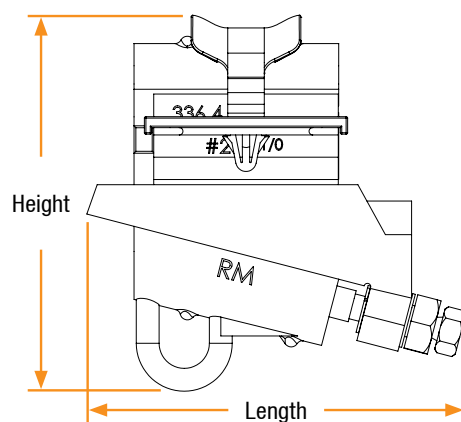
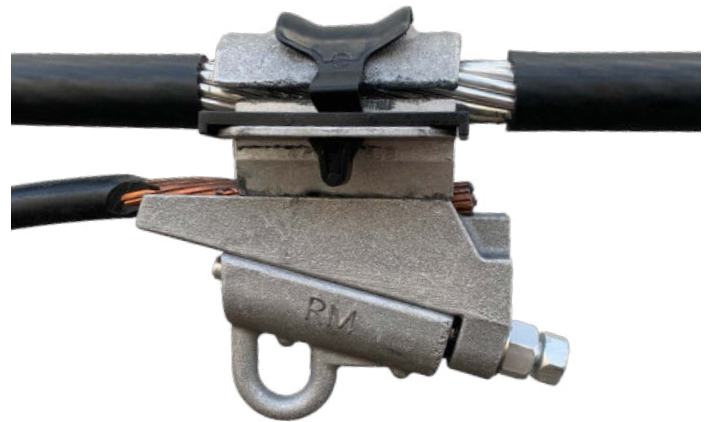
FOR OTHER SIZES, PLEASE CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY

- Designed to offset Richards Fiber Optic Bracket from pole
- Fabricated from steel for high-strength and durability
- Available in two sizes for different offset lengths



PART NUMBER	DIMENSIONS IN INCHES			
	L	D	C	H
RFB1	12	3	8	10-1/2
RFB2	18	5	8	10-1/2

- Provides a quick dependable method for connecting a tap to a main overhead conductor
- Range Taking design — Each available wedge size accommodates a range of conductors
- Innovative clip design captures interface so tap conductor can be inserted without struggle or risk of dropping components
- Eliminates need for ballistic tooling which can be unreliable and difficult to use/ maintain
- Shear Bolt simplifies installation — simply torque to shear and guarantee the required installation torque has been reached
- Shear head engineered with rivet to spin freely once sheared without coming free — eliminates risk of metal hex head falling down from bucket after shear
- Secondary Hex Head remains after in case assembly needs to be untightened
- RUS Approved



PART NUMBER*	RUN CONDUCTOR (AL ONLY)	RUN DIA. RANGE	TAP CONDUCTOR (AL OR CU)	TAP DIA. RANGE
ABWC00410	#4, #2, #1 AAC	0.232" - 0.328"	#6, #4 SOLID	0.162" - 0.231"
ABWC00420	#4, #2, #1 AAC	0.232" - 0.328"	#4	0.232" - 0.291"
ABWC00430	#4, #2, #1 AAC	0.232" - 0.328"	#2, #1 AAC	0.292" - 0.328"
ABWC02010	"#1 ACSR 1/0 2/0 AAC"	.354 - .414"	#6 ACSR, #4 AAC	0.198" - 0.231"
ABWC02020	"#1 ACSR 1/0 2/0 AAC"	.354 - .414"	#4 AAC, #2, #1 AAC	0.232" - 0.353"
ABWC02030	"#1 ACSR 1/0 2/0 AAC"	.354 - .414"	#1 ACSR, 1/0, 2/0 AAC	.354 - .414"
ABWC03030	2/0 ACSR, 3/0	0.447" - 0.502"	#2 AAC, #1	0.292" - 0.353"
ABWC03040	2/0 ACSR, 3/0	0.447" - 0.502"	#1 ACSR, 1/0, 2/0 AAC	0.354" - 0.446"
ABWC03050	2/0 ACSR, 3/0	0.447" - 0.502"	2/0 ACSR, 3/0	0.447" - 0.502"
ABWC25010	3/0 ACSR, 4/0, 250 AAC	0.502" - 0.574"	#6 ACSR, #4 AAC	0.198" - 0.249"
ABWC25020	3/0 ACSR, 4/0, 250 AAC	0.502" - 0.574"	#4 ACSR, #2, #1 AAC	0.250" - 0.353"
ABWC25030	3/0 ACSR, 4/0, 250 AAC	0.502" - 0.574"	#1 ACSR, 1/0, 2/0 AAC	0.354" - 0.446"
ABWC25040	3/0 ACSR, 4/0, 250 AAC	0.502" - 0.574"	2/0 ACSR, 3/0	0.447" - 0.521"
ABWC25050	3/0 ACSR, 4/0, 250 AAC	0.502" - 0.574"	4/0, 250 AAC	0.522" - 0.574"

(continued)

ABWC30020	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	#4	0.232" - 0.291"
ABWC30030	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	#2, #1 AAC	0.292" - 0.327"
ABWC30050	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	1/0 ACSR, 2/0	0.398" - 0.446"
ABWC30060	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	2/0 ACSR, 3/0	0.447" - 0.521"
ABWC30070	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	4/0, 250	0.522" - 0.591"
ABWC30080	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	"266.8 -19 AAC, 300 AAC, 266.8 ACSR"	0.592" - 0.664"
ABWC30090	"266.8 ACSR, 300 MCM, 336.4 AAC, 336.4 ACSR 18/1, 350 MCM"	0.609" - 0.684"	"300 ACSR 26/7, 350, 336.4 18/1"	0.665" - 0.684"
ABWC35010	"336.4, 350 MCM, 397 ACSR 18/1"	0.666" - 0.743"	#6, #4	0.162" - 0.256"
ABWC35020	"336.4, 350 MCM, 397 ACSR 18/1"	0.666" - 0.743"	#4 ACSR, #2, 1/0 AAC	0.257" - 0.367"
ABWC35030	"336.4, 350 MCM, 397 ACSR 18/1"	0.666" - 0.743"	1/0, 2/0, 3/0	0.368" - 0.521"
ABWC35040	"336.4, 350 MCM, 397 ACSR 18/1"	0.666" - 0.743"	4/0 ACSR, 266.8 AAC	0.522" - 0.641"
ABWC35050	"336.4, 350 MCM, 397 ACSR 18/1"	0.666" - 0.743"	"266.8 ACSR 36/7, 336.4, 397.5"	0.642" - 0.806"
ABWC50010	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	#6 AAC, #4, #2	0.184" - 0.316"
ABWC50020	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	#2, 1/0	0.292" - 0.398"
ABWC50030	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	1/0 ACSR, 2/0, 3/0 AAC	0.398" - 0.501"
ABWC50040	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	"3/0 ACSR, 4/0, 250, 266.8, 300 AAC"	0.502" - 0.627"
ABWC50050	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	"266.8 ACSR 26/7, 300 AAC, 336.4, 397.5 ACSR 24/7"	0.628" - 0.772"

* Available with Extra Heavy Duty thermal rating (ANSI C119.4 Class AA). To order add "-EHD" to part number.

ABWC50060	"397 ACSR 24/7, 450 MCM, 477, 500 MCM, 556.5 AAC"	0.769" - 0.858"	"336.4 ACSR 26/7, 397, 477, 500 MCM, 556 AAC"	0.720" - 0.858"
ABWC60010	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	#6, #4, #2	0.162" - 0.316"
ABWC60020	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	#2, #1, 1/0	0.292" - 0.398"
ABWC60030	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	1/0, 2/0, 3/0, 4/0 AAC	0.368" - 0.521"
ABWC60040	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	"4/0, 250, 266.8, 300 MCM, 336 AAC, 350 MCM"	0.522" - 0.679"
ABWC60050	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	"350 MCM, 336.4, 397.5, 477 AAC"	0.680" - 0.806"
ABWC60060	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR 24/7"	0.856" - 0.953"	"397 ACSR 30/7, 477, 500 MCM, 556.5, 636 AAC"	0.795" - 0.918"
ABWC60070	"477 ACSR 26/7, 556, 600 MCM, 636 ACSR 18/1, 605 ACSR"	0.856" - 0.953"	"556.5 ACSR 24/7, 636 AAC, 636 ACSR 18/1, 605"	0.914" - 0.952"
ABWC75010	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	#6 SOL, #4, #2 AAC	0.162" - 0.315"
ABWC75020	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	#2 ACSR, #1, 1/0, 2/0 AAC	0.316" - 0.446"
ABWC75030	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	2/0 ACSR, 3/0, 4/0, 250 AAC	0.447" - 0.585"
ABWC75035	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	266.8, 300 MCM, 350 MCM, 336.4 ACSR 18/1	0.586" - 0.683"
ABWC75040	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	"336.4 ACSR 26/7, 450 MCM, 500 MCM, 477, 556.5 AAC"	0.720" - 0.878"
ABWC75050	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	"477 ACSR 30/7, 556.5 ACSR, 600 MCM, 605 MCM, 636 ACSR 18/1, 715.5 AAC"	0.879" - 0.990"
ABWC75060	"636 ACSR, 715, 750 MCM, 795, 900 MCM"	0.973" - 1.108"	636 ACSR 26/7, 750 MCM, 715, 795, 900 MCM	0.991" - 1.108"

Underground Equipment



Underground Equipment

	Series	Page
Bare Crab Joints For Joining Bare Neutral Cables	FJB Series	99
Insulated Crab Joints	FJI Series	100
Fusible Crab Joints – Tower Joints	TWJ Series	101
Tower Joint Accessories – Cable End Caps & Shells	TWJA Series	102
High-Temperature Filler Shell	TWJA Series	102
Tower Joint Accessories – Insulating Sleeves & Caps	TWJS Series	103
Insulating Sleeves For Use With “TWJ” Series Fusible Crab Joints	TWJS Series	103
Fusible Crab Joints With Pigtails	CJLP Series	104
Crab Joints With Pigtails	SJ Series	105
Mole Limiter Assembly	RMLA Series	106
Cable-To-Cable IN-LINE Limiter	CCLA Series	107
Cable-To-Cable Limiter Assembly	CCLA Series	108
Cable-To-Cable Limiters	CCL Series	109
Two-Piece Cable-To-Cable Limiter Insulating Sleeves	LS Series	110
High-Temperature Filler Shell For Cable-To-Cable Limiters	ALS Series	110
Cable-to-Cable Current Limiting Fuses	CCLF Series	111

Two-Piece Cable-to-Cable Current Limiting Fuse Sleeves	CCLF-CCR Series	111
Limiter Lug Assembly	CLLA Series	112
Limiter Lugs	CLL Series	113
Limiter Lug Accessories – Insulating Sleeves	LLS Series	114
Limiter Lug Accessories – High-Temperature Filler Shells	ALLS Series	114
Current Limiting Lugs	CLLF Series	115
Ring bus Limiter Lug Assembly	CLLA Series	116
Network Protector Terminals	NPT Series	117
Network Protector Terminals	NPT Series (continued)	118
Accessories For Network Protector Terminals		118
Disconnect Network Protector Terminals	NPT-DISC Series	119
Disconnect Legs For Disconnect Network Protector Terminals	RDL Series	120
Protector Fuses – Low-Loss “S” Fuse	LLF Series	121
Network Protector Fuses – “Z” Fuse	NPF-Q Series	122
Network Protector Fuses – “V” Fuse	NPF-L Series	123
Network Protector Fuse with Fuse Cover Assembly	FCA	124
Lead Alloy Network Protector Fuses – Laminated Type – Standard Speed	Alloy Fuse Series	125
Lead Alloy Network Protector Fuses – Laminated Type – Time Lag	Alloy Fuse Series (continued)	126
Lead Alloy Network Protector Fuses – Non-Laminated Type (Single Layer)	NF Series	127
Copper Link Fuses	NWP Series	128
Copper Braids	CB Series	129
Secondary Spades	TRSS Series	130
Set Screw Connectors	SSCRW Series	131
Joint Casings	JC Series	132
Cable Rack Arms	RA Series	133
Stanchions	RA Series	134
Standard Cable Rack Arms	SCRA Series	135
Pigtail Plug	PTP Series	136
Lifting Hooks	RLH Series	137
Insulated T-Wrench		138

- Used for joining bare underground neutral cables
- Made from pure seamless copper tubing
- Tin-plated to resist corrosion
- Corrugated reducing adapters may be used when smaller cable is required

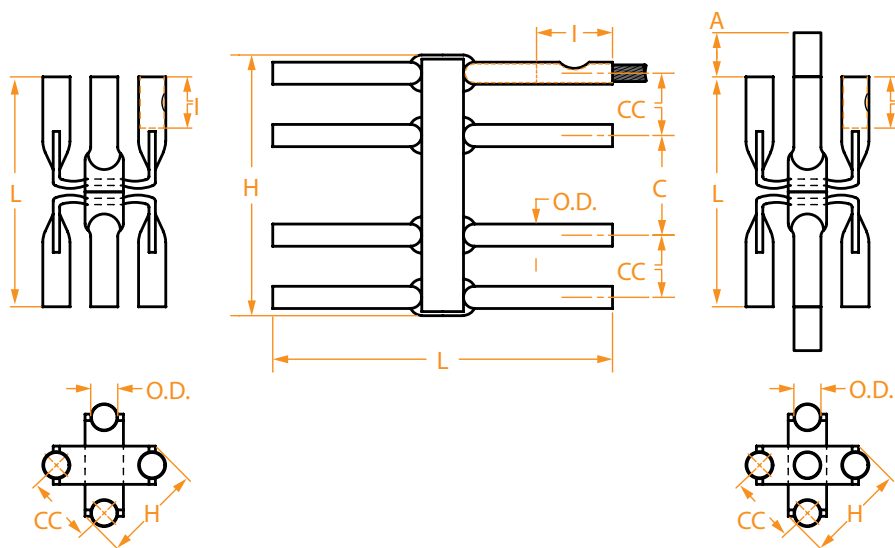


Figure 1

Figure 2

Figure 3

PART NUMBER	WIRE SIZE	FIGURE	# OF OUTLETS	# OF INDENTS	DIMENSIONS IN INCHES						
					I	H	L	C	CC	O.D.	A
FJB4/0-2W	4/0	2	4	1	2.0	3-3/16	6-7/16	—	2-3/16	0.687	—
FJB4/0-3W	4/0	2	6	1	2.0	7-1/16	6-7/16	3-7/8	2-3/16	0.687	—
FJB4/0-4W	4/0	2	8	1	2.0	9-1/4	6-7/16	3-7/8	2-3/16	0.687	—
CJB4/0-4W	4/0	1	8	2	2.0	3-1/2	9	—	2-3/16	0.687	—
CJB350-4W	350	1	8	2	2.5	3-3/4	9	—	2-1/2	0.875	—
FJB500-2W	500	2	4	2	2.5	3-15/16	7-1/2	—	2-1/2	1.062	—
FJB500-3W	500	2	6	2	2.5	8-3/16	7-1/2	3-3/4	2-1/2	1.062	—
FJB500-4W	500	2	8	2	2.5	10-9/16	7-1/2	3-3/4	2-1/2	1.062	—
CJB500-4W	500	1	8	2	2.5	3-3/4	8-3/4	—	2-3/4	1.062	—
CJB500-5W	500	3	10	2	2.5	4	9	—	2-3/4	1.062	2-1/2
CJB750-5W	750	3	10	2	3.5	5	10-1/2	—	3-1/4	1.3	3-3/4

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

INSULATED CRAB JOINTS

FJI Series

- Provides a means for connecting several cables at one common junction
- Corrugated adapters allow a wide variety of cables to be used
- Made from pure copper
- Tin-plated to resist corrosion
- Installation is done by “rolling back” the insulation over the cable sockets; inserting the cable into the sockets and crimping it. The insulation is then returned to its original position covering the socket.
- Eliminates bulky, time-consuming crotch taping
- Insulated with an EPDM rubber for optimum electrical and mechanical properties

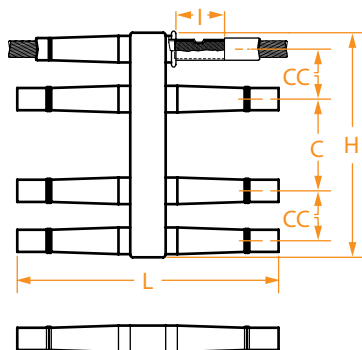


Figure 1

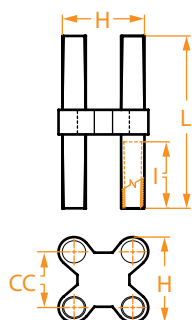


Figure 2

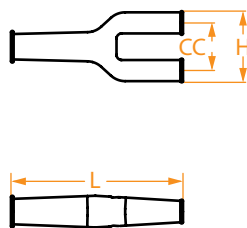


Figure 3

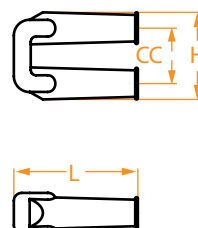


Figure 4

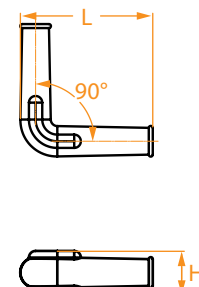


Figure 5

PART NUMBER	WIRE SIZE	FIGURE	# OF OUTLETS	# OF INDENTS	DIMENSIONS IN INCHES				
					I	H	L	C	CC
FJI4/0-2W	4/0	1	4	1	2.0	3-11/16	8-3/4	—	2-3/16
FJI4/0-3W	4/0	1	6	1	2.0	7-9/16	8-3/4	3-7/8	2-3/16
FJI4/0-4W	4/0	1	8	1	2.0	9-3/4	8-3/4	3-7/8	2-3/16
FJI4/0-5W	4/0	1	10	1	2.0	13-1/2	8-3/4	3-1/2	2-1/2
FJI4/0-6W	4/0	1	12	1	2.0	16	8-3/4	3-1/2	2-1/2
BIC4/0-4W	4/0	2	8	1	2.0	4	8-3/4	—	3
FJI500-(2)4/0	500 - 4/0	3	3	2	2.5	3	8-1/4	—	1-3/4
FJI500-U	500	4	2	2	3.5	4-1/4	6	—	2-1/2
FJI500-2W	500	1	4	2	2.5	4-3/8	12-5/8	—	2-1/2
FJI500-3W	500	1	6	2	2.5	8-5/8	12-5/8	3-3/4	2-1/2
FJI500-4W	500	1	8	2	2.5	11	12-5/8	3-3/4	2-1/2
FJI500-5W	500	1	10	2	2.5	14-1/2	12-5/8	3-3/4	2-1/2
FJI500-6W	500	1	12	2	2.5	17	12-5/8	3-3/4	2-1/2
FJI750-2W	750	1	4	2	2.5	4-3/4	13	—	2-1/2
FJI750-3W	750	1	6	2	2.5	9	13	4-1/2	2-1/2
FJI750-4W	750	1	8	2	2.5	12	13	4-1/2	2-1/2
FJI750-5W	750	1	10	2	2.5	16	13	4-1/2	2-1/2
RIL500-CE	500	5	2	2	3	2	6-3/16	—	—

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Provides limiter protection for six or eight cables at one common junction
- For 125/216V applications only
- Eliminates bulky, time-consuming crotch taping
- Each cable is attached to its own separate fusible section
- The fusible elements are made from pure copper seamless tubing and tin-plated
- The elements are encased in a high-temperature shell, which provides separate arcing chambers for each fusible section
- Corrugated adapters allow a wide variety of cables to be used
- Insulated with an EPDM rubber for optimum electrical and mechanical properties

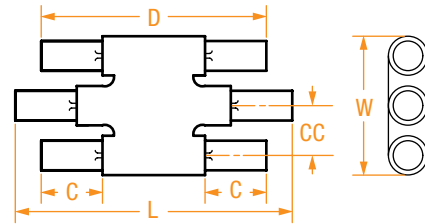


Figure 1

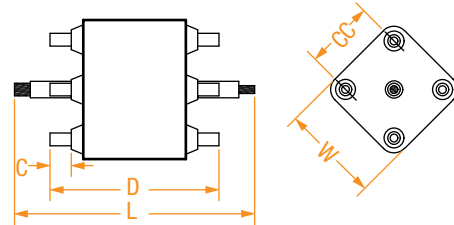


Figure 2

PART NUMBER	WIRE SIZE	FIGURE	# OF INDENTS	DIMENSIONS IN INCHES				
				C	L	D	CC	W
TWJ4/0-5*	4/0	2	1	2	18	10-1/2	3-1/4	5-11/16
TWJ500-3	500	1	2	2-7/8	15-7/16	10-7/8	2-5/16	6-7/16
TWJ500-5	500	2	2	3	20	13-1/2	3-9/16	6-3/16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* TWJ4/0-5 has an unfused center cable port designed for 500 mcm copper cable. The outer cable ports are fused (limiteded) and designed for 4/0 cable.

