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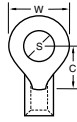
**JAMECO**<sup>®</sup>  
ELECTRONICS

**www.Jameco.com ♦ 1-800-831-4242**

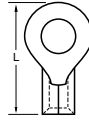
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Jameco Part Number 503433

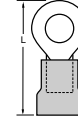
**STANDARD RING TONGUE**



**Material: Copper**



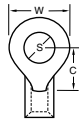
**Krimtite®**



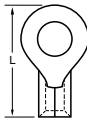
**Insulkrimp®  
(PVC Insulation)**

Wire Range AWG	Stud Size S	Max. Width W	Min. Clearance C	Loose Piece Order No.	Mylar Tape Order No.	Max. Length L	Loose Piece Order No.	Mylar Tape Order No.	Max. Length L
24-26 (0.20-0.12)	0 (1.5)	3.80 (.150)	3.10 (.121)	19069-0369	19069-0407	9.30 (.366)			
	2 (2)	3.80 (.150)	3.10 (.121)	19069-0370	19069-0371	9.30 (.366)			
		5.40 (.213)	5.50 (.215)	19069-0352	19069-0353	12.50 (.492)			
		3.80 (.150)	5.50 (.215)	19069-0358	19069-0405	11.70 (.460)			
	4 (2.6)	5.40 (.213)	5.50 (.215)	19069-0354	19069-0355	12.50 (.492)			
		5.40 (.213)	5.50 (.215)	19069-0356	19069-0357	12.50 (.492)			
	6 (3.5)	6.60 (.260)	7.40 (.290)	19069-0361	19069-0362	15.00 (.590)			
6.60 (.260)		7.40 (.290)	19069-0363	19069-0364	15.00 (.590)				
8 (4)	6.60 (.260)	7.40 (.290)	19069-0365	19069-0406	15.00 (.590)				
	6.60 (.260)	7.40 (.290)	19069-0365	19069-0406	15.00 (.590)				
18-22 (0.80-0.35)	1-2 (2)	6.00 (.235)	3.90 (.157)	19069-0027	19069-0028	12.30 (.484)	19070-0005	19070-0006	18.00 (.709)
	3-4 (2.6)	5.00 (.197)	4.40 (.173)	19069-0025	19069-0026	12.40 (.490)			
		6.00 (.235)	3.90 (.157)	19069-0029	19069-0030	12.30 (.484)	19070-0007	19070-0008	18.00 (.709)
		6.70 (.264)	6.10 (.240)	19069-0052	19069-0053	14.80 (.582)	19070-0038	19070-0039	20.50 (.807)
	5-6 (3-3.5)	6.00 (.235)	3.90 (.157)	19069-0031	19069-0032	12.30 (.484)	19070-0009	19070-0010	18.00 (.709)
		6.70 (.264)	6.10 (.240)	19069-0054	19069-0055	14.80 (.582)	19070-0040	19070-0042	20.50 (.807)
		8.20 (.322)	7.60 (.300)	19069-0033	19069-0034	17.00 (.671)	19070-0011	19070-0012	22.80 (.896)
	8 (4)	6.70 (.264)	6.10 (.240)	19069-0056	19069-0057	14.80 (.582)	19070-0044	19070-0045	20.50 (.807)
		8.20 (.322)	7.60 (.300)	19069-0035	19069-0036	17.00 (.671)	19070-0013	19070-0014	22.80 (.896)
		7.20 (.283)	6.10 (.240)	19069-0061	19069-0062	15.00 (.591)	19070-0051	19070-0052	20.70 (.816)
	10 (-)	8.20 (.322)	7.60 (.300)	19069-0037	19069-0038	17.00 (.671)	19070-0015	19070-0017	22.80 (.896)
		12.10 (.477)	9.80 (.386)				19070-0021	19070-0022	26.90 (1.060)
		12.10 (.477)	9.80 (.386)	19069-0042	19069-0044	21.20 (.835)	19070-0023	19070-0024	26.90 (1.060)