TOWER JOINT ACCESSORIES – CABLE END CAPS & SHELLS

TWJA Series

- Cable end caps are used to insulate the center cable of the fusible crab type “TWJ”
- An EPDM rubber is used for optimum electrical and mechanical properties

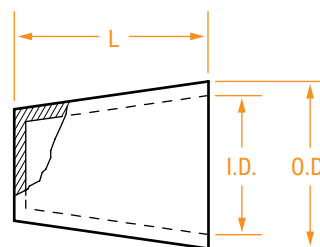


Figure 1

PART NUMBER	WIRE SIZE	FIGURE	DIMENSIONS IN INCHES		
			L	I.D.	O.D.
CC500	500	1	2-3/8	27/32	1-1/4

HIGH-TEMPERATURE FILLER SHELL

TWJA Series

- High-temperature filler shells are used with fusible crab joints type “TWJ”
- These shells prevent cable insulation damage due to the heat generated from the connections

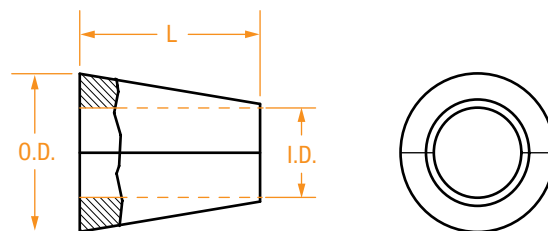


Figure 2

PART NUMBER	WIRE SIZE	FIGURE	DIMENSIONS IN INCHES		
			L	O.D.	I.D.
AS4/0	4/0	2	2-3/4	2-1/8	3/4
AS500/3	500	2	3	1-13/16	1-1/8
AS500-5	500	2	3	2-3/16	1-1/8

- Dead-end insulating caps are used to cap unused outlets of fusible crab joints
- This cap holds the filler shell in place and reduces the amount of hand taping
- An EPDM rubber is used for optimum electrical and mechanical properties

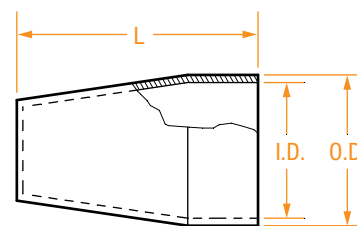


Figure 1

PART NUMBER	WIRE SIZE	FIGURE	DIMENSIONS IN INCHES		
			L	I.D.	O.D.
TWJC4/0	4/0	1	4-1/4	2-1/8	2-1/2
TWJC500-3	500	1	4-1/4	1-3/4	2-1/4
TWJC500-5	500	1	4-9/16	2-5/32	2-1/2

INSULATING SLEEVES FOR USE WITH “TWJ” SERIES FUSIBLE CRAB JOINTS

TWJS Series

- Insulating sleeves are used to hold the filler shell in place and reduces the amount of hand taping
- An EPDM rubber is used for optimum electrical and mechanical properties

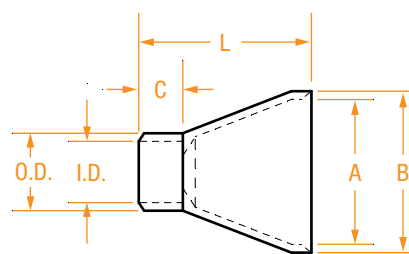


Figure 2

PART NUMBER	WIRE SIZE	FIGURE	DIMENSIONS IN INCHES					
			L	A	B	C	I.D.	O.D.
TWJS4/0	4/0	2	6-3/16	2-1/8	2-1/2	1-3/4	1-3/4	1-1/8
TWJS500-3	500	2	6-3/16	1-3/4	2-1/4	1-3/4	1-5/32	1-1/2
TWJS500-5	500	2	6-7/8	2-5/32	2-1/2	1-3/4	1-5/32	1-1/2

FUSIBLE CRAB JOINTS WITH PIGTAILS

CJLP Series

- Installation is as easy as making a cable-to-cable butt splice
- Provides limiter protection for six, eight or 12 cables at one common junction
- Eliminates bulky, time-consuming crotch taping
- Each cable is attached to its own separate fusible section
- The fusible elements are made from pure copper seamless tubing and hot-tinned
- The elements are encased in a high-temperature shell, which provides separate arcing chambers for each fusible section
- Insulated with an EPDM rubber for optimum electrical and mechanical properties
- For 125/216V applications only

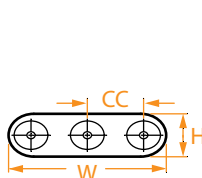
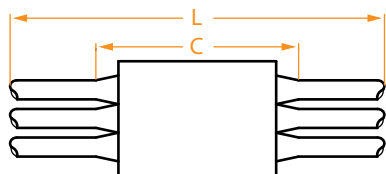


Figure 1

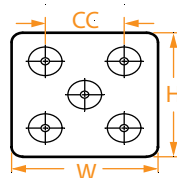


Figure 2

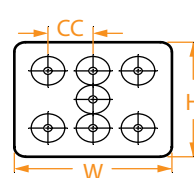


Figure 3

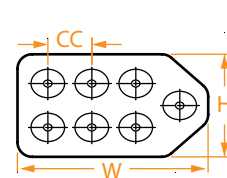
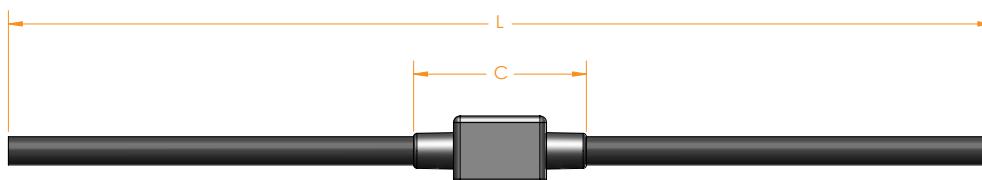
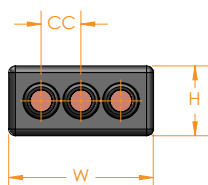
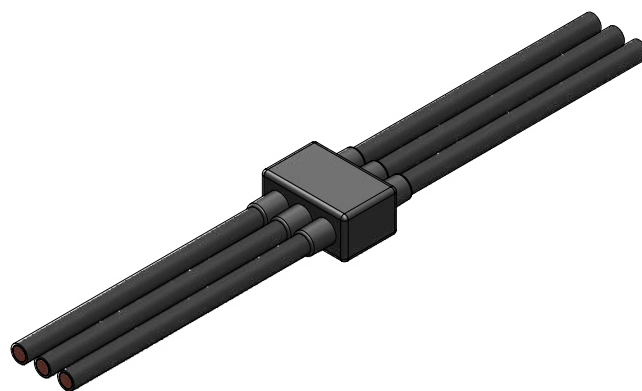


Figure 4

PART NUMBER	WIRE SIZE	FIGURE	DIMENSIONS IN INCHES				
			C	L	H	W	CC
CJLP500-3W	500	1	14-1/2	64	2-1/2	7	2-1/2
CJLPS500-3W	500	1	14-1/2	46	2-1/2	7	2-1/2
CJLP500-5W	500	2	17-5/8	62	6-1/2	6-1/2	3-1/2
CJLPS500-5W	500	2	17-5/8	44	6-1/2	6-1/2	3-1/2
CJLP500-7W	500	3	19	52	6	7	2-1/4
CJLP500-7W-LP	500	4	22-1/4	43	4	8-1/2	2-3/8

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Installation is as easy as making a cable-to-cable butt splice
- Eliminates bulky, time-consuming crotch taping
- All cables are connected at one common junction
- Insulated with an EPDM rubber for optimum electrical and mechanical properties
- Made from Pure Copper



PART NUMBER	WIRE SIZE	# CABLES PER SIDE	DIMENSIONS IN INCHES				
			C	L	H	W	CC
CJLP500-3W-ENT	500	3	6.5	37	2.625	5.438	1.5
CJLP500-5W-ENT	500	5	6.5	37	2.625	8.375	1.5
CJLP500-6W-ENT	500	6	6.5	37	2.625	9.938	1.5
CJLP500-7W-ENT	500	7	6.5	37	2.625	11.438	1.5

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

CRAB JOINTS WITH PIGTAILS

SJ Series

- Installation is as easy as making a cable-to-cable butt splice
- Eliminates bulky, time-consuming crotch taping
- Insulated with an EPDM rubber for optimum electrical and mechanical properties
- When fusible elements are used, the elements are made from pure copper seamless tubing and tin-plated
- The fusible elements are encased in a high-temperature shell, which provides separate arcing chambers for each fusible section

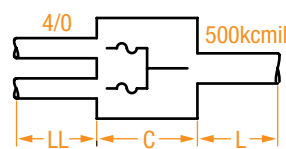


Figure 1

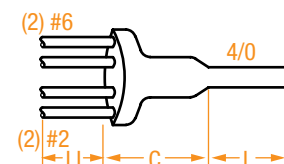


Figure 2

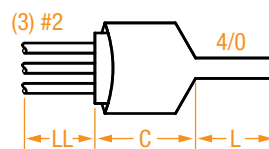


Figure 3

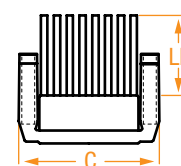


Figure 4



PART NUMBER	WIRE SIZE	CABLE SIZE # OF CABLES IN ()	FIGURE	DIMENSIONS IN INCHES		
				C	L**	LL*
SJ573-0536*	500	(2) 4/0	1	5	9 1/2	19 1/2
SJ573-0171	4/0	(2) #2 & (2) #6	2	4 1/2	6	6
SJ1420	4/0	(4) #4 Solid	2	5	9	8
SJ573-0346	4/0	(3) #2	3	4 3/4	24	16
SJ4/0-(6)1/0	4/0	(6) 1/0	2	—	—	—
SJ573-0569	(1) 500	(6) #2	4	8	—0—	11
SJ573-0551	(2) 500	(8) #2	4	11	—0—	11
SJ350AL-4/0-8W	(2) 350 AL	(8) 4/0 AL	4	12	—0—	—0—
SJ573-0668	—	(3) #2	See photo	2	—	6
SJ573-0676	—	(4) #2	See photo	2	—	6
SJ573-0692	—	(5) #2	See photo	2	—	6

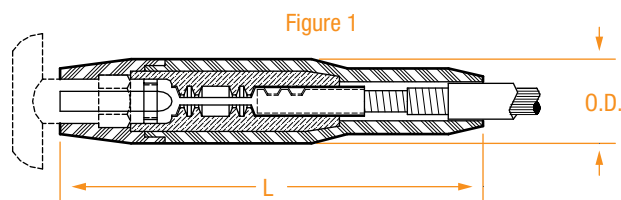
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

—0— indicates a cable port, rather than a cable length.

* The two (2) 4/0 cables are limited. 125/216V applications only.

** Cable lengths given are standard, contact the factory for different lengths.

- Mole limiter assemblies are complete units that include a fusible element, a high-temperature filler shell and an insulating sleeve
- Can be ordered as a complete assembly or individual components
- For 125/216V applications only



Complete Assemblies

PART NUMBER	WIRE SIZE	# OF INDENTS	DIMENSIONS IN INCHES	
			L	OD
RMLA4/0	4/0	1	7-1/2	1-7/8
RMLA500	500	2	12	2.40

Mole Limiter Element Only

PART NUMBER	WIRE SIZE	# OF INDENTS	DIMENSIONS IN INCHES		
			L	STUD OD	SOCKET OD
RML4/0	4/0	1	6	.52	.68
RML500	500	2	8-3/8	.81	1.05

Mole Limiter Shell Only

PART NUMBER	WIRE SIZE	# OF INDENTS	DIMENSIONS IN INCHES	
			L	OD
RMLSHELL-4/0	4/0	1	5-7/16	1.47
RMLSHELL-500	500	2	7	1.8

Mole Limiter Sleeve Only

PART NUMBER	WIRE SIZE	# OF INDENTS	DIMENSIONS IN INCHES		
			L	OD	ID
RMLSLV-4/0	4/0	1	6-7/16	1-7/8	.92
RMLSLV-500	500	2	12	2.40	1.27

CABLE-TO-CABLE LIMITER – MOLDED ASSEMBLY

CCLA Series

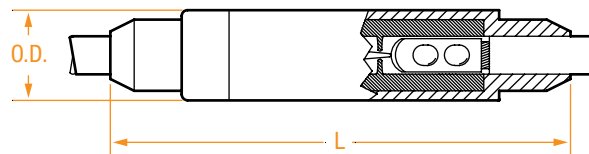
- Cable-to-Cable Limiter Assemblies are complete units that include a cable-to-cable fusible element, a high-temperature filler shell and an insulating sleeve
- This one-piece design is easy install and use
- For 125/216V applications only



PART NUMBER	WIRE SIZE	# OF INDENTS*	DIMENSIONS IN INCHES	
			L	O.D.
CCLA-IN-500	500	2	13	2-1/8
CCLA-IN-750-500	750 (side A) - 500 (side B)	3	13-1/4	2-1/8

* Number of indents refers to the number of crimps (min) to make on each side of the limiter using a nested indenter tool.

- Cable-to-Cable Limiter Assemblies are complete units that include a cable-to-cable fusible element, a high-temperature filler shell and an insulating sleeve
- When ordering individual components, refer to the following pages
- The “CCLAP” limiters are designed for use on paper-insulated cable and feature an oil-tight seal
- For 125/216V applications only

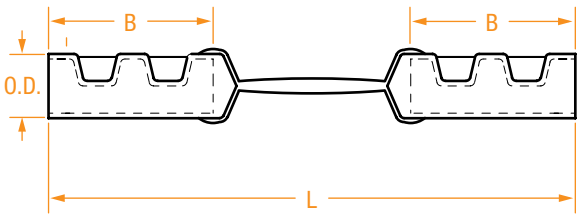


PART NUMBER		WIRE SIZE	# OF INDENTS	DIMENSIONS IN INCHES	
RUBBER INS.	PAPER INS.			L	O.D.
CCLA4/0	CCLAP4/0	4/0	1	8-1/4	1-1/2
CCLA250	CCLAP250	250	1	8-1/4	1-1/2
CCLA300	CCLAP300	300	2	12-1/8	2-1/2
CCLA350	CCLAP350	350	2	12-1/8	2-1/2
CCLA400	CCLAP400	400	2	12-1/8	2-1/2
CCLA500	CCLAP500	500	2	12-1/8	2-1/2
CCLA750	CCLAP750	750	2	12-1/8	2-1/2

CABLE-TO-CABLE LIMITERS

CCL Series

- Made of pure copper
- Tin-plated dipped for corrosion resistance
- These connectors combine the functions of fuse and a connector
- Designed to clear faults great enough to cause cable damage, while not clearing minor overloads
- The “CCLP” fuses are designed for use on paper-insulated cable and feature an oil-tight seal
- For 125/216V applications only



PART NUMBER		WIRE SIZE	DIMENSIONS IN INCHES		
RUBBER INS.	PAPER INS.		O.D.	B	L
CCL4/0	CCLP4/0	4/0	11/16	1-3/4	6-3/8
CCL250	CCLP250	250	3/4	1-7/8	6-3/8
CCL300	CCLP300	300	13/16	2	6-3/4
CCL350	CCLP350	350	7/8	2	6-3/4
CCL400	CCLP350	400	31/32	2-1/8	7
CCL500	CCLP500	500	1-1/16	2-7/8	8-3/4
CCL750	CCLP750	750	1-5/16	2-7/8	9

TWO-PIECE CABLE-TO-CABLE LIMITER INSULATING SLEEVES

LS Series

- Cable-to-cable insulating sleeves are used to hold the high temperature shell and to minimize the need for hand taping
- Molded from EPDM rubber, these sleeves have excellent mechanical and electrical properties

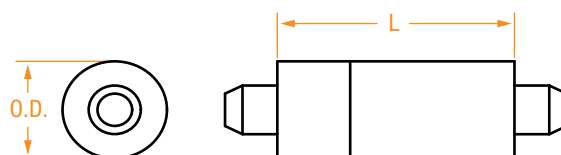


Figure 1

PART NUMBER	CABLE SIZE (RANGE)	FIGURE	DIMENSIONS IN INCHES	
			O.D.	L
LS-250	4/0 TO 250	1	1-1/2	8-1/4
LS-2PC-500	300 TO 500	1	2-1/2	12-1/8
LS-2PC-750	750	1	2-1/2	12-1/8

HIGH-TEMPERATURE FILLER SHELL FOR CABLE-TO-CABLE LIMITERS

LS Series

- High-temperature shells provide an arcing chamber for the limiter element under overload conditions
- For use with CCL Series (included in CCLA assembly)

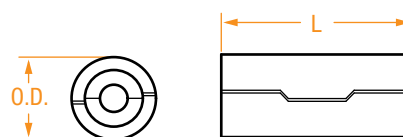


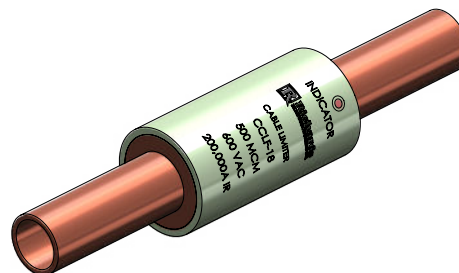
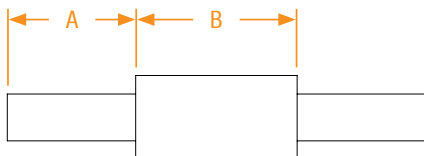
Figure 2

PART NUMBER	CABLE SIZE (RANGE)	FIGURE	DIMENSIONS IN INCHES	
			O.D.	L
ALS250	4/0 TO 250	2	1-3/8	6-1/2
ALS500	300 TO 500	2	1-7/8	8
ALS750	750	2	2-1/16	9

CABLE-TO-CABLE CURRENT LIMITING FUSES

CCLF Series

- Current limiting device to quickly clear system faults
- Rated for 600VAC and 200kA interrupt rating (IR)
- Crimp barrel suitable for copper conductor only
- Suitable for underground applications
- Molded rubber insulating sleeve available (see CCLF-CCR Series)



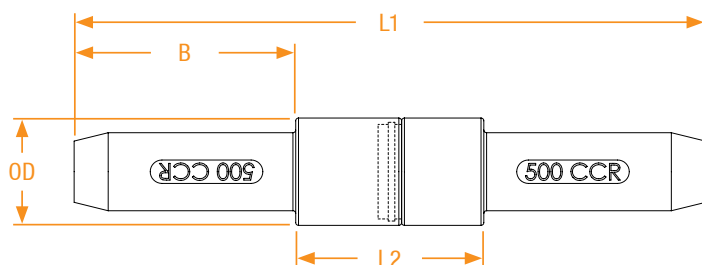
PART NUMBER*	CABLE SIZE	DIE INDEX	A	B
CCLF-12	4/0 AWG	15	1.75	3.63
CCLF-15	350 MCM	18	2.00	3.63
CCLF-18	500 MCM	20	2.88	3.63
CCLF-23	750 MCM	24	3.50	3.75

* Cable-To-Cable Current Limiting Fuses are compatible with CCLF-CCR Series Sleeves. To order with corresponding size sleeve add "A" after "CCLF".

TWO-PIECE CABLE-TO-CABLE CURRENT LIMITING FUSE SLEEVES

CCLF-CCR Series

- Insulating sleeve for CCLF Series



PART NUMBER	CABLE SIZE	OD	B	L1	L2
4/0-CCR	4/0 AWG	2	3-1/16	10-5/8	4-1/2
350-CCR	350 MCM	2-1/8	3-11/16	11-5/8	4-3/8
500-CCR	500 MCM	2-7/16	5	14-3/16	4-1/4
750-CCR	750 MCM	3	5	14-1/2	4-9/16

- Limiter lug assemblies are complete units that are comprised of a fusible element, a high-temperature filler shell and an insulating sleeve
- When ordering individual components, refer to the following pages.
- The “CLLAP” limiters are designed for use on paper-insulated cable and feature an oil-tight seal
- For 125/216V applications only

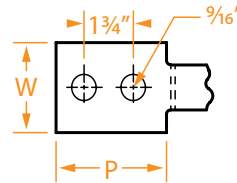
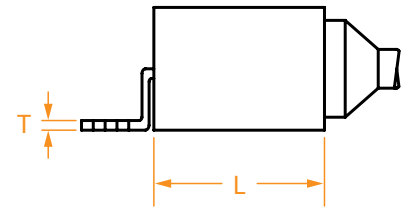


Figure 1
“NEMA Pad”

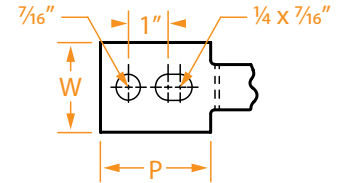


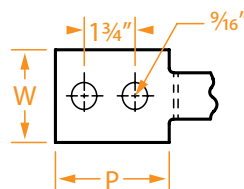
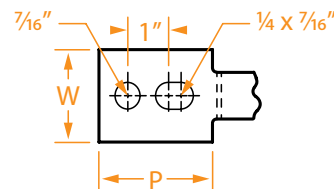
Figure 2
“A Pad”

PART NUMBER		WIRE SIZE	FIGURE	DIMENSIONS IN INCHES			
RUBBER INS.	PAPER INS.			L	W	P	T
CLLA4/0N	CLLAP4/0-N	4/0	1	10	1	2-7/16	9/64
CLLA4/0-A	CLLAP4/0-A	4/0	2	9-3/4	1	2-3/16	9/64
CLLA250-N	CLLAP250-N	250	1	10	1-1/8	2-7/16	5/32
CLLA250-A	CLLAP250-A	250	2	9-3/4	1-1/8	2-3/16	5/32
CLLA300-N	CLLAP300-N	300	1	10-7/8	1-3/16	2-9/16	5/32
CLLA300-A	CLLAP300-A	300	2	10-3/8	1-3/16	2-5/16	5/32
CLLA350-N	CLLAP350-N	350	1	10-7/8	1-5/16	2-9/16	3/16
CLLA350-A	CLLAP350-A	350	2	10-3/8	1-5/16	2-5/16	3/16
CLLA400-N	CLLAP400-N	400	1	10-3/4	1-7/16	2-9/16	3/16
CLLA400-A	CLLAP400-A	400	2	10-1/2	1-7/16	2-5/16	3/16
CLLA500-N	CLLAP500-N	500	1	11-3/4	1-1/2	3	7/32
CLLA500-A	CLLAP500-A	500	2	11-1/2	1-1/2	2-3/4	1/4
CLLA750-N	CLLAP750-N	750	1	11-3/4	1-15/16	3	1/4
CLLA750-A	CLLAP750-A	750	2	11-1/2	1-15/16	2-3/4	1/4

LIMITER LUG

CLL Series

- Made of pure copper
- Tin-plated to resist corrosion
- These connectors combine the functions of fuse and a connector
- Designed to clear faults great enough to cause cable damage, while not clearing minor overloads
- The "CLLP" and "CLLPL" fuses are designed for use on paper insulated cable and feature an oil-tight seal
- For 125/216V applications only

Figure 1
"NEMA Pad"Figure 2
"A Pad"

PART NUMBER		WIRE SIZE	FIGURE	DIMENSIONS IN INCHES					
RUBBER INS.	PAPER INS.			L	C	W	P	T	O.D.
CLL4/0-N	CLLP4/0-N	4/0	1	8-1/2	1-7/8	1	2-7/16	9/64	11/16
CLL4/0-A	CLLP4/0-A	4/0	2	8-1/2	1-7/8	1	2-7/16	9/64	11/16
CLL250-N	CLLP250-N	250	1	8-1/2	1-7/8	1-1/8	2-7/16	5/32	3/4
CLL250-A	CLLP250-A	250	2	8-1/2	1-7/8	1-1/8	2-7/16	5/32	3/4
CLL300-N	CLLP300-N	300	1	9	2	1-3/4	2-9/16	5/32	13/16
CLL300-A	CLLP300-A	300	2	9	2	1-3/4	2-9/16	5/32	13/16
CLL350-N	CLLP350-N	350	1	9	2	1-5/16	2-9/16	3/16	7/8
CLL350-A	CLLP350-A	350	2	9	2	1-5/16	2-9/16	3/16	7/8
CLL400-N	CLLP400-N	400	1	9-1/4	2-1/8	1-7/16	2-9/16	3/16	31/32
CLL400-A	CLLP400-A	400	2	9-1/4	2-1/8	1-7/16	2-9/16	3/16	31/32
CLL500-N	CLLP500-N	500	1	10-1/4	2-9/16	1-1/2	3	7/32	1-1/16
CLL500-A	CLLP500-A	500	2	10-1/4	2-9/16	1-1/2	3	7/32	1-1/16
CLL750-N	CLLP750-N	750	1	10-1/4	2-9/16	1-15/16	3	1/4	1-5/16
CLL750-A	CLLP750-A	750	2	10-1/4	2-9/16	1-15/16	3	1/4	1-5/16

LIMITER LUG ACCESSORIES – INSULATING SLEEVES

LLS Series

- Limiter lug insulating sleeves are used to hold the high-temperature filler shell and to minimize the need for hand taping
- Molded from EPDM rubber, these sleeves have excellent mechanical and electrical properties

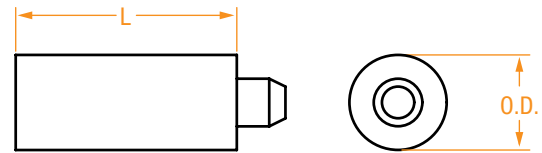


Figure 1

PART NUMBER	WIRE SIZE	FOR USE WITH CURRENT LIMITING LUG (CLLF)	FOR USE WITH LOW VOLTAGE LIMITING LUG (CLLA)	DIMENSIONS IN INCHES	
				O.D.	L
LLS4/0	4/0 to 250	✓	✓	1-3/4	6-3/4
LLS500	300 to 500	✓	✓	2-1/2	9
LLS750	750		✓	2-1/2	9-1/4
LLS750-2	750	✓		3-1/8	7-7/8
LLS1000	1000	✓		3-19/32	4-3/32

LIMITER LUG ACCESSORIES – HIGH-TEMPERATURE FILLER SHELLS

ALLS Series

- High-temperature shells provide an arcing chamber for the limiter element under overload conditions
- For use with CLL Series (included in CLLA assembly)

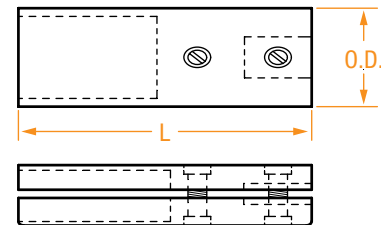


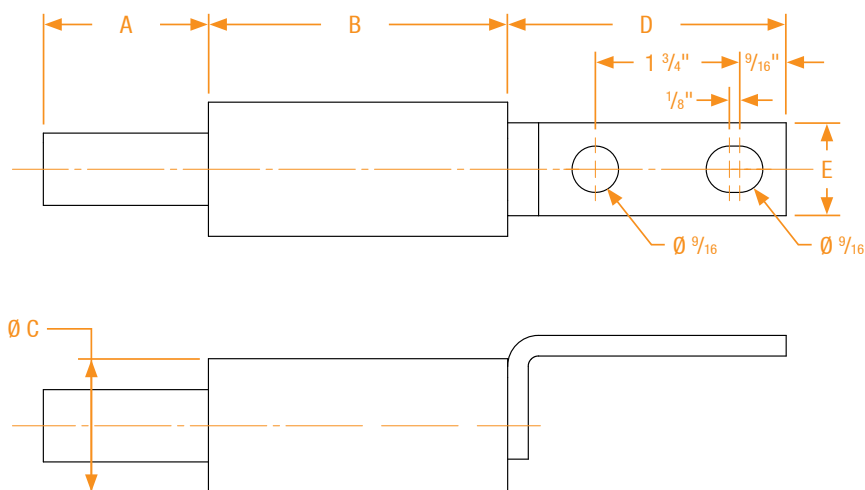
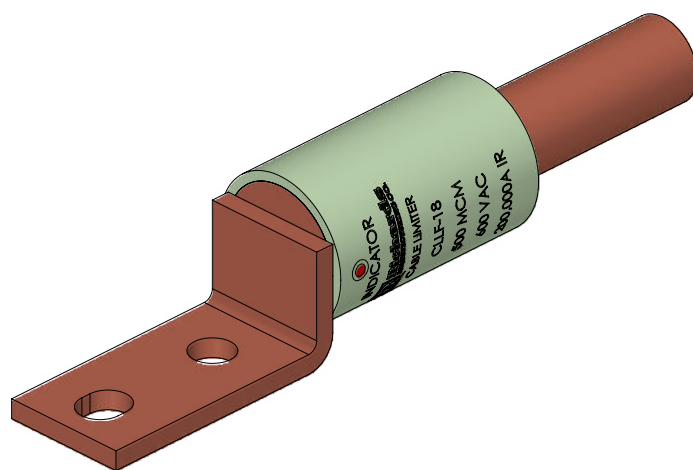
Figure 2

PART NUMBER	CABLE SIZE (RANGE)	FIGURE	DIMENSIONS IN INCHES	
			O.D.	L
ALLS250	4/0 TO 250	2	1-7/16	5-11/16
ALLS500	300 TO 500	2	1-7/8	7-1/8
ALLS750	750	2	1-7/8	7-1/2

CURRENT LIMITING LUGS

CLLF Series

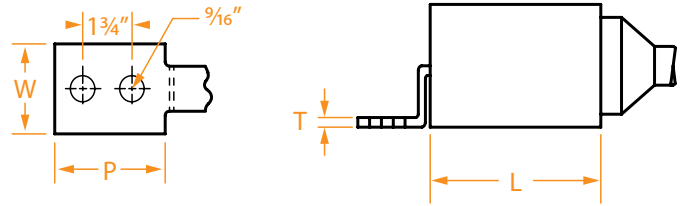
- Current limiting device to quickly clear system faults
- Rated for 600VAC and 200kA interrupt rating (IR)
- Crimp barrel suitable for copper conductor only
- Suitable for underground applications
- Molded rubber insulating sleeve available (see LLS Series)



PART NUMBER*	CABLE SIZE	DIE INDEX	A	B	C	D	E
CLLF-12	4/0 AWG	15	1.75	3.63	1.44	3.38	1.125
CLLF-15	350 MCM	18	2.0	3.63	1.63	3.38	1.125
CLLF-18	500 MCM	20	2.88	3.08	1.88	3.38	1.63
CLLF-23	750 MCM	24	3.5	3.75	2.5	3.5	2.0
CLLF-28	1000 MCM	27	3.5	3.75	3.0	3.5	2.0

* Silver Sand Cable limiter lugs are compatible with LLS Series Sleeves. To order with corresponding size sleeve add "A" after "CLLF".

- Ring Bus Limiter Lug assemblies are complete units that are comprised of a fusible element, a high-temperature filler shell, an insulating sleeve, U-bolt and saddle and rubber hood
- Facilitates connection to secondary network "ring bus"
- Protects network secondary cable with fusible element contained within a high-temperature filler shell
- For 125/216V applications only



PART NUMBER	U BOLT WIRE SIZE (RUN)	WIRE SIZE (TAP)	DIMENSIONS IN INCHES			
			L	W	P	T
CLLA4/0N-UBOLT	500-800 MCM	4/0	10	1	2-7/16	9/64
CLLA250N-UBOLT	500-800 MCM	250	10	1-1/8	2-7/16	5/32
CLLA300N-UBOLT	500-800 MCM	300	10-7/8	1-3/16	2-9/16	5/32
CLLA350N-UBOLT	500-800 MCM	350	10-7/8	1-5/16	2-9/16	3/16
CLLA400N-UBOLT	500-800 MCM	400	10-3/4	1-7/16	2-9/16	3/16
CLLA500N-UBOLT	500-800 MCM	500	11-3/4	1-1/2	3	7/32
CLLA750N-UBOLT	500-800 MCM	750	11-3/4	1-15/16	3	1/4

NETWORK PROTECTOR TERMINALS

NPT Series

- Network protector terminals are designed for use on network protectors
- Terminals available with built-in cable limiters (limited) or without (non-limited)
- The fusible elements are made of pure copper and tin-plated for corrosion resistance
- The element is enclosed in a high-temperature shell which provides separate arcing chambers for each fusible section
- The terminals are molded with silicone rubber for optimum electrical properties, high-temperature capabilities and low-compression set

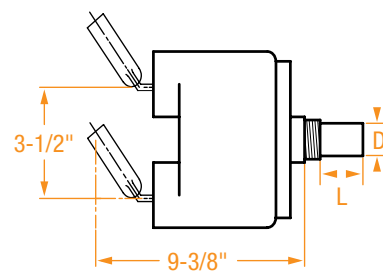
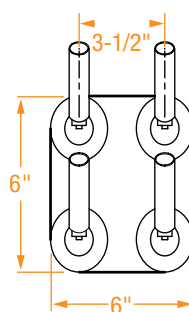


Figure 1



Figure 2



Figure 3

Terminal supplied with four rubber boots.



Figure 4

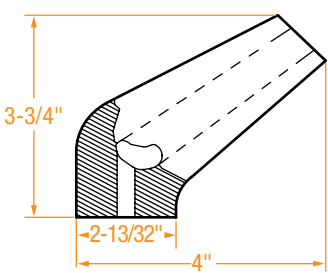
Terminal supplied with four rubber sleeves. Shown, 4 CL18-2N (500 mcm Cu lugs) and hardware.

PART NUMBER	NETWORK PROTECTOR MANUFACTURER	WIRE SIZE	DRAWING NO.	# OF CABLE PORTS	FIGURE	LIMITED OR NON-LIMITED	DIMENSIONS IN INCHES	
							B (L)	D
NPT523-0925 (was NPT500A)	Richards 313NPs & Westinghouse	500	MN-E02167-B	4	1	Limited **	1-7/8	1-1/4
312-1316-00	Richards 313NPs & Westinghouse	500	MN107447	4	1	Non-Limited	1-7/8	1-1/4
312-1311-00	Richards 313NPs & Westinghouse	750	MN106980	6	2	Limited **	2-1/8	3-3/4
312-1315-00*	Richards 313NPs & Westinghouse	500	MN106147	4 2-hole spades	4	Limited **	1-7/8	1-1/4
312-1315-01*	Richards 313NPs & Westinghouse	500	MN106147	4 2-hole spades	4	Non-Limited	1-7/8	1-1/4
312-1268-00	Richards 313NPs & Westinghouse	500	MN101003	4	3	Limited **	1-7/8	1-1/4
312-1269-00	Richards 313NPs & Westinghouse	500	MN101003	4	3	Non-Limited	1-7/8	1-1/4
NPT523-0909 (was NPT500B)	Richards 137NPs & General Electric	500	MN-E02167-B	4	1	Limited **	1-1/4	1-1/4
312-1330-00	Richards 137NPs & General Electric	500	MN111240	4	1	Non-Limited	1-1/4	1-1/4

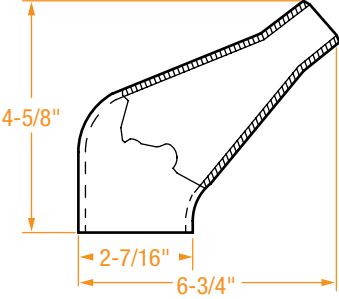
* Terminal supplied with four rubber sleeves, four two-hole 500 mcm copper lugs and hardware.

** For 125/216V applications only.

High-Temperature Shell



Insulating Sleeve

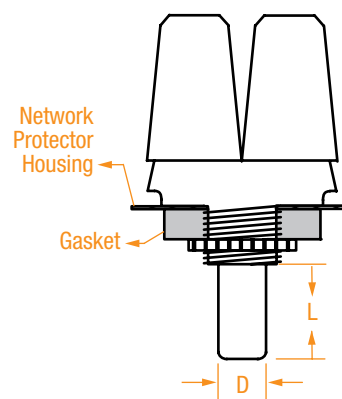


PART NUMBER	CABLE	SHELL OR SLEEVE
HTS-500	500 kcmil cable	High Temperature Shell
HTS-750	750 kcmil cable	High Temperature Shell
ES-500	500 kcmil cable	Insulating Sleeve
ES-750	750 kcmil cable	Insulating Sleeve

DISCONNECT NETWORK PROTECTOR TERMINALS

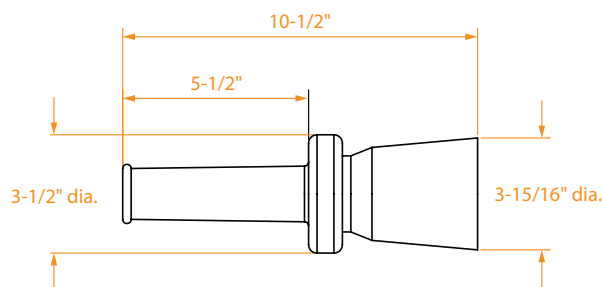
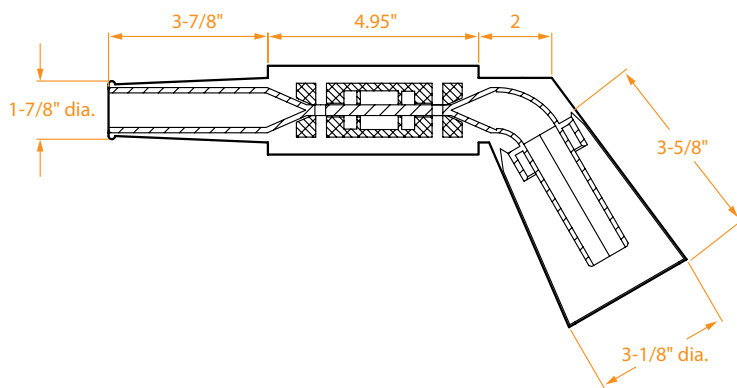
NPT-DISC Series

- The Richards disconnect network protector terminals are designed for fast and easy installations. The disconnect legs on the following page are crimped onto the system cable and then plugged into the terminal. The disconnect leg forms a water-tight seal around the terminal, so there is no taping.
- Disconnect network protector terminals are designed for use on General Electric or Westinghouse network protectors.
- The terminals are molded with silicone rubber for optimum electrical properties, high-temperature capabilities and low-compression set.
- Disconnect legs, shown on the next page, come limited or unlimited, which eliminates the need to externally limiter each cable.



PART NUMBER	NETWORK PROTECTOR MANUFACTURER	WIRE SIZE	NP TYPE	# OF POSITIONS	DIMENSIONS IN INCHES	
					L	D
312-1200-00	Richards 313NPs & Westinghouse	500	313NP, 1875A	4	2-3/4	1-1/4
312-1265-00	Richards 313NPs & Westinghouse	500	313NP wall mount, 2500 & 3500A	8	1-9/16	2-3/4
312-1270-00	Richards 313NPs & Westinghouse	500	313NP 2500 & 3500 A	8	2-5/8	2-3/4
237-1229-00	Richards 137NPs & General Electric	500	MG8, 1875A	4	1-1/4	1-3/4
237-1221-00	Richards 137NPs & General Electric	500	MG8 – 3500A	8	1-5/8	3-3/4
237-1245-00	Richards 137NPs & General Electric	500	MG14 – 4500A	8	2-1/8	3-3/4
237-1234-10	Richards 137NPs & General Electric	500	Special	4	1-1/8	1-1/4

- The disconnect legs are available fused or unfused, straight or angled
- For use with copper cable
- Accessories available when using the disconnect
- For use with NPT-DISC Series Terminal Bases
- Molded flange for improved ease of installation (straight style only)



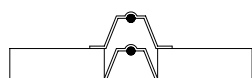
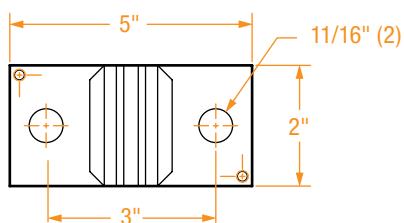
PART NUMBER	DISCONNECT LEG TYPE	
RDL-FA500	Fused *	Angled
RDL-US500	Unfused	Straight
RDL-UA500	Unfused	Angled
RDL-FA750	Fused *	Angled
RDL-US750	Unfused	Straight

* For 125/216V applications only.

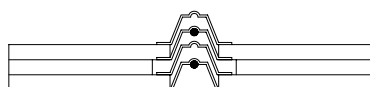
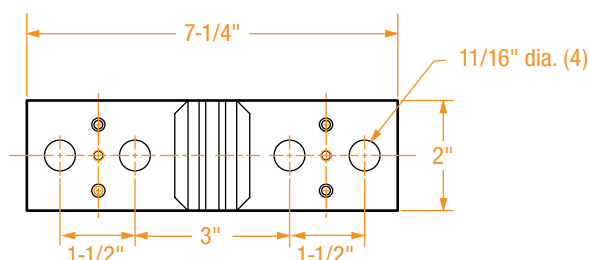
PROTECTOR FUSES – LOW-LOSS “S” FUSE

LLF Series

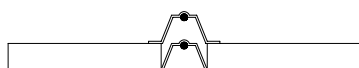
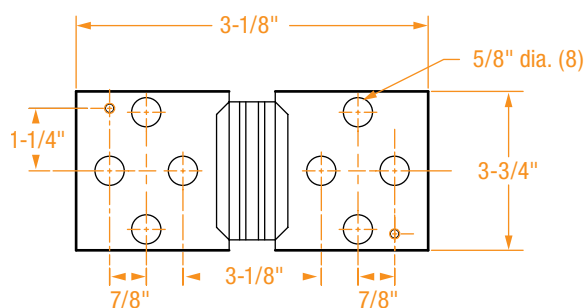
- LLF-KA fuses are to be used on 125/216V network protectors
- LLF-KA fuses are made from silver-plated copper with a tin or cadmium overlay in the element
- LLF-KA fuses are “low loss” meaning they radiate a limited amount of heat until they approach their melting temperature



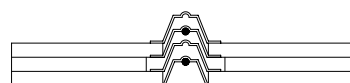
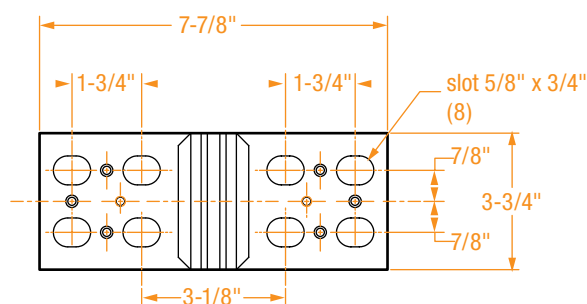
LLF-2KA
2,000 Amperes



LLF-2.25 KA
2,250 Amperes

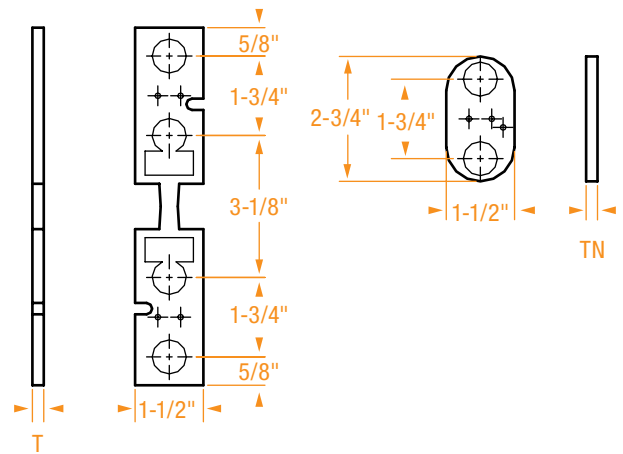


LLF-3KA/LLF-4KA
3,000/4,000 Amperes
(Same hole configuration
for both sizes)



LLF-5KA
5,000 Amperes

- Network protector fuses are used for backup. They are designed to coordinate with the protector relay and should not blow on a network feeder fault before the relays have time to trip the protector. However, in case the protector fails to open, the fuses must blow in time to prevent transformer damage.
- Fuses are made of pure silver-plated copper.
- Time current curves are available upon request.