	5/16 (8)	12.10 (.477)	9.80 (.386)	19069-0045	19069-0046	21.20 (.835)	19070-0026	19070-0027	26.90 (1.060)
	3/8 (9)	13.80 (.544)	14.00 (.552)	19069-0049	19069-0050	26.30 (1.034)	19070-0033	19070-0035	31.90 (1.259)
14-16 (2.00-1.30)	1-2 (2)	6.60 (.260)	5.30 (.209)				19070-0065	19070-0066	19.90 (.785)
	3-4 (2.6)	6.00 (.260)	5.30 (.209)	19069-0099	19069-0100	14.20 (.560)	19070-0067	19070-0068	19.90 (.785)
		6.60 (.260)	5.30 (.209)	19069-0101	19069-0102	14.20 (.560)	19070-0069	19070-0070	19.90 (.785)
	5-6 (3-3.5)	8.20 (.322)	7.00 (.275)	19069-0112	19069-0113	16.30 (.640)	19070-0083	19070-0084	22.00 (.865)
		6.60 (.260)	5.30 (.209)	19069-0103	19069-0104	14.20 (.560)	19070-0071	19070-0072	19.90 (.785)
	8 (4)	8.20 (.322)	7.00 (.275)	19069-0114	19069-0115	16.30 (.640)	19070-0086	19070-0087	22.00 (.865)
		8.90 (.352)	7.90 (.310)	19069-0121	19069-0122	17.70 (.696)	19070-0099	19070-0100	23.40 (.921)
		8.20 (.322)	7.00 (.275)	19069-0116	19069-0117	16.30 (.640)	19070-0090	19070-0092	22.00 (.865)
	10 (-)	8.90 (.352)	7.90 (.310)	19069-0123	19069-0124	17.70 (.696)	19070-0102	19070-0104	23.40 (.921)
		12.10 (.477)	9.90 (.388)	19069-0105	19069-0106	21.20 (.837)	19070-0073	19070-0074	26.10 (1.062)
		12.10 (.477)	9.90 (.388)	19069-0107	19069-0108	21.20 (.837)	19070-0075	19070-0076	26.10 (1.062)
	5/16 (8)	12.10 (.477)	9.90 (.388)	19069-0109	19069-0110	21.20 (.837)	19070-0078	19070-0079	26.10 (1.062)
		13.80 (.544)	13.60 (.535)	19069-0096	19069-0097	25.70 (1.010)	19070-0063	19070-0064	31.40 (1.235)
		13.80 (.544)	13.60 (.535)	19069-0093	19069-0094	25.70 (1.010)	19070-0059	19070-0061	31.40 (1.235)
	14-16 (2.00-1.30) Heavy Duty (Also suitable for 12 AWG)	5-6 (3-3.5)	9.80 (.385)	7.70 (.303)				19054-0090	19054-0091
8 (4)		9.80 (.385)	7.70 (.303)				19054-0092	19054-0093	27.30 (1.076)
		9.80 (.385)	7.70 (.303)	19044-0163	19044-0164	19.90 (.785)	19054-0094	19054-0095	27.30 (1.076)
10 (-)		13.70 (.540)	10.00 (.393)				19054-0096	19054-0021	31.60 (1.243)
		13.70 (.540)	10.00 (.393)	19044-0167	19044-0023	24.20 (.952)	19054-0097		31.60 (1.243)
5/16 (8)		13.70 (.540)	10.00 (.393)	19044-0168	19044-0024	24.20 (.952)	19054-0098	19054-0099	31.60 (1.243)
		15.20 (.598)	11.80 (.466)	19044-0186	19044-0187	26.80 (1.056)			
3/8 (9)		15.20 (.598)	11.80 (.466)	19044-0184	19044-0185	26.80 (1.056)	19054-0126	19054-0127	34.20 (1.347)
		19.30 (.760)	15.50 (.611)	19044-0140		32.50 (1.280)	19054-0066	19054-0068	39.90 (1.571)
7/16 (11)		19.30 (.760)	15.50 (.611)	19044-0142		32.50 (1.280)	19054-0070	19054-0071	39.90 (1.571)
1/2 (12)	19.30 (.760)	15.50 (.611)	19044-0137	19044-0138	32.50 (1.280)	19054-0063		39.90 (1.571)	