PART NUMBER	NETWORK PROTECTOR RATING AMPS	TRANSFORMER FULL LOAD (NORMAL) AMPS	FUSE “T” DIMENSIONS IN INCHES	WASHER “TN” DIMENSIONS IN INCHES
NPF-22.5-Q	1600	1200	.225	17/64
NPF-25-Q	1875	1340	.250	15/64
NPF-30-Q	2000	1600	.300	12/64
NPF-37.5-Q	2500	2000	.375	8/64
NPF-44-Q	3000	2500	.440	4/64
NPF-50-Q	3000	3000	.500	N/A

NOTE: THIS CHART IS A REFERENCE TABLE ONLY BASED ON COMMON APPLICATIONS. IT IS NOT A DEFINITIVE SELECTION GUIDE FOR UTILITIES TO RELY ON WITHOUT A PROFESSIONAL AND INTERNAL FUSE COORDINATION STUDY CONDUCTOR BY END-USER.

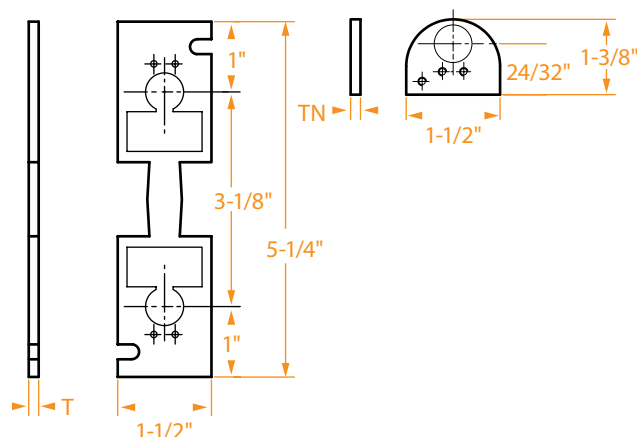


* Fuse cover is available for 125/216V applications. The part number is 312-3120-00.
 ** For tin plating add ‘-TN’

NETWORK PROTECTOR FUSES – “Y” FUSE

NPF-L Series

- Network protector fuses are designed to coordinate with the network protector relay and should not blow on a network feeder fault before the relay has time to trip the protector. However, in case the protector fails to open, the fuses must blow in time to prevent transformer damage.
- Fuses are made of pure silver-plated copper.
- For network protectors with two bolt-fuse mountings.
- Fuse mounting enclosure is available for 125/216V network-protector applications.
- Time-current curves available upon request.



PART NUMBER	NETWORK PROTECTOR RATING AMPS	TRANSFORMER FULL LOAD (NORMAL) AMPS	FUSE “T” DIMENSIONS IN INCHES	WASHER “TN” DIMENSIONS IN INCHES
NPF-11-L	800	600	.110	3/8
NPF-15-L	1200	800	.150	5/16
NPF-22.5-L	1600	1200	.225	1/4
NPF-25-L	1600	1340	.250	15/64
NPF-30-L	2000	1600	.300	3/16
NPF-37.5-L	2500	2500	.375	1/8
NPF-44-L	3000	2825	.438	1/16
NPF-50-L	3000	3000	.500	N/A

NOTE: THIS CHART IS A REFERENCE TABLE ONLY BASED ON COMMON APPLICATIONS. IT IS NOT A DEFINITIVE SELECTION GUIDE FOR UTILITIES TO RELY ON WITHOUT A PROFESSIONAL AND INTERNAL FUSE COORDINATION STUDY CONDUCTOR BY END-USER.



* Fuse cover is available for 125/216V applications. The part number is 312-3120-00.

** For tin plating add ‘-TN’

- Easy and quick installation
- Captive Nuts eliminate loose hardware
- Reduces risk of dropping components
- Easily check fuse status via Viewing Window
- One-handed removal



312-2566-00A
(shown assembled with Z fuse
- fuse supplied separately)

PART NUMBER	FUSE STYLE (SUPPLIED SEPARATELY)
312-2565-00A	Y (see NPF-L Series)
312-2566-00A	Z (see NPF-Q Series)

Laminated Type – Standard Speed

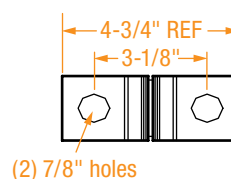


Figure 1



Figure 2

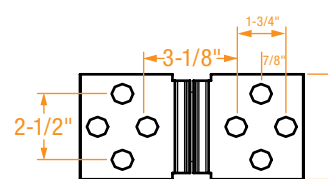


Figure 3



Figure 4

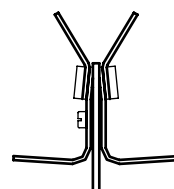
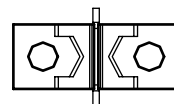


Figure 5

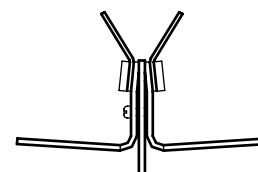
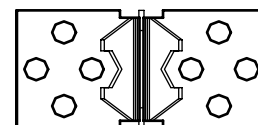


Figure 6

PART NUMBER		AMP.	VOLTAGE	OEM EQUIV. (OPEN/ VENTILATED)	OEM EQUIV. (SUBMERSIBLE/ NEMA 1A)	FIGURE
Open/Ventilated Enclosure	Submersible/ Nema 1A Enclosure					
312-3200-00	312-3201-00	800	120/208	1173006	1173007	1
312-3250-00	312-3251-00	800	277/480	1254871	1254872	3
312-3201-00	312-3202-00	1200	120/208	1173007	1173008	1
312-3251-00	312-3252-00	1200	277/480	1254872	1300550	3
312-3202-00	312-3203-00	1600	120/208	1173008	1173010	1
312-3252-00	312-3253-00	1600	277/480	1300550	1300551	3
312-3204-00	312-3205-00	1875	120/208	1173009	1173011	1
312-3254-00	312-3255-00	1875	277/480	1346424	14A5795G06	3
312-3110-00	312-3208-00	2500	120/208	1346917	1247325	2
312-3208-00	312-3209-00	2825	120/208	1247325	1291274	2
312-3260-00	312-3261-00	2825	277/480	1332318	1615572	4
312-3208-00	312-3211-00	3000	120/208	1247325	12A3822G07	2
312-3260-00	312-3263-00	3000	277/480	1332318	15A4106G04	4
312-3209-00	312-3211-00*	3500	120/208	1291274	12A3822G07	2
312-3261-00	312-3263-00*	3500	277/480	1615572	15A4106G04	4

* This fuse to be used only in a submersible 3500 Ampere unit.

Laminated Type – Time Lag

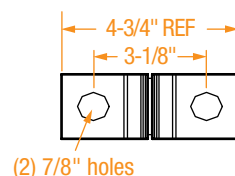


Figure 1

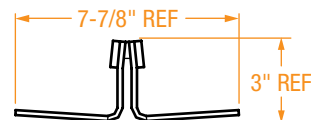
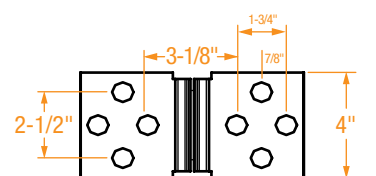


Figure 2

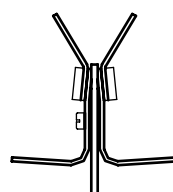
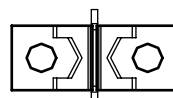


Figure 3

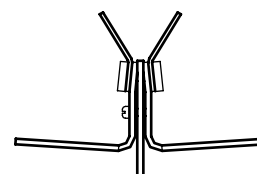
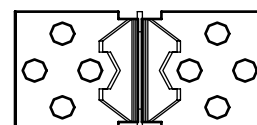
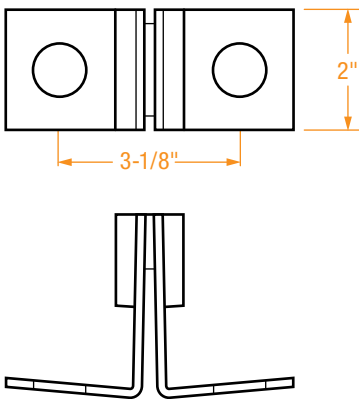


Figure 4

PART NUMBER		AMP.	VOLTAGE	OEM EQUIV. (OPEN/ VENTILATED)	OEM EQUIV. (SUBMERSIBLE/ NEMA 1A)	FIGURE
Open/ Ventilated Enclosure	Submersible/ NEMA 1A Enclosure					
312-3300-00	312-3301-00	800	120/208	1019506	1019507	1
312-3500-00	312-3501-00	800	277/480	1300576	1300577	3
312-3301-00	312-3302-00	1200	120/208	1019507	1019508	1
312-3501-00	312-3502-00	1200	277/480	1300577	1300578	3
312-3302-00	312-3303-00	1600	120/208	1019508	1019510	1
312-3502-00	312-3503-00	1600	277/480	1300578	1300579	3
312-3304-00	312-3100-00	1875	120/208	1019509	1019511	1
312-3305-00	312-3306-00	1875	277/480	—	—	3
312-3308-00	312-3309-00	2500	120/208	12A3822G06	1649110	2
312-3506-00	312-3507-00	2500	277/480	—	405D312G01	4
312-3309-00	312-3311-00	2825	120/208	1649110	—	2
312-3507-00	312-3511-00	2825	277/480	405D312G01	—	4
312-3309-00	312-3310-00	3000	120/208	1649110	1649797	2
312-3507-00	312-3508-00	3000	277/480	405D312G01	405D312G03	4
312-3310-00		3500	120/208	1649797	—	2
312-3508-00		3500	277/480	405D312G03	—	4

Non-Laminated Type – Single Layer

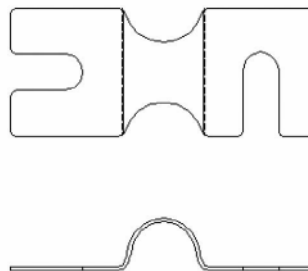
- Made from silver-plated copper and tin/lead solder
- May be used at 125/216V or 277/480V
- NF fuses have a lower loss, and a lower operating temperature than the equivalent copper link fuses
- Time-current curves available upon request



PART NUMBER	NETWORK PROTECTOR RATING AMPS
NF-2	800
NF-3	1200
NF-4	1600
NF-5	1875
NF-6	2000
NF-7*	2500
NF-10*	3000
NF-10*	3500

* Have two NEMA-spaced holes on each side.

- Made from silver-plated copper
- May be used at 125/216V or 277/480V
- The most inexpensive network-protector fuse available
- Time-current curves available upon request

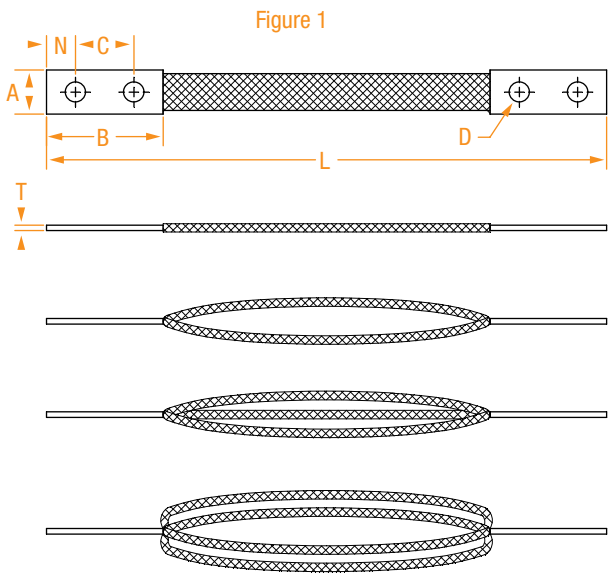


PART NUMBER	NETWORK PROTECTOR RATING AMPS	TRANSFORMER FULL LOAD (NORMAL) AMPS
NWP-7	800	600
NWP-6	1200	800
NWP-5	1600	1340
NWP-5	1875	1340
NWP-4	2000	1600
NWP-3	2500	2000

COPPER BRAIDS

CB Series

- Made of flexible pure copper braid
- Designed to compensate for misalignment or equipment, dampen vibrations and take up linear expansion and contraction
- Pads can be drilled to any specification
- For special lengths and drilling, contact the factory



PART NUMBER	NETWORK PROTECTOR RATING AMPS	DIMENSIONS IN INCHES						
		A	L	B	D	N	C	T
CB504-0530	900A	1-3/4	9-1/4	3	3/4	3/4	1-1/2	3/4
CB570-2774	1200A	2	15	3-1/8	9/16	11/16	1-1/2	7/8
CB183053	—	2	32	2-1/2	1/2	9/16	N/A one-hole	1/8
CB396271	—	1	1" x 15' copper wire mesh					
CB396740	—	1	1" x 100' copper wire mesh					

- Designed to fit onto pad mount transformer's secondary studs
- The "clamp-on" design offers a solid and reliable connection, while not damaging the transformer stud
- Made of solid copper or aluminum
- The threaded studs and nuts are made of stainless steel
- Tin-plated to resist corrosion
- Available in an assortment of shapes and sizes for any transformer stud size
- Spaced according to NEMA standards

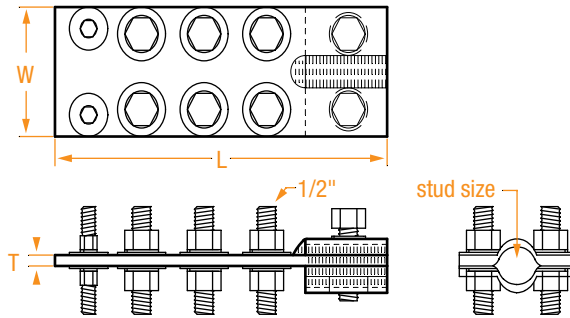
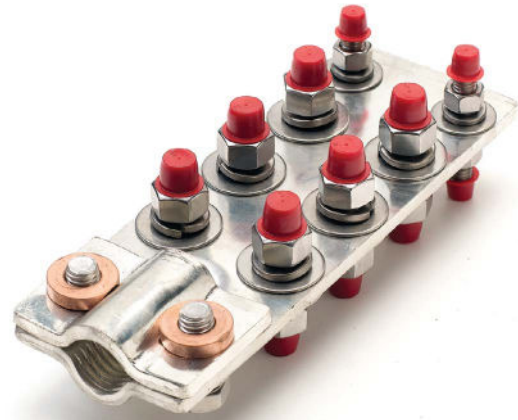


Figure 1

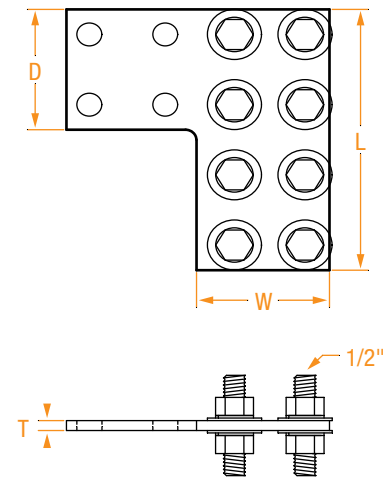


Figure 2

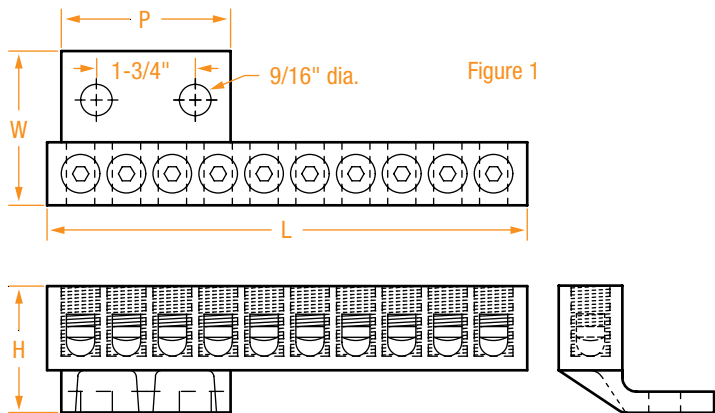
PART NUMBER	MATERIAL	FIGURE	DIMENSIONS IN INCHES				
			L	T	W	D	STUD SIZE
TRSS-C100	Cu	1	8-1/2	1/4	3	—	5/8
TRSS-C101	Cu	1	8-1/2	1/4	3	—	1
TRSS-C102	Cu	1	6-3/4	1/2	3	—	5/8
TRSS-A200	Al	2	6-1/2	1/2	3-1/16	3	four-hole NEMA Pad
TRSS-A201	Al	2	4-5/8	1/2	3	3-1/8	two-hole NEMA Pad

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

SET SCREW CONNECTORS

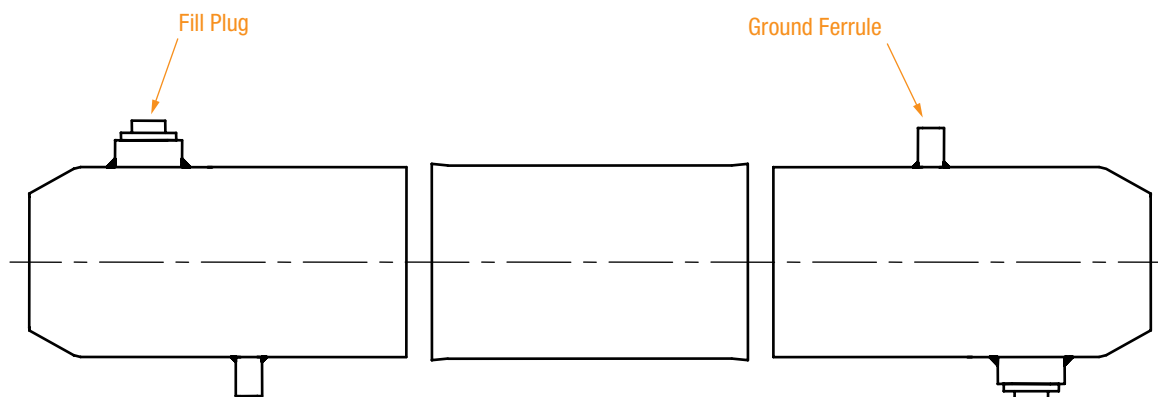
SSCRW Series

- Made of aluminum alloy
- Used on pad-mounted transformers
- Accepts a range of conductor sizes –from #8 to 4/0
- Two-hole NEMA pad
- Comes with a plastic cover



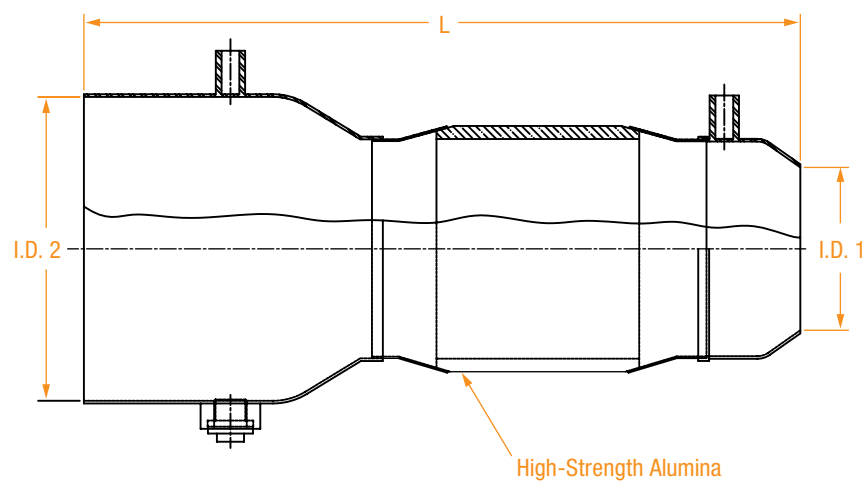
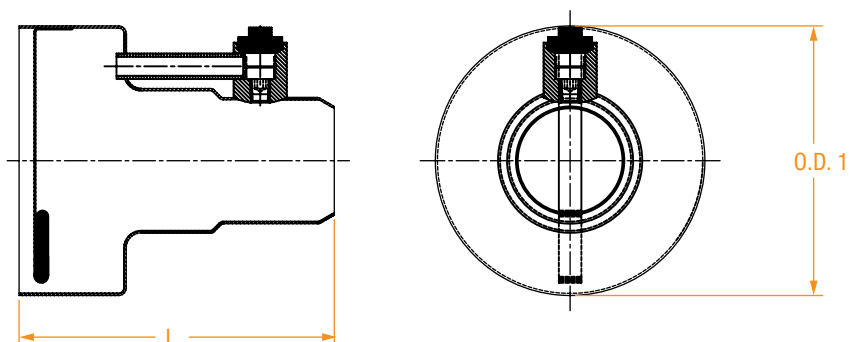
PART NUMBER	DIMENSIONS IN INCHES			
	L	H	W	P
SSCRW10-12-1	8-1/2	2-1/4	2-3/4	3

- Used on low pressure oil filled transmission cable — 69kV, 138kV and 345kV
- Made from spun copper
- Fill plugs allow addition of oil or compound



Available with inside diameters of 5, 7 & 9 inches.

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.



CABLE RACK ARMS

RA Series

- Made of galvanized steel
- Used to support underground cables, splices, crab joints and other accessories in manholes and vaults



Figure 4

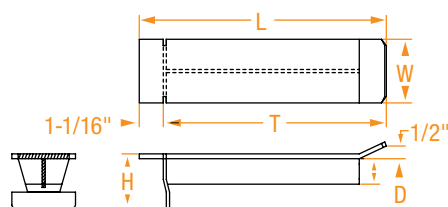


Figure 1

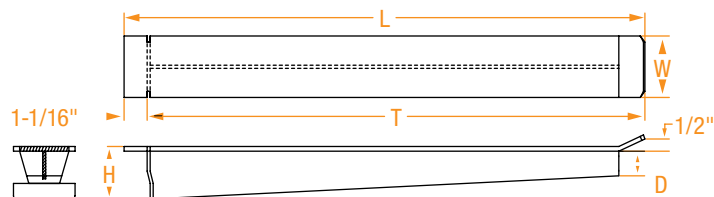


Figure 2

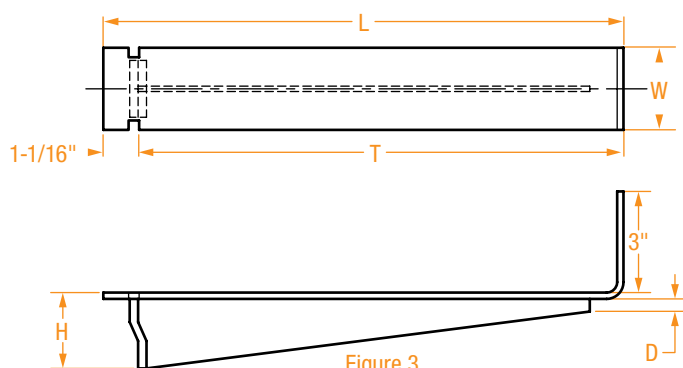


Figure 3

Cable Rack Arms

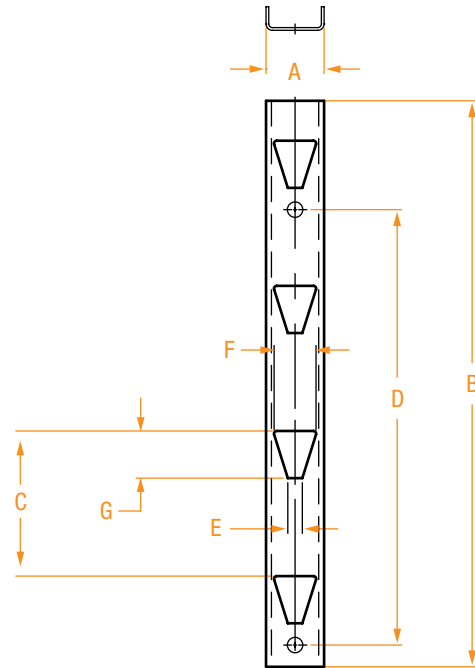
PART NUMBER*	FIGURE	DIMENSIONS IN INCHES				
		L	T	H	D	W
RA-1W	1	9-11/16"	8-5/8"	2-7/16"	1"	2-1/2"
RA-2W	2	13-13/16"	12-3/4"	2-7/16"	3/8"	2-1/2"
RA-3W	2	21-3/16"	19-9/16"	2-7/16"	1/2"	2-1/2"
RA-1W-90	3	10"	9-15/16"	2-7/16"	3/8"	2-1/2"
RA-2W-90	3	15-1/4"	12-3/4"	2-7/16"	3/8"	2-1/2"
RA-3W-90	3	21-3/16"	20-1/16"	2-7/16"	3/8"	2-1/2"

Rack Arm Covers

PART NUMBER	FIGURE	DIMENSIONS IN INCHES				
		L	T	H	D	W
RA-1W-C	4	9"	—	4-1/2"	—	2-3/4"
RA-2W-C	4	13"	—	4-1/2"	—	2-3/4"

* RA-1W comes assembled with cover. For all other rack arms the cover is sold separately - to order cover assembled with rack arms add "-A".

- Made of galvanized steel
- Used to support cables in manholes
- Rack arms available in three different sizes



PART NUMBER	# OF SLOTS	DIMENSIONS IN INCHES						
		A	B	C	D	E	F	G
003-0346	1	4	9	—	6-3/4	1	2-29/32	3-1/4
003-0353	2	4	17-1/4	8	10	1	2-29/32	3-1/4
003-0379	2	4	19	10	10	1	2-29/32	3-1/4
003-0387	2	4	21	12	10	1	2-29/32	3-1/4
003-0395	3	4	25-3/4	8	23-1/4	1	2-29/32	3-1/4
003-0437	4	4	32	8	23-1/4	1	2-29/32	3-1/4
003-0445	4	4	39	10	30	1	2-29/32	3-1/4
003-0452	4	4	45	12	30	1	2-29/32	3-1/4
003-0460*	6	4	48	8	23-1/4 & 16*	1	2-29/32	3-1/4
003-0478*	6	4	59	10	20 & 29-1/2*	1	2-29/32	3-1/4

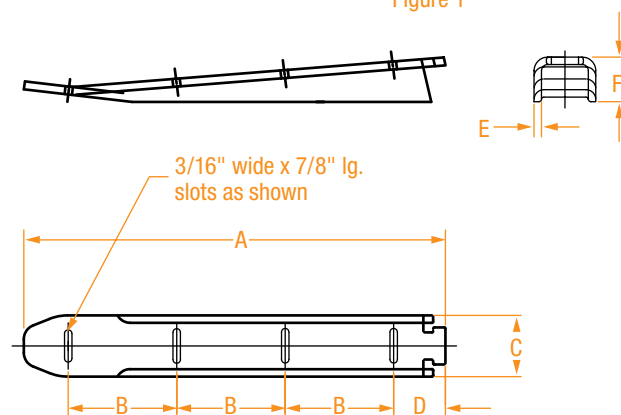
* Two "D" dimensions are given because there are three mounting holes. The first dimension is from the top hole to the center mounting hole. The second dimension is from the center hole to the bottom mounting hole.

STANDARD CABLE RACK ARMS

SCRA Series

- Made from galvanized steel channel
- Epoxy coated
- Fits standard cable racks

Figure 1



PART NUMBER	# OF SLOTS	DIMENSIONS IN INCHES					
		A	B	C	D	E	F
SRA-4	2	4-1/2	2-1/4	1-1/2	1-7/16	3/16	1-1/4
SRA-7	3	8	2-3/4	1-1/2	1-1/4	3/16	1-1/4
SRA-10*	4	10-11/16	2-3/4	1-1/2	1-5/16	3/16	1-1/8
SRA-14	5	14-1/2	2-3/4	1-1/2	2-1/2	3/16	1-5/8

* This size has one 1/2" diameter hole between the 2nd and 3rd slots.

- Designed to provide a permanently installed waterproof 115V NEMA 5-15R receptacle for underground application
- Constructed with 2 ft. of 2/0 copper wire for connection to the 115V source and 2 lengths of #12 wire for the neutral and ground
- Preassembled internal connection to the receptacle is enclosed in a polyurethane potting material to prevent oil or water infiltration through the wire strands
- The 2/0 hot leg is designed to provide a rigid but bendable support for the entire receptacle
- The cap is sealed water tight with 2 Buna-N O-rings. A deep grooved finish on both the cap and body affords positive grip even when wearing dielectric gloves.
- Connection to the 115V source can be accomplished with a mechanical vise connector or compression sleeve onto an available crab leg. Ground and neutral connections can utilize a mechanical vise connector or compression terminal lug.



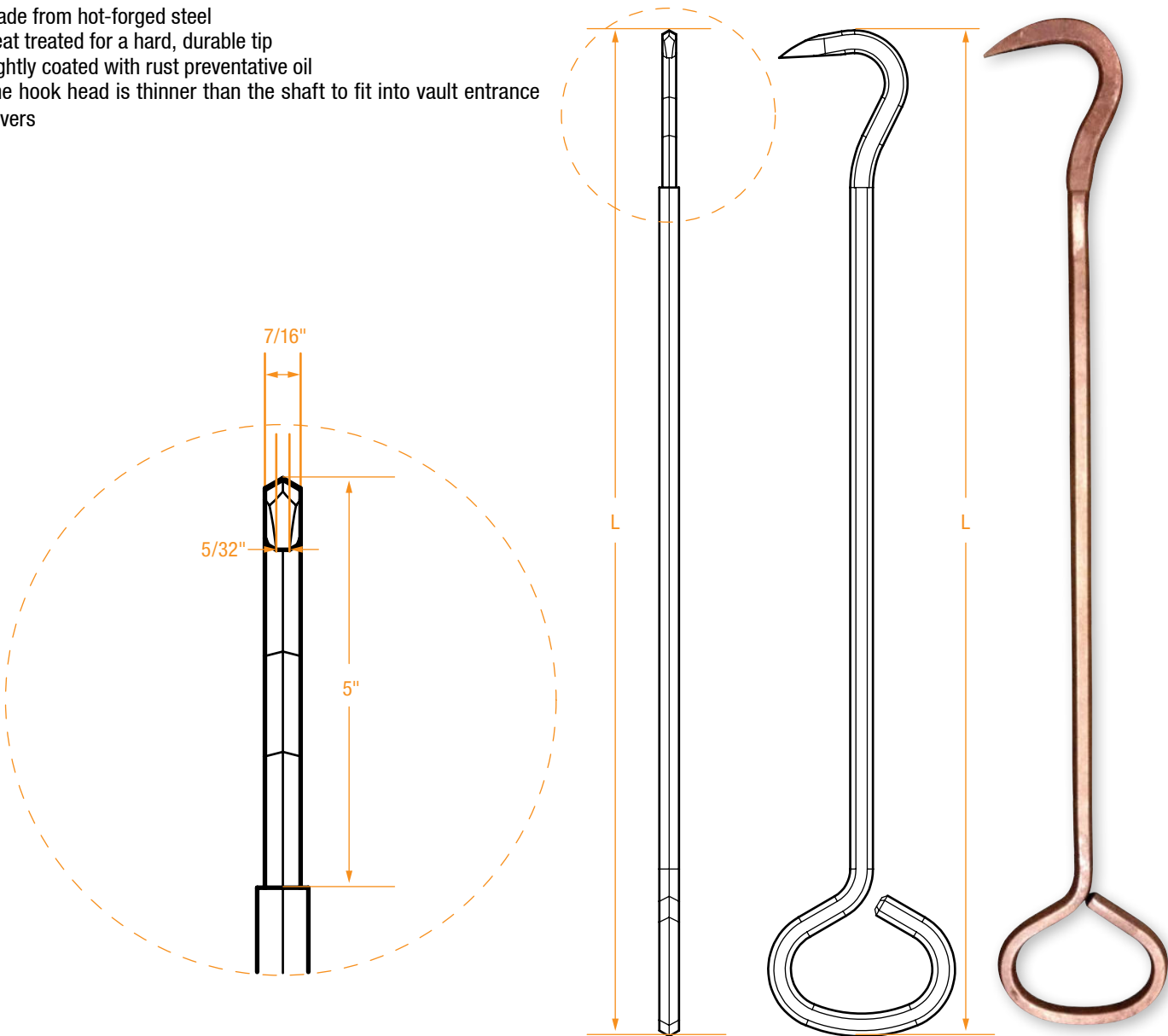
PART NUMBER	LENGTH OF 4/0 SOURCE CABLE (INCHES)	LENGTH OF #12 NEUTRAL AND GROUND CABLES (INCHES)
PTP-1	12	24

* Ends of Neutral and Ground wires can be connected to using a 4/0 crimp connector.

LIFTING HOOKS

RLH Series

- Made from hot-forged steel
- Heat treated for a hard, durable tip
- Lightly coated with rust preventative oil
- The hook head is thinner than the shaft to fit into vault entrance covers



PART NUMBER	L
RLH-1	24
RLH-2	28
RLH-3	32
RLH-4	36

INSULATED T-WRENCH

- Insulated T-Wrench is commonly used to work on Network Protectors
- Layer of red insulation underneath black top-coat of insulation provides visual indication of worn or damaged insulation
- Allows work to be performed at a great distance than by doing the same operation by hand



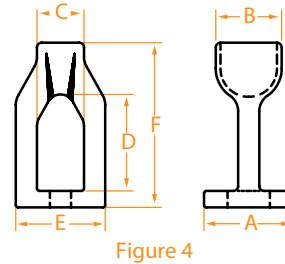
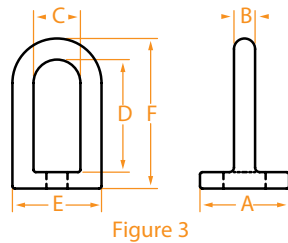
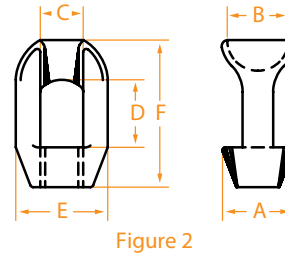
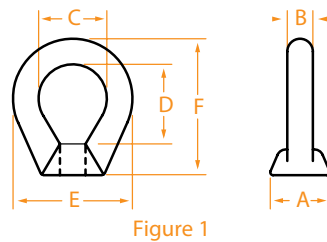
PART NUMBER	DESCRIPTION
312-1903-00	INSULATED T-WRENCH, 3/4" x 32"
312-1903-10	INSULATED T-WRENCH, 3/4"x 53 1/2"
312-1903-20	INSULATED T-WRENCH, 3/4" x 36"
312-1903-30	INSULATED T-WRENCH, 3/4" x 22"
312-1903-40	INSULATED T-WRENCH, 3/4" x 34"
312-1947-00	INSULATED T-WRENCH, 9/16" x 32"
312-1947-40	INSULATED T-WRENCH, 9/16" x 34"

Pole Line Hardware



Pole Line Hardware	Series	Page
Eyelets.....	RENUT Series.....	141
“J” Hooks	RJH Series.....	142
Single-Position Equipment Brackets	LPB Series.....	143
Grid Gains & Crossarm Gains	RGG & RCG Series	144
Crossarm Support Gains.....	RCSG Series	145
Pole-Eye Plates.....	RPEP Series.....	146
Guy Hooks.....	RGH Series	147
Aerial Clamps	RAC Series	148
Turnbuckles.....	RTB Series	149
Pole-Top Extensions	RPTA Series.....	150
Three-Hole Messenger Clamps.....	RSC1204 Series	151
Heavy-Duty Messenger Clamps.....	RHDC Series	152
Swivel Nuts	SN Series	153

- Tapped oversize for easy assembly
- Made from ductile iron or forged steel
- Some available forged for additional strength



PART NUMBER	FIGURE	BOLT DIA	DIMENSIONS IN INCHES					
			A	B	C	D	E	F
RENUT-1*	1	5/8	1-3/8	9/16	1-1/2	1-3/4	2-5/8	3
RENUT-2	1	3/4	1-3/8	9/16	1-1/2	1-3/4	2-5/8	3
RTMBL-1	2	5/8	1-1/2	1-1/2	7/8	1-3/8	1-7/8	3
RTMBL-2	2	3/4	1-1/2	1-1/2	7/8	1-3/8	1-7/8	3
RBLTE-1	3	5/8	2-3/8	9/16	1-1/4	3	2-3/8	4
RBLTE-2	3	3/4	2-3/8	9/16	1-1/4	3	2-3/8	4
RTMBE-1*	4	5/8	2-3/8	1-1/2	1-1/4	2-9/16	2-3/8	4
RTMBE-2	4	3/4	2-3/8	1-1/2	1-1/4	2-9/16	2-3/8	4-3/8

* RUS Approved.

- Made of steel or bronze

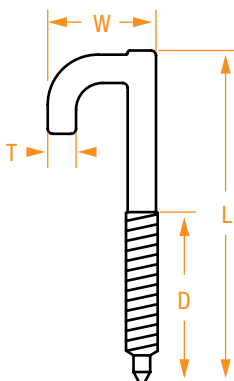


Figure 1

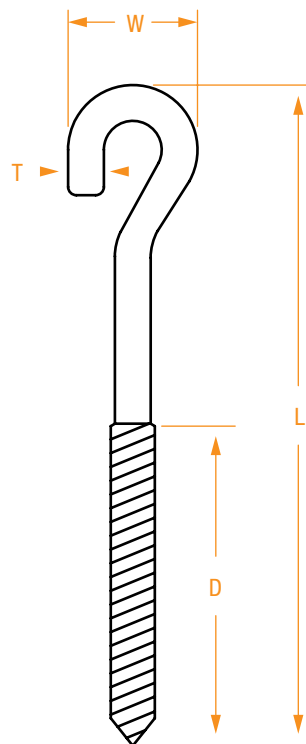
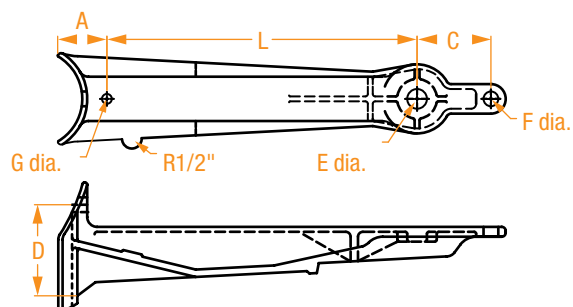


Figure 2



PART NUMBER	MATERIAL	FIGURE	DIMENSIONS IN INCHES			
			L	W	T	D
RJH18666	Steel	1	5	1-9/16	7/16	2-1/2
RJH18667	Bronze	2	6	1-1/4	3/8	2-7/8
RJH18668	Steel	2	6	1-1/4	3/8	3
RJH18669	Steel	2	5	1-1/2	3/8	2-5/8
RJH18670	Steel	2	9	1-1/2	3/8	3

- Designed for mounting pin or post-type insulators in vertical position
- Can support arresters and cutouts at the end of the bracket
- Made of malleable iron ASTMA197-47– hot-dipped galvanized



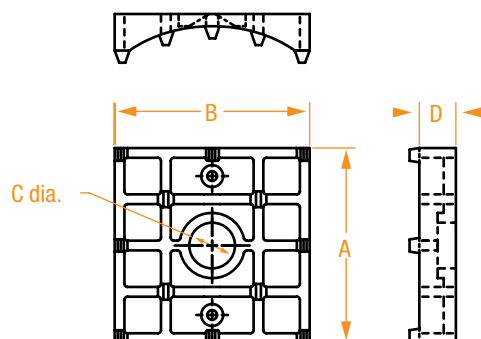
PART NUMBER	FIGURE	BOLT DIA.	DIMENSIONS IN INCHES						
			A	L	C	D	E	F	G
LPB622	1	5/8	2	15-1/2	4-1/2	4-1/2	13/16	11/16	1/2

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

GRID GAINS & CROSSARM GAINS

RGG & RCG Series

- Reduces bolt slotting by spreading the applied load across a large area
- Fits a large range of pole diameters
- Reduces the chances of pole fires due to leakage current
- Made of malleable iron – hot-dipped galvanized

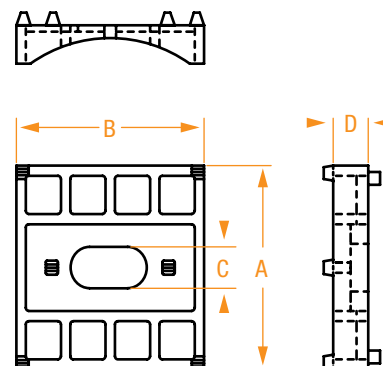


PART NUMBER	FIGURE	DIMENSIONS IN INCHES				POLE RANGE
		A	B	C	D	
RGG122	1	4	4	13/16	3/4	6-12
RGG122-15/16	1	4	4	15/16	3/4	6-12

GRID GAINS

Crossarm Gains

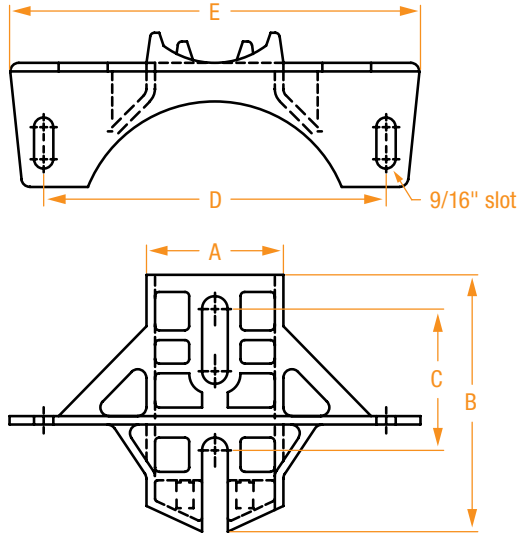
- Provides additional stability
- Reduces leakage current
- No wood-to-wood contact
- Accepts a range of crossarm sizes
- Made of malleable iron ASTMA197-47– hot-dipped galvanized



PART NUMBER	DIMENSIONS IN INCHES				POLE RANGE	MAX. BOLT	CROSSARM RANGE
	A	B	C	D			
RCG395	4	4	13/16	7/8	6-12	3/4	31/2 - 51/2

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- No need for crossarm braces at capacitor and transformer installations, cable and corner poles
- Provides additional stability
- Improves appearance
- Made of malleable iron ASTMA197-47– hot-dipped galvanized