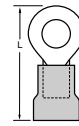
**STANDARD RING TONGUE**



**Material: Copper**

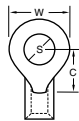


**Krimptite®**



**Insulkrimp®**  
(PVC Insulation)

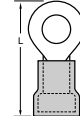
Wire Range AWG (mm <sup>2</sup> )	Stud Size S	Maximum Width W	Minimum Clearance C	Loose Piece Order No.	Mylar Tape Order No.	Maximum Length L	Loose Piece Order No.	Mylar Tape Order No.	Maximum Length L
10-12 (5.00-3.30)	5-6 (3-3.5)	7.40 (.292)	7.80 (.306)	19069-0230	19069-0232	18.80 (.741)	19070-0143	19070-0144	26.20 (1.032)
		9.80 (.385)	7.70 (.303)	19069-0202		19.90 (.785)	19070-0119	19070-0120	27.30 (1.076)
	8 (4)	7.40 (.292)	7.80 (.306)	19069-0233	19069-0235	18.80 (.741)	19070-0145	19070-0146	26.20 (1.032)
		9.80 (.385)	7.70 (.303)	19069-0205	19069-0208	19.90 (.785)	19070-0121	19070-0122	27.30 (1.076)
	10 (-)	9.80 (.385)	7.70 (.303)	19069-0209	19069-0212	19.90 (.785)	19070-0123	19070-0125	27.30 (1.076)
		13.70 (.540)	10.00 (.393)	19069-0217	19069-0218	24.20 (.952)	19070-0130	19070-0131	31.60 (1.243)
		15.20 (.598)	14.40 (.566)	19069-0236		26.80 (1.056)			
	1/4 (6)	13.70 (.540)	10.00 (.393)	19069-0219	19069-0221	24.20 (.952)	19070-0132	19070-0133	31.60 (1.243)
		15.20 (.598)	14.40 (.566)	19069-0238	19069-0240	26.80 (1.056)	19070-0150	19070-0151	34.20 (1.347)
	5/16 (8)	13.70 (.540)	10.00 (.393)	19069-0223	19069-0225	24.20 (.952)	19070-0136	19070-0137	31.60 (1.243)
		15.20 (.598)	14.40 (.566)	19069-0244	19069-0246	26.80 (1.056)	19070-0155	19070-0156	34.20 (1.347)
	3/8 (9)	15.20 (.598)	14.40 (.566)	19069-0241	19069-0243	26.80 (1.056)	19070-0153	19070-0154	34.20 (1.347)
		19.30 (.760)	15.50 (.611)	19069-0196	19069-0145	32.50 (1.280)			39.90 (1.571)
	7/16 (11)	19.30 (.760)	15.50 (.611)	19069-0198	19069-0146	32.50 (1.280)	19070-0115	19070-0116	39.90 (1.571)
	1/2 (12)	19.30 (.760)	15.50 (.611)	19069-0192	19069-0194	32.50 (1.280)	19070-0109	19070-0110	39.90 (1.571)