PART NUMBER	DIMENSIONS IN INCHES					POLE RANGE	MOUNTING BOLT		BOLT ON SHELF	CROSSARM RANGE
	A	B	C	D	E		TOP	BOTTOM		
RCSG182	4	7-1/2	6	10	12	6-12	3/4	5/8	9/16 x 1-1/2	31/2 - 61/2
RCSG182-1	4	7-1/2	6	10	12	6-12	3/4	5/8	9/16 x 2	31/2 - 61/2

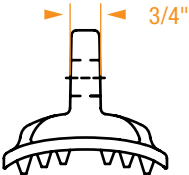
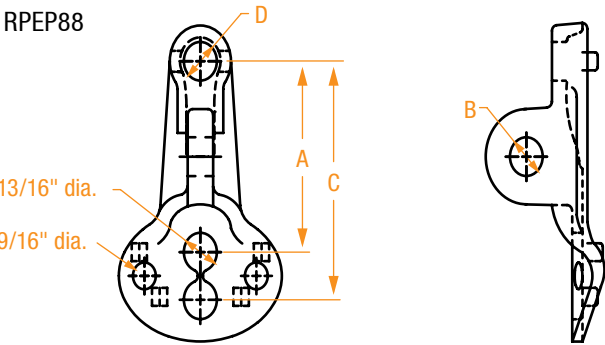
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

POLE-EYE PLATES

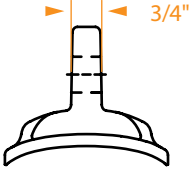
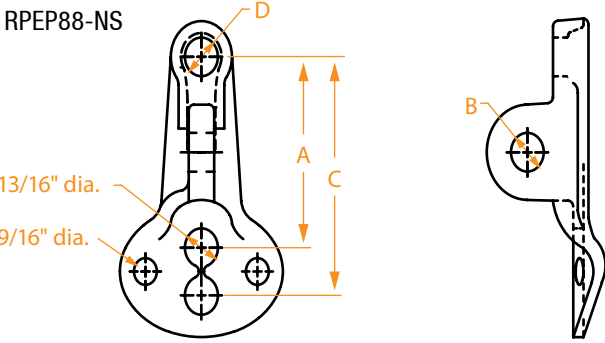
RPEP Series

- Designed to allow any guy or dead-end angle up to 90°
- Will fit on any diameter pole
- Teeth on the back increase stability
- Made of hot-dipped galvanized ductile iron

RPEP88



RPEP88-NS



PART NUMBER	DIMENSIONS IN INCHES			
	A	B	C	D
RPEP88	4	13/16	5	13/16
RPEP88-NS	4	13/16	5	13/16

- Increases the load that can be carried by the through bolt by applying the load in tension, rather than in shear
- The teeth on the back increase stability
- Allows easy installation of a guy loop or dead-end device
- Accepts a wide range of stranding diameters
- Can handle pull-off angles from 0 to 90°
- Made of hot-dipped galvanized ductile iron

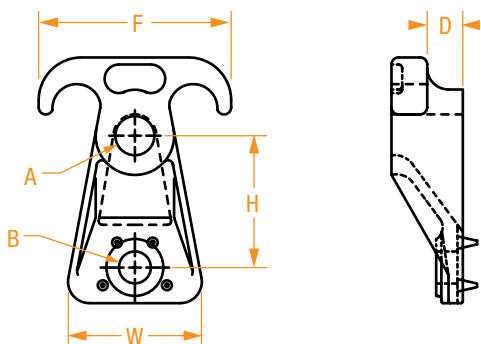


Figure 1

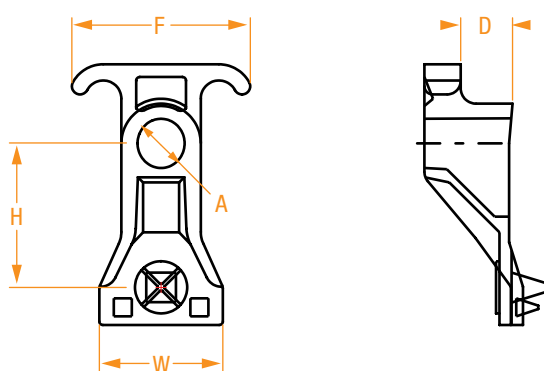


Figure 2

PART NUMBER	FIGURE	DIMENSIONS IN INCHES					MOUNTING HARDWARE		THIMBLE DIAMETER
		H	D	F	P	W	A	B	
RGH133	1	2-3/4	1/2	3-5/8	—	2-1/2	3/4	1/2	1-3/8
RGH133-AX	2	—	7/8	3-1/8	—	2-1/4	3/4	—	1-3/8
RGH135	1	2-3/4	7/8	3-3/4	—	2-1/2	5/8	1/2	1-3/8

AERIAL CLAMPS

RAC Series

- Designed for attaching small aerial cable and triplex
- The body is tapped to insure proper clamping
- Teeth on the back increase stability and resist down slotting
- Made of malleable iron ASTMA197-47— hot-dipped galvanized

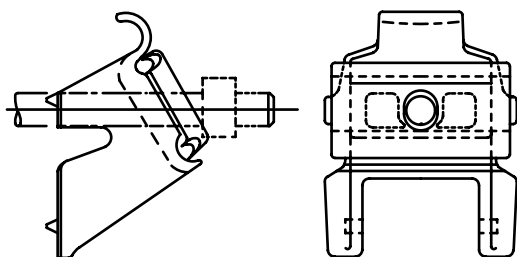


Figure 1

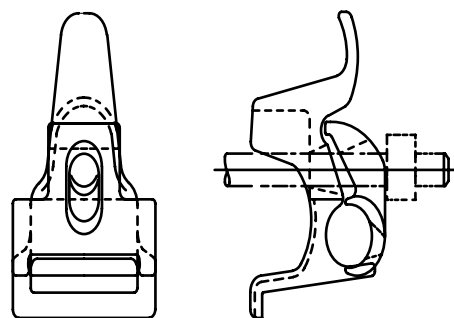
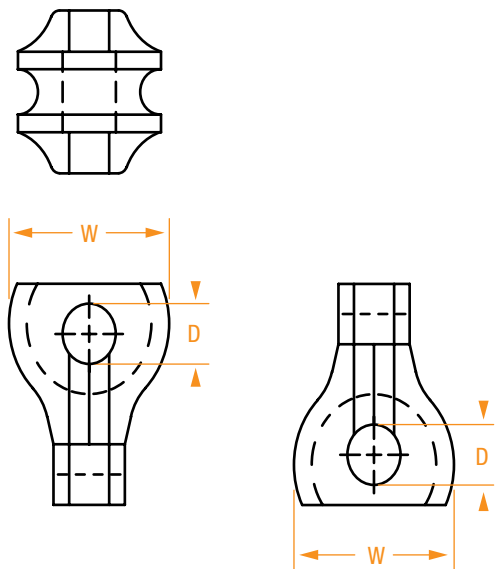


Figure 2

PART NUMBER	FIGURE	MESSENGER RANGE	GRD. WIRE GROOVE SIZE	CLEARANCE POLE TO MESSENGER	MTG. BOLT
RAC197A	1	.375 - .500	#6 AWG - 1/4	1-1/2	5/8
RAC336	2	.43 - .80	—	1-1/2	5/8

- Designed to alleviate stress point when tying two guy wires together
- Made of malleable iron ASTMA197-47– hot-dipped galvanized

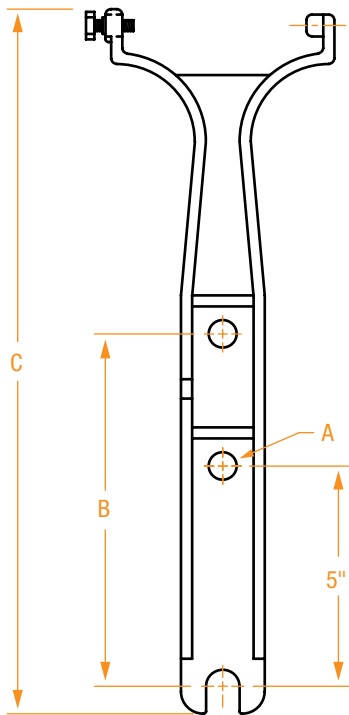


PART NUMBER	DIMENSIONS IN INCHES	
	W	D
RTB071330	2-1/2	3/4

POLE-TOP EXTENSIONS

RPTA Series

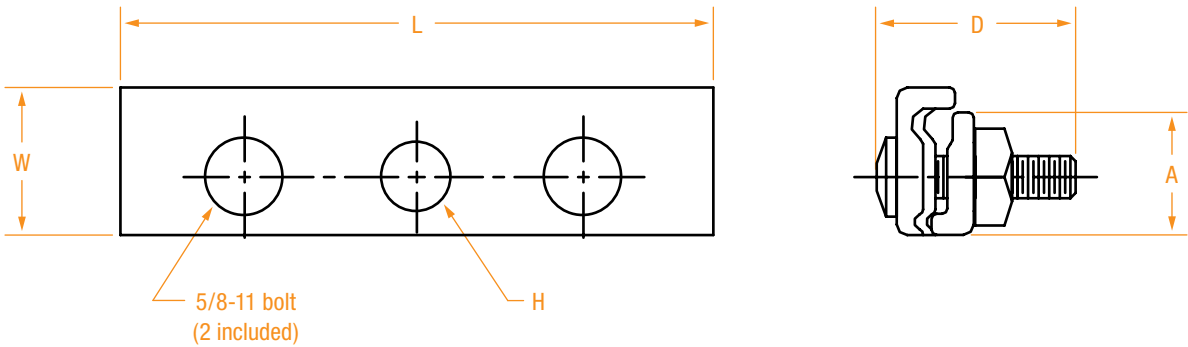
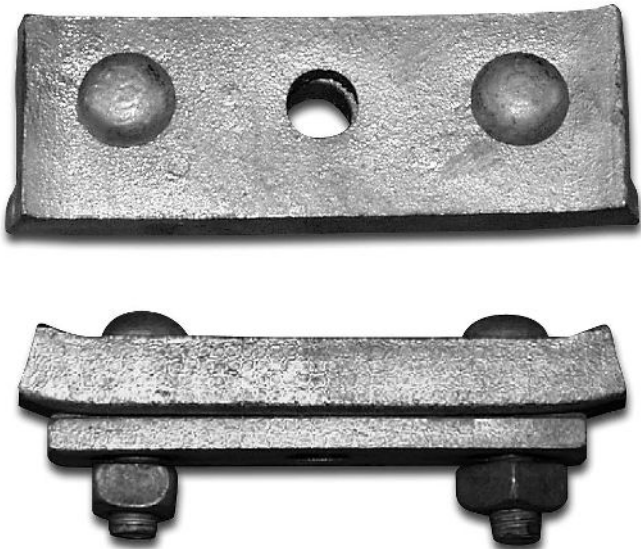
- Design aids in dampening vibrations and permits inline grade variations
- Made of malleable iron ASTMA197-47– hot-dipped galvanized



PART NUMBER	MTG. BOLT A	DIMENSIONS IN INCHES	
		B	C
RPTA529	5/8	8	16

FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

- Connects messenger cable to pole
- Made of hot-dipped galvanized ductile iron



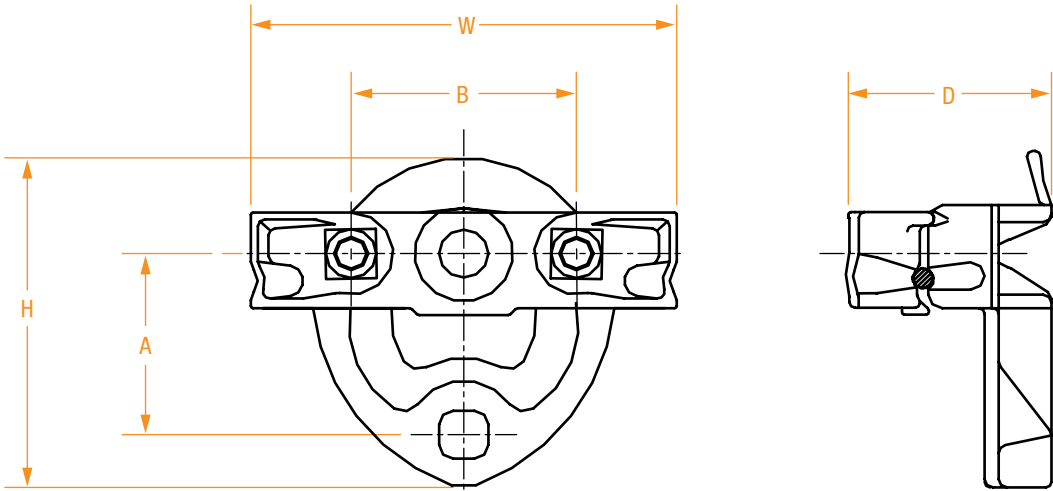
PART NUMBER	MESSENGER RANGE	DIMENSIONS IN INCHES				
		A	H	D	L	W
RSC1204	1/4 - 7/16	1-7/8	13/16	2-3/8	7	2-1/4

POLE LINE HARDWARE

HEAVY-DUTY MESSENGER CLAMPS

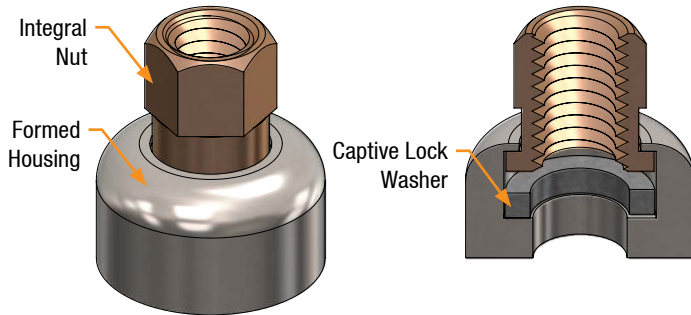
RHDC Series

- Connects messenger cable to pole
- Made of hot-dipped galvanized ductile iron



PART NUMBER	MESSENGER RANGE	DIMENSIONS IN INCHES				
		H	A	B	W	D
RHDC176	5/16 - 1/2	6-1/4	3-1/4	4	7-3/8	3-11/16

- Integral Hex Nut
- Captive Lock Washer
- Formed Housing Acts as Flat Washer
- Combination design saves time and facilitates easy installation



PART NUMBER	THREAD SIZE	NUT SIZE	MATERIAL DETAILS	COMMON APPLICATION(S)
SN-1/4-REL	1/4"-20	Thumb Screw	Zinc Plated Steel	Network Protector Relay
SN-1/2-SBR	1/2"-13	3/4" Hex	Silicon Bronze Nut, Stainless Steel Housing	Outdoor Electrical Equipment
SN-1/2-ZP	1/2"-13	3/4" Hex	Zinc Plated Steel	Indoor, Bus and Fuses
SN-3/8-GAL	3/8"-16	9/16" Hex	Galvanized Steel	Pole Line Hardware
SN-5/8-GAL	5/8"-11	1" Square	Galvanized Steel	Machine Bolts - Overhead Hardware
SN-3/4-GAL	3/4"-10	1-1/8" Square	Galvanized Steel	Machine Bolts - Overhead Hardware

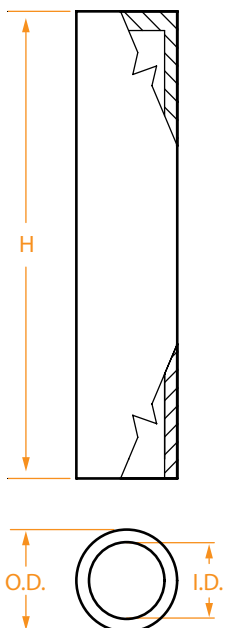
Rubber Products



Rubber Products

	Series	Page
Cable End Caps	CCAP Series	157
Insulated Connector Covers	348 Series	158
Wildlife Protectors – Plastic	RWP Series	159
Wildlife Protectors – Rubber	BG Series	160

- Made of ethylene propylene rubber
- Available in several different sizes

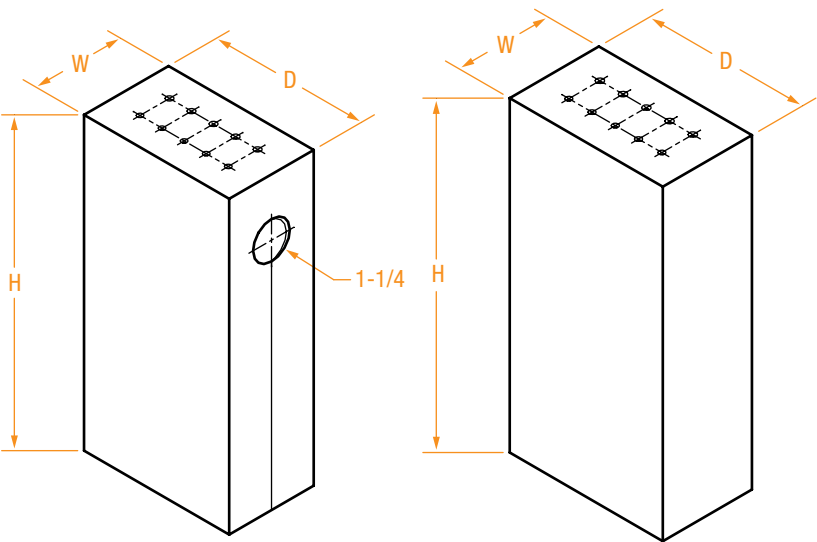


PART NUMBER *	WIRE SIZE	DIMENSIONS IN INCHES		
		H	OD	ID
CCAP348382	1/0	4-1/2	1	0.60
CCAP348300-B *	3/0	4-1/2	1-3/4	1.1875
CCAP4/0	4/0	2-1/2	1-1/4	.75
CCAP350	350	2-1/2	1-3/8	1
CCAP500	500	2-1/2	1-1/2	1.125
CCAP348383-B**	500	4-1/4	2	1
CCAP750	750	2-1/2	1-3/4	1.375
CCAP348301-B*	750	5-1/2	2-5/16	1.825

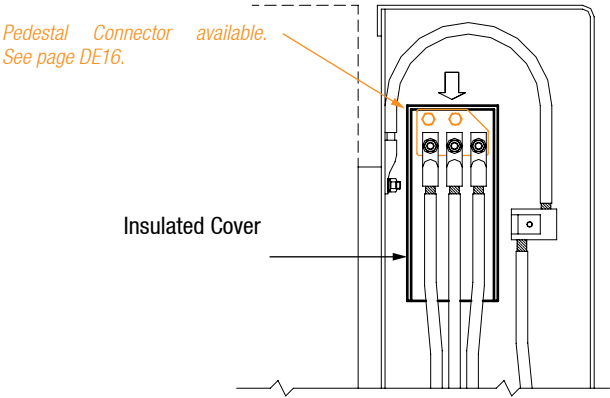
FOR OTHER SIZES, CONTACT YOUR SALES REPRESENTATIVE OR THE FACTORY.

* "-B" indicates that the Cable End Cap comes with a tightening band for easy installation.
 ** Made for 4kV, marked "4kV DEAD AS ALIVE."