**Material: Copper**



**Versakrimp™**

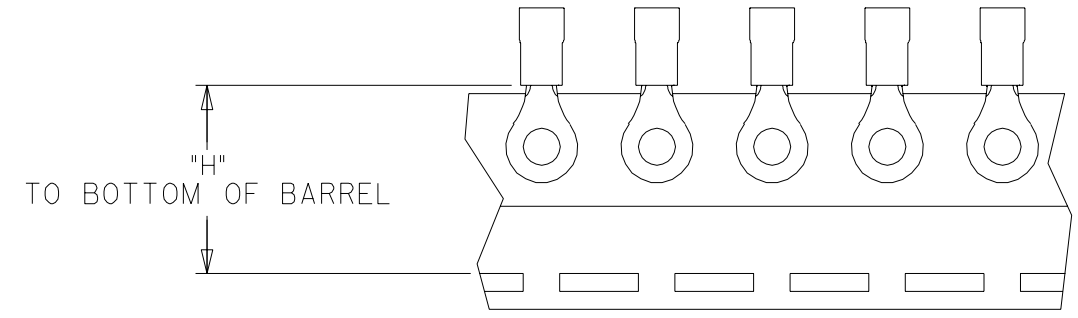
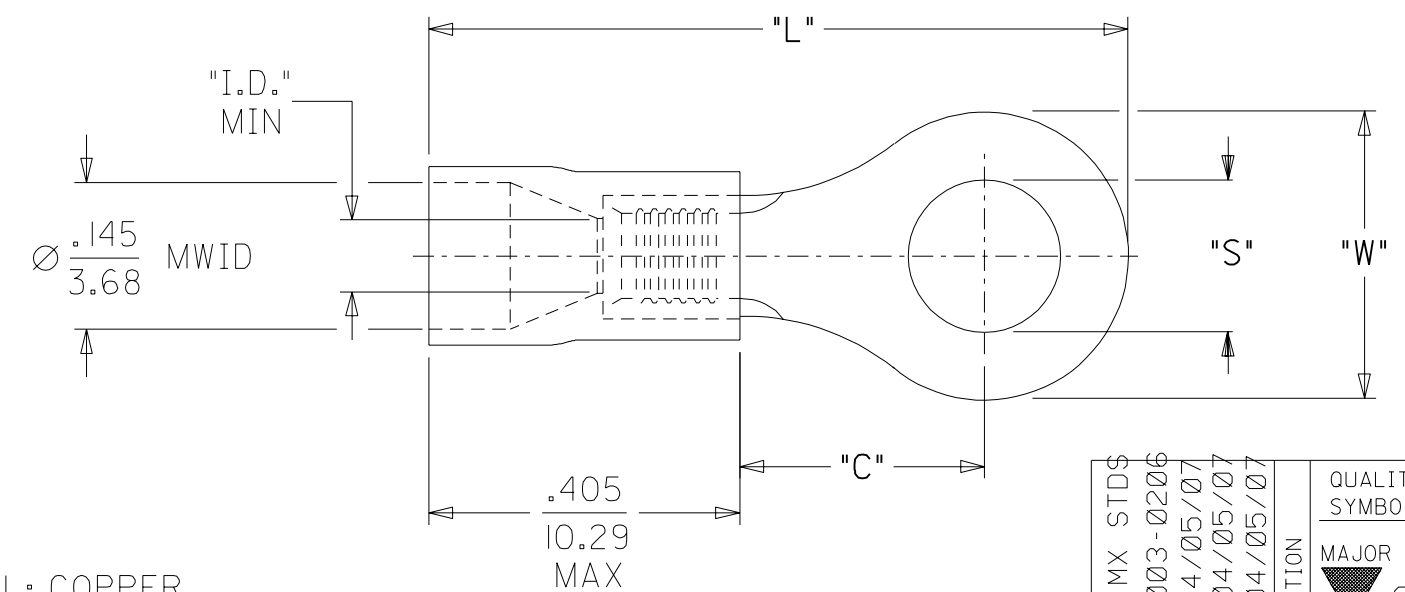


**Avikrimp®**  
(Nylon Insulation)

Wire Range AWG (mm <sup>2</sup> )	Stud Size S	Maximum Width W	Minimum Clearance C	Loose Piece Order No.	Mylar Tape Order No.	Maximum Length L	Loose Piece Order No.	Mylar Tape Order No.	Expanded Flare Order No.*	Expanded Flare on Mylar Tape Order No.*	Maximum Length L
10-12 (5.00-3.30)	5-6 (3-3.5)	7.40 (.292)	7.80 (.306)	19193-0128	19193-0129	18.80 (.741)	19073-0216	19073-0218	19073-0220	19073-0221	27.00 (1.047)
		9.80 (.385)	7.70 (.303)	19193-0103	19193-0105	19.90 (.785)	19073-0160	19073-0162	19073-0163	19073-0164	27.70 (1.091)
	8 (4)	7.40 (.292)	7.80 (.306)	19193-0130	19193-0131	18.80 (.741)	19073-0222	19073-0224	19073-0225	19073-0226	27.00 (1.047)
		9.80 (.385)	7.70 (.303)	19193-0106	19193-0108	19.90 (.785)	19073-0165	19073-0167	19073-0168	19073-0169	27.70 (1.091)
	10 (-)	9.80 (.385)	7.70 (.303)	19193-0109	19193-0111	19.90 (.785)	19073-0170	19073-0172	19073-0173	19073-0174	27.70 (1.091)
		13.70 (.540)	10.00 (.393)	19193-0114	19193-0115	24.20 (.952)	19073-0179	19073-0180	19073-0181	19073-0184	32.00 (1.258)
		15.20 (.598)	14.40 (.566)				19073-0227	19073-0228	19073-0229	19073-0230	34.60 (1.362)
	1/4 (6)	13.70 (.540)	10.00 (.393)	19193-0116	19193-0118	24.20 (.952)	19073-0188	19073-0190	19073-0191	19073-0194	32.00 (1.258)
		15.20 (.598)	14.40 (.566)	19193-0134	19193-0135	26.80 (1.056)	19073-0231	19073-0232	19073-0233	19073-0234	34.60 (1.362)
	5/16 (8)	13.70 (.540)	10.00 (.393)	19193-0120	19193-0122	24.20 (.952)	19073-0200	19073-0201	19073-0202	19073-0205	32.00 (1.258)
		15.20 (.598)	14.40 (.566)	19193-0141	19193-0142	26.80 (1.056)	19073-0242	19073-0243	19073-0244	19073-0245	34.60 (1.362)
	3/8 (9)	15.20 (.598)	14.40 (.566)	19193-0137	19193-0139	26.80 (1.056)	19073-0236	19073-0237	19073-0238	19073-0239	34.60 (1.362)
		19.30 (.760)	15.50 (.611)	19193-0097		32.50 (1.280)					
	7/16 (11)	19.30 (.760)	15.50 (.611)	19193-0099	19193-0100	32.50 (1.280)					
	1/2 (12)	19.30 (.760)	15.50 (.611)	19193-0094	19193-0095	32.50 (1.280)	19073-0145	19073-0146	19073-0147		40.30 (1.586)