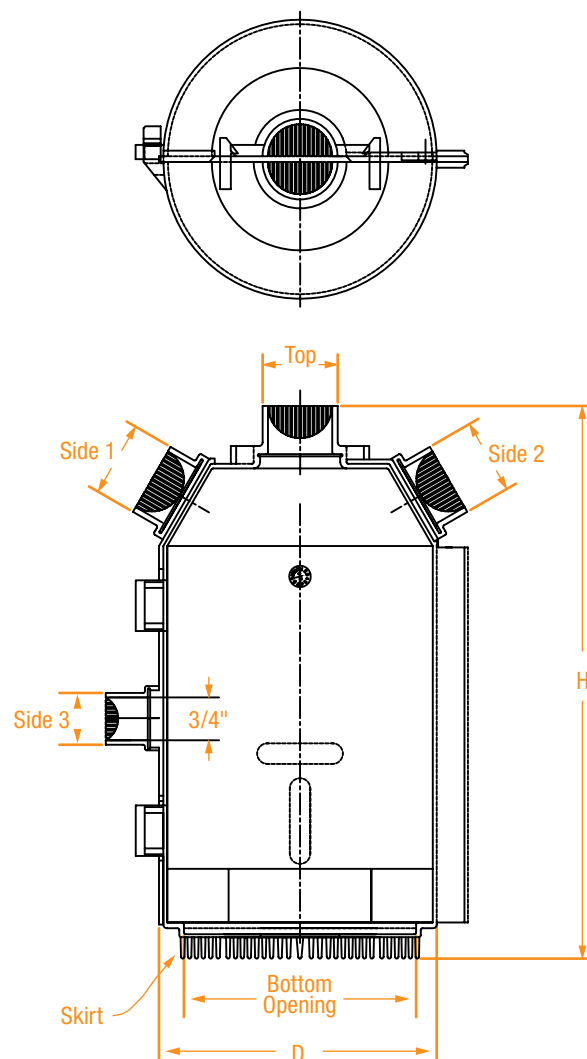
- Made from weather-resistant vinyl
- Insulates and protects electrical connections
- Available with or without a side split



PART NUMBER	SIDE STYLE	DIMENSIONS IN INCHES		
		H	W	D
348458	Seamless	10	5	3
348311	Split	10	5	3



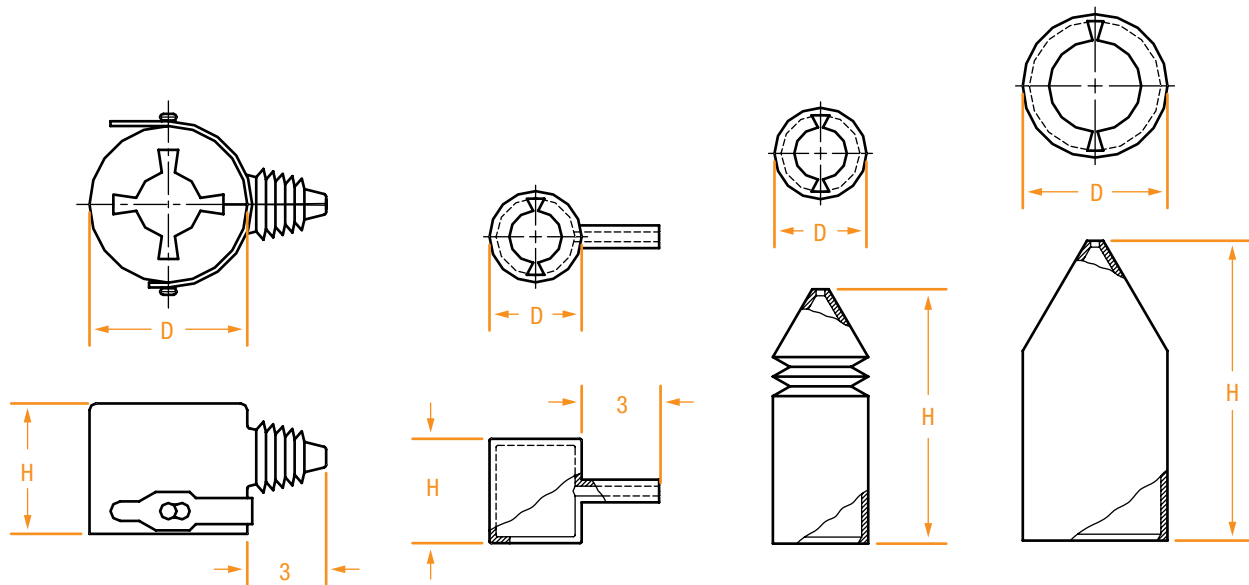
- Protects against accidental contact between wildlife and equipment bushings
- Track resistant per ASTM D 2303-97 standard test methods for liquid-contaminant, inclined-plane tracking and erosion of insulating materials
- Side and top snaps provide secure closure
- Knock outs on both sides for lightning arresters



PART NUMBER	DIMENSIONS IN INCHES		# OF CABLE PORTS	SIZE OF CABLE PORTS				
	H	D		Top	Side 1	Side 2	Side 3	Bottom
RWP2	9	4-3/4	3	3/4	3/4	3/4	—	2-1/2
RWP3*	9-1/2	4-3/4	4	1-1/8	1-1/8	1-1/8	3/4	2-1/2
RWP4*	9-1/2	4-3/4	4	1-5/16	1-5/16	1-5/16	15/16	2-1/2
RWP5	7	4-3/4	4	1-5/16	1-5/16	1-5/16	15/16	2-1/2

* Comes with a "skirt" at the bottom and a rubber insert to firmly grip bushing.

- Used on transformers, reclosers and potheads
- Made of ethylene propylene rubber
- Highly resistant to ozone and ultraviolet light deterioration
- Track resistant
- Easy Installation
- 20+ year life expectancy
- Available slit for “HOT” installations



PART NUMBER	FIGURE	DIMENSIONS IN INCHES	
		H	D
BG30-EN*	1	4 7/8	5 7/8
BG554-5678*	2	4	3-1/2
BG13-8-18	2	5-1/2	4-1/4
BG30-S*	3	4	3-1/2
BG30	3	9-3/4	3-1/2
BG30-414	4	11-1/2	5-1/2
BG30-12	4	11-3/4	4-3/8
BG-RS0218	4	14-1/2	6

* Wildlife protector slit for “HOT” installations.

003-0346	131	312-3511-00	123	AL10-3/8	4	ALCCD14	38
003-0353	131	350-CCR	108	AL11	4	ALCCD15	38
003-0379	131	500-CCR	108	AL11-2N	7	ALCCD16	38
003-0387	131	750-CCR	108	AL11-3/8	4	ALCCD18	38
003-0395	131	348311	152	AL12	4	ALCCD20	38
003-0437	131	348458	152	AL12-2N	7	ALCCD23	38
003-0445	131	ABWC00410	90	AL12-3/8	4	ALCCD24	38
003-0452	131	ABWC00420	90	AL13	4	ALCCD28	38
003-0460	131	ABWC00430	90	AL14	4	ALCD1-2N	9
003-0478	131	ABWC02010	90	AL14-2N	7	ALCD2	6
4/0-CCR	108	ABWC02020	90	AL15	4	ALCD3	6
237-1221-00	116	ABWC02030	90	AL15-2N	7	ALCD3-2N	9
237-1229-00	116	ABWC03030	90	AL15-4N	13	ALCD5	6
237-1234-10	116	ABWC03040	90	AL16	4	ALCD5-2N	9
237-1245-00	116	ABWC03050	90	AL16-2N	7	ALCD7	6
312-1200-00	116	ABWC25010	90	AL16-5/8	4	ALCD7-2N	9
312-1265-00	116	ABWC25020	90	AL18	4	ALCD8	6
312-1268-00	114	ABWC25030	90	AL18-2N	7	ALCD8-2N	9
312-1269-00	114	ABWC25040	90	AL18-4N	13	ALCD9	6
312-1270-00	116	ABWC25050	90	AL18-5/8	4	ALCD9-2N	9
312-1311-00	114	ABWC30030	91	AL20	4	ALCD10	6
312-1315-00	114	ABWC30050	91	AL20-2N	7	ALCD10-2N	9
312-1315-01	114	ABWC30060	91	AL20-5/8	4	ALCD11	6
312-1316-00	114	ABWC30070	91	AL23	4	ALCD11-2N	9
312-1330-00	114	ABWC30080	91	AL23-2N	7	ALCD12	6
312-1903-00	135	ABWC30090	91	AL23-4N	13	ALCD12-2N	9
312-1903-10	135	ABWC35010	91	AL23-5/8	4	ALCD13	6
312-1903-20	135	ABWC35020	91	AL24	4	ALCD14	6
312-1903-30	135	ABWC35030	91	AL24-2N	7	ALCD14-2N	9
312-1947-00	135	ABWC35040	91	AL24-4N	13	ALCD15	6
312-2562-00A	121	ABWC35050	91	AL24-5/8	5	ALCD15-2N	9
312-2566-00A	121	ABWC50010	91	AL28	5	ALCD16	6
312-3100-00	123	ABWC50020	91	AL28-2N	7	ALCD16-2N	9
312-3110-00	122	ABWC50030	91	AL28-2N-W	7	ALCD18	6
312-3200-00	122	ABWC50040	91	AL28-4N	13	ALCD18-2N	9
312-3201-00	122	ABWC50050	91	AL28-5/8	5	ALCD23-2N	9
312-3202-00	122	ABWC50060	92	AL28CR-4N	13	ALCD24-2N	9
312-3203-00	122	ABWC60010	92	AL29-2N	7	ALCD28-2N	9
312-3204-00	122	ABWC60020	92	AL29-4N	13	ALCR7	44
312-3205-00	122	ABWC60030	92	AL30-2N	7	ALCR9	44
312-3208-00	122	ABWC60040	92	AL31-2N	8	ALCR10	44
312-3209-00	122	ABWC60050	92	AL32-2N	8	ALCR11	44
312-3211-00	122	ABWC60060	92	ALC5	37	ALCR12	44
312-3250-00	122	ABWC60070	92	ALC7	37	ALCR13	44
312-3251-00	122	ABWC75010	92	ALC8	37	ALCR14	44
312-3252-00	122	ABWC75020	92	ALC9	37	ALCR15	44
312-3253-00	122	ABWC75030	92	ALC10	37	ALCR16	44
312-3254-00	122	ABWC75035	92	ALC11	37	ALCR18	44
312-3255-00	122	ABWC75040	92	ALC12	37	ALCR20	44
312-3260-00	122	ABWC75050	92	ALC13	37	ALCR23	44
312-3261-00	122	ABWC75060	92	ALC14	37	ALCR28	44
312-3263-00	122	ACRN-5/8	86	ALC15	37	ALCR29	44
312-3300-00	123	ACRN-5/8-CPS	86	ALC16	37	ALCRCD5-3	46
312-3301-00	123	AHLC-18-9	70	ALC18	37	ALCRCD7	46
312-3302-00	123	AHLC-100-TN	70	ALC20	37	ALCRCD9	46
312-3303-00	123	AHLC-300-TN	70	ALC23	37	ALCRCD10	46
312-3304-00	123	AHLC-397	72	ALC24	37	ALCRCD11	46
312-3305-00	123	AHLC-700	70	ALC28	37	ALCRCD12	46
312-3306-00	123	AL3-1/4	4	ALC29	37	ALCRCD13	46
312-3308-00	123	AL3-2N	7	ALC30	37	ALCRCD14	46
312-3309-00	123	AL5-1/4	4	ALC31	37	ALCRCD15	46
312-3310-00	123	AL5-2N	7	ALC32	37	ALCRCD18	46
312-3311-00	123	AL7-1/4	4	ALCCD5	38	ALCRCD23	46
312-3500-00	123	AL7-2N	7	ALCCD7	38	ALCRCD28	46
312-3501-00	123	AL8-2N	7	ALCCD8	38	ALCRCD29	46
312-3502-00	123	AL9	4	ALCCD9	38	ALLS250	111
312-3503-00	123	AL9-2N	7	ALCCD10	38	ALLS500	111
312-3506-00	123	AL9-3/8	4	ALCCD11	38	ALLS750	111
312-3507-00	123	AL10	4	ALCCD12	38	ALS250	107
312-3508-00	123	AL10-2N	7	ALCCD13	38	ALS500	107

ALS750.....	107	ASL12-2N.....	7	BHLC-400.....	71	CCLP500.....	106
ALT7.....	41	ASL13-2N.....	7	BHLC-401.....	71	CCLP750.....	106
ALT9.....	41	ASL14-2N.....	7	BIC4/0-4W.....	96	CCR3-2.....	55
ALT9-7.....	41	ASL15-2N.....	7	BSC-2/0.....	74	CCR5.....	55
ALT10.....	41	ASL16-2N.....	7	CB504-0530.....	126	CCR7.....	55
ALT10-9.....	41	ASL18-2N.....	7	CB570-2774.....	126	CCR8.....	55
ALT11.....	41	ASL20-2N.....	7	CB183053.....	126	CCR9.....	55
ALT12.....	41	ASL23-2N.....	7	CB396271.....	126	CCR10.....	55
ALT12-10.....	41	ASL24-2N.....	7	CB396740.....	126	CCR11.....	55
ALT13.....	41	ASL28-2N.....	7	CC3.....	49	CCR12.....	55
ALT14.....	41	ASL28-2N-W.....	7	CC4.....	49	CCR13.....	55
ALT15.....	41	ASL29-2N.....	7	CC5.....	49	CCR14.....	55
ALT15-9.....	41	ASL30-2N.....	7	CC7.....	49	CCR15.....	55
ALT15-12.....	41	ASL31-2N.....	8	CC8.....	49	CCR18.....	55
ALT77.....	42	ASL32-2N.....	8	CC9.....	49	CCR23.....	55
ALTT7-5.....	42	ASLCD1-2N.....	9	CC10.....	49	CCR28.....	55
ALTT9.....	42	ASLCD2.....	6	CC11.....	49	CCR29.....	55
ALTT9-7.....	42	ASLCD3.....	6	CC12.....	49	CCT6-12.....	53
ALTT10.....	42	ASLCD3-2N.....	9	CC13.....	49	CCT9.....	53
ALTT10-7.....	42	ASLCD5.....	6	CC14.....	49	CCT9-3.....	53
ALTT10-8.....	42	ASLCD5-2N.....	9	CC15.....	49	CCT9-5.....	53
ALTT10-9.....	42	ASLCD7.....	6	CC16.....	49	CCT9-7.....	53
ALTT12.....	42	ASLCD7-2N.....	9	CC18.....	49	CCT9-8.....	53
ALTT12-9.....	42	ASLCD8.....	6	CC20.....	49	CCT10.....	53
ALTT12-10.....	42	ASLCD8-2N.....	9	CC23.....	49	CCT10-3.....	53
ALTT14-9.....	42	ASLCD9.....	6	CC28.....	49	CCT10-5.....	53
ALTT14-10.....	42	ASLCD9-2N.....	9	CC29.....	49	CCT10-7.....	53
ALTT15.....	42	ASLCD10.....	6	CC30.....	49	CCT10-8.....	53
ALTT15-9.....	42	ASLCD10-2N.....	9	CC32.....	49	CCT10-9.....	53
ALTT15-10.....	42	ASLCD11.....	6	CC33.....	49	CCT12.....	53
ALTT15-12.....	42	ASLCD11-2N.....	9	CC500.....	98	CCT12-7.....	53
ALTT15-14.....	42	ASLCD12.....	6	CCAP4/0.....	151	CCT12-8.....	53
ALTT18.....	42	ASLCD12-2N.....	9	CCAP350.....	151	CCT12-9.....	53
ALTT18-9.....	42	ASLCD13.....	6	CCAP500.....	151	CCT12-10.....	53
ALTT18-10.....	42	ASLCD13-2N.....	9	CCAP750.....	151	CCT13.....	53
ALTT18-12.....	42	ASLCD14-2N.....	9	CCAP348300-B.....	151	CCT13-7.....	53
ALTT18-14.....	42	ASLCD15-2N.....	9	CCAP348301-B.....	151	CCT13-8.....	53
ALTT18-15.....	42	ASLCD16-2N.....	9	CCAP348382.....	151	CCT13-9.....	53
ALTT23.....	43	ASLCD18-2N.....	9	CCAP348383-B.....	151	CCT13-10.....	53
ALTT23-12.....	43	ASLCD23-2N.....	9	CCL4/0.....	106	CCT13-12.....	53
ALTT23-14.....	43	ASLCD24-2N.....	9	CCL250.....	106	CCT15.....	53
ALTT23-15.....	43	ASLCD28-2N.....	9	CCL300.....	106	CCT15-9.....	53
ALTT23-18.....	43	B3CC-4N.....	30	CCL350.....	106	CCT15-10.....	53
ALTT28.....	43	B4CC-4N.....	30	CCL400.....	106	CCT15-12.....	53
ALTT28-12.....	43	BCASC2/0.....	75	CCL500.....	106	CCT16.....	53
ALTT28-14.....	43	BCASC2/0-45.....	75	CCL750.....	106	CCT16-9.....	53
ALTT28-15.....	43	BCASC2/0-E-45.....	75	CCLA4/0.....	105	CCT16-10.....	53
ALTT28-18.....	43	BCASC2/0-E-W.....	75	CCLA250.....	105	CCT16-13.....	53
ALTT28-23.....	43	BCASC2/0-E-W-45.....	75	CCLA300.....	105	CCT16-14.....	53
APT7.....	12	BCASC2/0-W.....	75	CCLA350.....	105	CCT16-15.....	53
APT9.....	12	BCASC2/0-W-45.....	75	CCLA400.....	105	CCT18.....	53
APT10.....	12	BCASC397.....	75	CCLA500.....	105	CCT18-9.....	53
APT12.....	12	BCASC397-45.....	75	CCLA7500.....	105	CCT18-10.....	53
APT15.....	12	BCASC397-E-45.....	75	CCLA-IN-500.....	104	CCT18-12.....	53
APT18.....	12	BCASC397-E-45-L.....	75	CCLA-IN-750-500.....	104	CCT18-13.....	53
APT23.....	12	BCASC397-L.....	75	CCLAP4/0.....	105	CCT18-15.....	53
APT28.....	12	BG13-8-18.....	154	CCLAP250.....	105	CCT18-16.....	53
AS4/0.....	98	BG30.....	154	CCLAP300.....	105	CCT20.....	53
AS500/3.....	98	BG30-12.....	154	CCLAP350.....	105	CCT20-10.....	53
AS500-5.....	98	BG30-414.....	154	CCLAP400.....	105	CCT20-12.....	53
ASC-2/0.....	74	BG30-EN.....	154	CCLAP500.....	105	CCT20-13.....	53
ASC-500.....	74	BG30-S.....	154	CCLAP750.....	105	CCT20-18.....	53
ASC-1000.....	74	BG554-5678.....	154	CCLF-12.....	108	CCT23.....	53
ASL3-2N.....	7	BG-RS0218.....	154	CCLF-15.....	108	CCT23-15.....	53
ASL5-2N.....	7	BHLC-100.....	71	CCLF-18.....	108	CCT23-18.....	53
ASL7-2N.....	7	BHLC-100-LI.....	71	CCLF-23.....	108	CCT28.....	53
ASL8-2N.....	7	BHLC-101.....	71	CCLP4/0.....	106	CCT28-18.....	53
ASL9-2N.....	7	BHLC-102.....	71	CCLP250.....	106	CCT28-20.....	53
ASL10-2N.....	7	BHLC-201.....	71	CCLP300.....	106	CCT28-23.....	53
ASL11-2N.....	7	BHLC-300.....	71	CCLP350.....	106	CJB4/0-4W.....	95

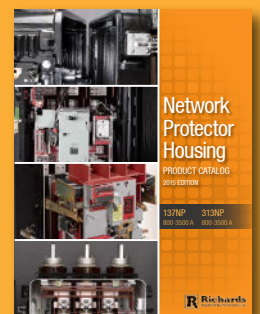
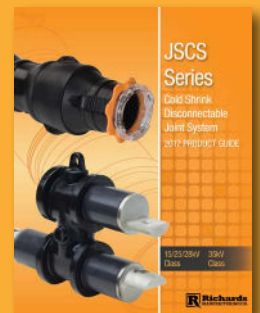
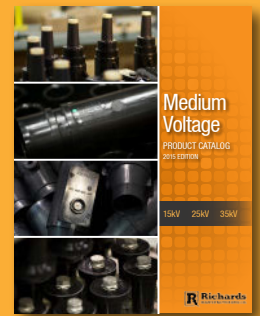
CJB350-4W.....	95	CL10-5/16-P.....	26	CL23-5/8-P.....	27	CLLP4/0-N.....	110
CJB500-4W.....	95	CL10-P.....	26	CL23-P.....	27	CLLP250-A.....	110
CJB500-5W.....	95	CL11.....	19	CL28.....	19	CLLP250-N.....	110
CJB750-5W.....	95	CL11-2N.....	20	CL28-2N.....	21	CLLP300-A.....	110
CJLP500-3W.....	100	CL11-2N-3/8.....	20	CL28-2N-1-3/4.....	21	CLLP300-N.....	110
CJLP500-5W.....	100	CL11-2N-P.....	28	CL28-2N-P.....	28	CLLP350-A.....	110
CJLP500-7W.....	100	CL11-3/8.....	19	CL28-3/4.....	19	CLLP350-N.....	110
CJLPS500-3W.....	100	CL11-3/8-P.....	27	CL28-3/4-P.....	27	CLLP400-A.....	110
CJLPS500-5W.....	100	CL11-5/16.....	18	CL28-4N.....	22	CLLP400-N.....	110
CL2-1/4.....	18	CL11-5/16-P.....	26	CL28-5/8.....	19	CLLP500-A.....	110
CL2-1/4-P.....	26	CL11-P.....	27	CL28-5/8-P.....	27	CLLP500-N.....	110
CL2-3/8.....	18	CL12.....	19	CL28-P.....	27	CLLP750-A.....	110
CL2-5/16.....	18	CL12-1/2-P.....	27	CL29-2N.....	21	CLLP750-N.....	110
CL3-1/4.....	18	CL12-2N.....	20	CL29-4N.....	22	CPT5.....	33
CL3-1/4-P.....	26	CL12-2N-3/8.....	20	CL30-2N.....	21	CPT5-90.....	33
CL3-2N-1/4.....	20	CL12-2N-P.....	28	CL30-2N-P.....	28	CPT9.....	33
CL3-2N-5/16.....	20	CL12-3/8.....	19	CL30-3/4-P.....	27	CPT9-90.....	33
CL3-3/8.....	18	CL12-3/8-P.....	27	CL30-4N.....	22	CPT10.....	33
CL3-3/8-P.....	26	CL12-5/16.....	19	CL30-4N-P.....	28	CPT12.....	33
CL3-5/16.....	18	CL12-5/16-P.....	27	CL32-2N.....	21	CPT12-90.....	33
CL3-5/16-P.....	26	CL13.....	19	CL32-2N-P.....	28	CPT15.....	33
CL5-1/4.....	18	CL13-2N.....	20	CL32-3/4-P.....	27	CPT15-90.....	33
CL5-1/4-P.....	26	CL13-2N-3/8.....	20	CL32-4N.....	22	CPT18.....	33
CL5-1-66PS.....	32, 34	CL13-2N-P.....	28	CL32-4N-P.....	28	CPT18-90.....	33
CL5-2N.....	20	CL13-3/8.....	19	CL33-4N.....	22	CR3.....	62
CL5-2N-1/4.....	20	CL13-3/8-P.....	27	CL371885.....	22	CR4.....	62
CL5-2N-5/16.....	20	CL13-5/16.....	19	CLL4/0-A.....	110	CR5.....	62
CL5-2N-066.....	32, 34	CL13-P.....	27	CLL4/0-N.....	110	CR6.....	62
CL5-3/8.....	18	CL14.....	19	CLL250-A.....	110	CR7.....	62
CL5-3/8-P.....	26	CL14-2N.....	21	CLL250-N.....	110	CR8.....	62
CL5-5/16.....	18	CL14-2N-3/8.....	21	CLL300-A.....	110	CR9.....	62
CL5-5/16-P.....	26	CL14-2N-P.....	28	CLL300-N.....	110	CR10.....	62
CL7.....	18	CL14-3/8.....	19	CLL350-A.....	110	CR11.....	62
CL7-1/2-P.....	26	CL14-5/8-P.....	27	CLL350-N.....	110	CR12.....	62
CL7-1/4.....	18	CL14-P.....	27	CLL400-A.....	110	CR13.....	62
CL7-1/4-P.....	26	CL15.....	19	CLL400-N.....	110	CR14.....	62
CL7-2N.....	20	CL15-2N.....	21	CLL500-A.....	110	CR15.....	62
CL7-2N-1/4.....	20	CL15-2N-3/8.....	21	CLL500-N.....	110	CR16.....	62
CL7-2N-5/16.....	20	CL15-2N-P.....	28	CLL750-A.....	110	CR17.....	62
CL7-2N-066.....	32, 34	CL15-3/8.....	19	CLL750-N.....	110	CR18.....	62
CL7-3/8.....	18	CL15-5/8-P.....	27	CLLA4/0-A.....	109	CR19.....	62
CL7-3/8-P.....	26	CL15-P.....	27	CLLA4/0N.....	109	CR20.....	62
CL7-5/16.....	18	CL16.....	19	CLLA250-A.....	109	CR21.....	62
CL7-5/16-P.....	26	CL16-2N.....	21	CLLA250N.....	109	CR22.....	62
CL8.....	18	CL16-2N-3/8.....	21	CLLA300-A.....	109	CR23.....	62
CL8-1/2-P.....	26	CL16-2N-P.....	28	CLLA300N.....	109	CR24.....	62
CL8-1/4.....	18	CL16-3/8.....	19	CLLA350-A.....	109	CR26.....	62
CL8-1/4-P.....	26	CL16-5/8.....	19	CLLA350N.....	109	CR28.....	62
CL8-2N-1/4.....	20	CL16-5/8-P.....	27	CLLA400-A.....	109	CR29.....	62
CL8-2N-5/16.....	20	CL16-P.....	27	CLLA400N.....	109	CR30.....	62
CL8-3/8.....	18	CL18.....	19	CLLA500-A.....	109	CR31.....	62
CL8-3/8-P.....	26	CL18-2N.....	21	CLLA500N.....	109	CR32.....	62
CL8-5/16.....	18	CL18-2N-P.....	28	CLLA750-A.....	109	CR33.....	62
CL8-5/16-P.....	26	CL18-4N.....	22	CLLA750N.....	109	CRA12-3.....	59
CL9.....	18	CL18-5/8.....	19	CLLP4/0-A.....	109	CRA12-5.....	59
CL9-2N.....	20	CL18-5/8-P.....	27	CLLP4/0N.....	109	CRA12-7.....	59
CL9-2N-3/8.....	20	CL18-P.....	27	CLLP250-A.....	109	CRA12-8.....	59
CL9-2N-5/16.....	20	CL20.....	19	CLLP250N.....	109	CRA12-9.....	59
CL9-3/8.....	18	CL20-2N.....	21	CLLP300-A.....	109	CRA12-10.....	59
CL9-3/8-P.....	26	CL20-2N-P.....	28	CLLP300N.....	109	CRA12-11.....	59
CL9-5/16.....	18	CL20-5/8.....	19	CLLP350-A.....	109	CRA15-3.....	59
CL9-5/16-P.....	26	CL20-5/8-P.....	27	CLLP350N.....	109	CRA15-5.....	59
CL9-P.....	26	CL20-P.....	27	CLLP400-A.....	109	CRA15-7.....	59
CL10.....	18	CL23.....	19	CLLP400N.....	109	CRA15-9.....	59
CL10-2N.....	20	CL23-2N.....	21	CLLP500-A.....	109	CRA15-11.....	59
CL10-2N-3/8.....	20	CL23-2N-P.....	28	CLLP500N.....	109	CRA15-12.....	59
CL10-2N-P.....	28	CL23-3/4.....	19	CLLP750-A.....	109	CRA15-13.....	59
CL10-3/8.....	18	CL23-3/4-P.....	27	CLLP750N.....	109	CRA15-14.....	59
CL10-3/8-P.....	26	CL23-4N.....	22	CLLF-500.....	112	CRA18-3.....	59
CL10-5/16.....	18	CL23-5/8.....	19	CLLP4/0-A.....	110	CRA18-5.....	59

CRA18-7.....	59	FJI750-3W.....	96	NPF-30-Q.....	119	OCC23.....	51
CRA18-8.....	59	FJI750-4W.....	96	NPF-37.5-L.....	120	OCC24.....	51
CRA18-9.....	59	FJI750-5W.....	96	NPF-37.5-Q.....	119	OCC28.....	51
CRA18-10.....	59	HD3.....	64	NPF-44-L.....	120	OCC29.....	51
CRA18-11.....	59	HD5.....	64	NPF-44-Q.....	119	OCCR3-2.....	57
CRA18-13.....	59	HD6.....	64	NPF-50-L.....	120	OCCR5.....	57
CRA18-14.....	59	HD7.....	64	NPF-50-Q.....	119	OCCR7.....	57
CRA18-15.....	59	HD8.....	64	NPT500A.....	114	OCCR8.....	57
CRA18-16.....	59	HD9.....	64	NPT500B.....	114	OCCR9.....	57
CRA23-12.....	59	HD10.....	64	NPT523-0909.....	114	OCCR10.....	57
CRA23-15.....	59	HD11.....	64	NPT523-0925.....	114	OCCR11.....	57
CRA23-16.....	59	HD12.....	64	NSC-547.....	80	OCCR12.....	57
CRA23-18.....	59	HD13.....	64	NWP-3.....	125	OCCR13.....	57
CRA23-20.....	59	HD14.....	64	NWP-4.....	125	OCCR14.....	57
CSL5-2N.....	20	HD15.....	64	NWP-5.....	125	OCCR15.....	57
CSL7-2N.....	20	HD16.....	64	NWP-6.....	125	OCCR18.....	57
CSL9-2N.....	20	HD17.....	64	NWP-7.....	125	OCCR23.....	57
CSL10-2N.....	20	HD18.....	64	OATC7.....	39	OCCR28.....	57
CSL11-2N.....	20	HD19.....	64	OATC9.....	39, 40	OCCR29.....	57
CSL12-2N.....	20	HD20.....	64	OATC10.....	39	OTCC3.....	52
CSL13-2N.....	20	HD21.....	64	OATC11.....	39	OTCC5.....	52
CSL14-2N.....	21	HD23.....	64	OATC12.....	39, 40	OTCC7.....	52
CSL15-2N.....	21	HD24.....	64	OATC13.....	39, 40	OTCC8.....	52
CSL16-2N.....	21	HD25.....	64	OATC14.....	39	OTCC9.....	52
CSL18-2N.....	21	HD28.....	64	OATC15.....	39, 40	OTCC10.....	52
CSL20-2N.....	21	HD32.....	64	OATC16.....	39	OTCC11.....	52
CSL23-2N.....	21	HDCL7-2N.....	23	OATC18.....	39, 40	OTCC12.....	52
CSL28-2N.....	21	HDCL8-2N.....	23	OATC20.....	39, 40	OTCC13.....	52
CSL28-2N-1-3/4.....	21	HDCL9-2N.....	23	OATC23.....	39, 40	OTCC14.....	52
CSL29-2N.....	21	HDCL10-2N.....	23	OATC24.....	39	OTCC15.....	52
CSL30-2N.....	21	HDCL11-2N.....	23	OATC28.....	39	OTCC16.....	52
CSL32-2N.....	21	HDCL12-2N.....	23	OATC29.....	39	OTCC18.....	52
ES-750.....	115	HDCL13-2N.....	23	OATC30.....	39	OTCC20.....	52
FD3.....	63	HDCL14-2N.....	23	OATC31.....	39	OTCC23.....	52
FD5.....	63	HDCL15-2N.....	23	OATC32.....	39	OTCC28.....	52
FD6.....	63	HDCL16-2N.....	23	OATCCD5.....	40	OTCC29.....	52
FD7.....	63	HDCL18-2N.....	23	OATCCD7.....	40	OTCC30.....	52
FD8.....	63	HDCL20-2N.....	23	OATCCD10.....	40	OTCC32.....	52
FD9.....	63	HDCL23-2N.....	23	OATCCD11.....	40	OTCCR3.....	58
FD10.....	63	HDCL28-2N.....	23	OATCCD14.....	40	OTCCR5.....	58
FD11.....	63	HTS-500.....	115	OATCCD16.....	40	OTCCR7.....	58
FD12.....	63	HTS-750.....	115	OATCR3-2.....	45	OTCCR8.....	58
FD13.....	63	LLS4/0.....	111	OATCR5.....	45	OTCCR9.....	58
FD14.....	63	LLS500.....	111	OATCR7.....	45	OTCCR10.....	58
FD15.....	63	LLS750.....	111	OATCR8.....	45	OTCCR11.....	58
FD16.....	63	LLS750-2.....	111	OATCR9.....	45	OTCCR12.....	58
FD17.....	63	LPB622.....	139	OATCR10.....	45	OTCCR13.....	58
FD18.....	63	LS-2PC-500.....	107	OATCR11.....	45	OTCCR14.....	58
FD19.....	63	LS-2PC-750.....	107	OATCR12.....	45	OTCCR15.....	58
FD20.....	63	LS-250.....	107	OATCR13.....	45	OTCCR18.....	58
FD21.....	63	ML8-10.....	30	OATCR14.....	45	OTCCR23.....	58
FJB4/0-2W.....	95	ML13-18.....	30	OATCR15.....	45	OTCCR28.....	58
FJB4/0-3W.....	95	MT18-12-N.....	34	OATCR18.....	45	OTCCR29.....	58
FJB4/0-4W.....	95	MT18-N.....	34	OATCR23.....	45	PC371105.....	85
FJB500-2W.....	95	MT23-18-N.....	34	OATCR28.....	45	PTP-1.....	133
FJB500-3W.....	95	MT23-N.....	34	OATCR29.....	45	R07-1285.....	87
FJB500-4W.....	95	NF-2.....	124	OCC3.....	51	R124214.....	81
FJI4/0-2W.....	96	NF-3.....	124	OCC5.....	51	RA-1W.....	130
FJI4/0-3W.....	96	NF-4.....	124	OCC7.....	51	RA-1W-90.....	130
FJI4/0-4W.....	96	NF-5.....	124	OCC8.....	51	RA-2W.....	130
FJI4/0-5W.....	96	NF-6.....	124	OCC9.....	51	RA-2W-90.....	130
FJI4/0-6W.....	96	NF-7.....	124	OCC10.....	51	RA-2W-C.....	130
FJI500-(2)4/0.....	96	NF-10.....	124	OCC11.....	51	RA-3W.....	130
FJI500-2W.....	96	NPF-11-L.....	120	OCC12.....	51	RA-3W-90.....	130
FJI500-3W.....	96	NPF-15-L.....	120	OCC13.....	51	RA-3W-C.....	130
FJI500-4W.....	96	NPF-22.5-L.....	120	OCC14.....	51	RAC197A.....	144
FJI500-5W.....	96	NPF-22.5-Q.....	119	OCC15.....	51	RAC336.....	144
FJI500-6W.....	96	NPF-25-L.....	120	OCC16.....	51	RAFOB-6045.....	88
FJI500-U.....	96	NPF-25-Q.....	119	OCC18.....	51	RAFOB-6050.....	88
FJI750-2W.....	96	NPF-30-L.....	120	OCC20.....	51	RAFOB-6055.....	88

RAFOB-6065	88	RSS10	61	SAL30	3	SCL12-2N	17
RAFOB-6080	88	RSS11	61	SAL30-2N	3	SCL12-3/8	17
RAFOB-6085	88	RSS12	61	SAL32	3	SCL13	17
RAFOB-6100	88	RSS13	61	SAL32-2N	3	SCL13-2N	17
RB319	82	RSS14	61	SALC3	36	SCL14	17
RB319-NTN	82	RSS15	61	SALC5	36	SCL14-2N	17
RB341	82	RSS16	61	SALC7	36	SCL15	17
RB341-NTN	82	RSS17	61	SALC8	36	SCL15-2N	17
RB563	82	RSS18	61	SALC9	36	SCL16	17
RB563-NTN	82	RSS19	61	SALC10	36	SCL16-2N	17
RBCLLA4/0N	113	RSS20	61	SALC11	36	SCL18	17
RBCLLA250N	113, 115	RSS21	61	SALC12	36	SCL18-2N	17
RBCLLA300N	113	RSS22	61	SALC13	36	SCL20	17
RBCLLA350N	113	RSS23	61	SALC14	36	SCL20-2N	17
RBCLLA400N	113	RSS24	61	SALC15	36	SCL23	17
RBCLLA500N	113	RSS25	61	SALC16	36	SCL23-2N	17
RBCLLA750N	113	RSS26	61	SALC18	36	SCL28	17
RBLTE-1	137	RSS27	61	SALC20	36	SCL28-2N	17
RBLTE-2	137	RSS28	61	SALC23	36	SCL28-4N	17
RBWC-L-9	83	RSS29	61	SALC24	36	SCL30	17
RBWC-L-9-5	83	RSS30	61	SALC28	36	SCL30-2N	17
RBWC-L-9-7	83	RSS31	61	SALC29	36	SCL30-4N	17
RBWC-M-5/8-7	83	RSS32	61	SALC30	36	SCL32	17
RBWC-M-5/8-9	83	RSS33	61	SALC31	36	SCL32-2N	17
RCG395	140	RST-275	81	SALC32	36	SCL32-4N	17
RCSG182	141	RST-356	81	SCC3	48	SDC495	79
RCSG182-1	141	RTB071330	145	SCC4	48	SEC3-12	79
RDL-FA500	117	RTG512	77	SCC5	48	SJ4/0-(6)1/0	102
RDL-FA750	117	RTG512-F	77	SCC7	48	SJ350AL-4/0-8W	102
RDL-UA500	117	RTG512-F-3/8	77	SCC8	48	SJ573-0171	102
RDL-US500	117	RTG512-M	77	SCC9	48	SJ573-0346	102
RDL-US750	117	RTG512-XL	77	SCC10	48	SJ573-0536	102
RENUT-1	137	RTMBE-1	137	SCC11	48	SJ573-0551	102
RENUT-2	137	RTMBE-2	137	SCC12	48	SJ573-0569	102
RFB1	89	RTMBL-1	137	SCC13	48	SJ573-0668	102
RFB2	89	RTMBL-2	137	SCC14	48	SJ573-0676	102
RGG122	140	RWP2	153	SCC15	48	SJ573-0692	102
RGG122-15/16	140	RWP3	153	SCC16	48	SJ1420	102
RGH133	143	RWP4	153	SCC18	48	SN-1/2-SBR	149
RGH133-AX	143	RWP5	153	SCC20	48	SN-1/2-ZP	149
RGH135	143	SAL3	2	SCC23	48	SN-1/4-REL	149
RHDC176	148	SAL5	2	SCC28	48	SN-3/4-GAL	149
RJH18666	138	SAL7	2	SCC29	48	SN-3/8-GAL	149
RJH18667	138	SAL8	2	SCC30	48	SN-5/8-GAL	149
RJH18668	138	SAL9	2	SCC32	48	SRA-4	132
RJH18669	138	SAL9-2N	2	SCC33	48	SRA-7	132
RJH18670	138	SAL10	2	SCL3	16	SRA-10	132
RLH-1	134	SAL10-2N	2	SCL3-1/4	16	SRA-14	132
RLH-2	134	SAL11	2	SCL3-5/16	16	SSCRW10-12-1	128
RLH-3	134	SAL11-2N	2	SCL5	16	ST1	65
RLH-4	134	SAL12	2	SCL5-1/4	16	ST2	65
RML4/0	103	SAL12-2N	2	SCL5-3/8	16	ST3	65
RML500	103	SAL13	2	SCL7-1/4	16	ST5	65
RMLA4/0	103	SAL13-2N	2	SCL7-2(3/8)	16	ST6	65
RMLA500	103	SAL14	2	SCL7-3/8	16	ST7	65
RMLSHELL-4/0	103	SAL14-2N	2	SCL7-5/16	16	ST8	65
RMLSHELL-500	103	SAL15	2	SCL7-390	16	ST9	65
RMLSLV-4/0	103	SAL15-2N	2	SCL8-5/16	16	ST10	65
RMLSLV-500	103	SAL16	2	SCL9-2(5/16)	16	ST11	65
RPEP88	142	SAL16-2N	2	SCL9-3/8	16	ST12	65
RPTA529	146	SAL18	2	SCL9-5/16	16	ST13	65
RSC1204	147	SAL18-2N	2	SCL10	16	ST14	65
RSD262	78	SAL20	2	SCL10-2(1/4)	16	ST15	65
RSD262C	78	SAL20-2N	3	SCL10-2(3/8)	16	ST16	65
RSPTAP	80	SAL22	3	SCL10-2N	16	ST17	65
RSS3	61	SAL23-2N	3	SCL10-3/8	16	ST18	65
RSS5	61	SAL24	3	SCL11-2(3/8)	16	ST19	65
RSS7	61	SAL24-2N	3	SCL11-2N	17	ST20	65
RSS8	61	SAL28	3	SCL11-3/8	16	ST21	65
RSS9	61	SAL28-2N	3	SCL12	17	ST22	65

ST23	65	TCCT9-3	54	TCL20-2N	25
ST24	65	TCCT9-5	54	TCL23-2N	25
ST26	65	TCCT9-7	54	TCL24-2N	25
ST28	65	TCCT9-8	54	TCL28-2N	25
ST29	65	TCCT10	54	TRSS-A200	127
ST30	65	TCCT10-3	54	TRSS-A201	127
ST31	65	TCCT10-5	54	TRSS-C100	127
ST32	65	TCCT10-7	54	TRSS-C101	127
ST33	65	TCCT10-8	54	TRSS-C102	127
TAL5	10	TCCT10-9	54	TWJ4/0-5	97
TAL7	10	TCCT12	54	TWJ500-3	97
TAL8	10	TCCT12-7	54	TWJ500-5	97
TAL9	10	TCCT12-8	54	TWJC4/0	99
TAL9-2N	10	TCCT12-9	54	TWJC500-3	99
TAL10	10	TCCT12-10	54	TWJC500-5	99
TAL10-2N	10	TCCT13	54	TWJS4/0	99
TAL11	10	TCCT13-7	54	TWJS500-3	99
TAL11-2N	10	TCCT13-8	54	TWJS500-5	99
TAL12	10	TCCT13-9	54	VC3	69
TAL12-2N	10	TCCT13-10	54	VC3-H	76
TAL13	10	TCCT13-12	54	VC5	69
TAL13-2N	10	TCCT15	54	VC5-H	76
TAL14	10	TCCT15-9	54	VC7	69
TAL14-2N	10	TCCT15-10	54	VC7-H	76
TAL15	10	TCCT15-12	54	VC10	69
TAL15-2N	10	TCCT16	54	VC10S	69
TAL16-2N	11	TCCT16-9	54	VC10S-H	76
TAL18-2N	11	TCCT16-10	54	VC12	69
TAL20-2N	11	TCCT16-12	54	VC12-H	76
TAL23-2N	11	TCCT16-13	54	VC15	69
TAL24-2N	11	TCCT16-14	54	VC18	69
TAL28-2N	11	TCCT16-15	54	VC-8002	84
TAL30-2N	11	TCCT18	54	VC-8010	84
TAL32-2N	11	TCCT18-9	54	VC-8020	84
TCC3	50	TCCT18-10	54	VC-8058-SH	84
TCC5	50	TCCT18-12	54	ZE	114
TCC7	50	TCCT18-13	54		
TCC8	50	TCCT18-15	54		
TCC9	50	TCCT18-16	54		
TCC10	50	TCCT20	54		
TCC11	50	TCCT20-10	54		
TCC12	50	TCCT20-12	54		
TCC13	50	TCCT20-13	54		
TCC14	50	TCCT20-18	54		
TCC15	50	TCCT23	54		
TCC16	50	TCCT23-15	54		
TCC18	50	TCCT23-18	54		
TCC20	50	TCCT28	54		
TCC23	50	TCCT28-18	54		
TCC28	50	TCCT28-20	54		
TCC29	50	TCCT28-23	54		
TCC30	50	TCL5	24		
TCC32	50	TCL7	24		
TCC33	50	TCL8	24		
TCCR3-2	56	TCL9	24		
TCCR5-	56	TCL9-2N	24		
TCCR7-	56	TCL10	24		
TCCR8-	56	TCL10-2N	24		
TCCR9-	56	TCL11	24		
TCCR10-	56	TCL11-2N	24		
TCCR11-	56	TCL12	24		
TCCR12-	56	TCL12-2N	24		
TCCR13-	56	TCL13	24		
TCCR14-	56	TCL13-2N	24		
TCCR15-	56	TCL14	24		
TCCR18-	56	TCL14-2N	24		
TCCR23-	56	TCL15	24		
TCCR28-	56	TCL15-2N	25		
TCCR29-	56	TCL16-2N	25		
TCCT9	54	TCL18-2N	25		





517 Lyons Avenue, Irvington, NJ 07111
973.371.1771 | www.Richards-Mfg.com