\* For use with heavier wire insulation. Maximum wire insulation (.255") 6.50mm.

LOOSE PIECE		Ⓐ TAPE MOUNTED		SPECIFICATIONS							
MATERIAL NUMBER Ⓐ	ALTERNATE NUMBER	MATERIAL NUMBER	ALTERNATE NUMBER	STUD SIZE	"S" ±.005/(0.13)	Ⓐ "W" MAX.	"C" MIN.	"L" MAX.	"ID" MIN.	STOCK THICKNESS	"H" ±.020/.051
F 190700005	AA-220-02X	190700006	AA-220-02XT	2	.094/(2.39)	.235/(6.00)	.157/(3.99)	.709/(18.01)	.062/(1.57)	.028/(0.71)	.980/(24.89)
190700007	AA-220-04X	190700008	AA-220-04XT	4	.119/(3.02)						
190700009	AA-220-06X	190700010	AA-220-06XT	6	.146/(3.71)						
190700011	AA-221-06X	190700012	AA-221-06XT	6	.146/(3.71)	.322/(8.18)	.270/(6.86)	.866/(22.00)	.062/(1.57)	.028/(0.71)	
190700013	AA-221-08X	190700014	AA-221-08XT	8	.173/(4.39)						
190700015	AA-221-10X	190700017	AA-221-10XT	10	.198/(5.03)						
190700019	AA-221-209X	190700020	AA-221-209XT	209	.209/(5.18)	.477/(12.11)	.386/(9.80)	1.060/(26.92)	.062/(1.57)	.028/(0.71)	
E 190700021	AA-222-10X	190700022	AA-222-10T	10	.198/(5.03)						
190700023	AA-222-14X	190700024	AA-222-14XT	14	.256/(6.50)						
190700026	AA-222-56X	190700027	AA-222-56XT	56	.328/(8.33)	.544/(13.82)	.552/(14.02)	1.259/(31.98)	Ⓐ .055/(1.40)	.031/(0.79)	1.172/(29.77)
190700029	AA-226-10X	190700030	AA-226-10XT	10	.198/(5.03)						
190700031	AA-226-14X	190700032	AA-226-14XT	14	.256/(6.50)						
190700036	AA-226-56X	190700037	AA-226-56XT	56	.328/(8.33)	Ⓐ .264/(6.70)	.240/(6.10)	.807/(20.50)	.062/(1.57)	.028/(0.71)	
190700033	AA-226-38X	190700035	AA-226-38XT	38	.390/(9.91)						
D 190700038	AA-232-04X	190700039	AA-232-04XT	4	.119/(3.02)						
190700040	AA-232-06X	190700042	AA-232-06XT	6	.146/(3.71)	.283/(7.20)	.240/(6.10)	.816/(20.73)	.062/(1.57)	.028/(0.71)	.980/(24.89)
190700044	AA-232-08X	190700045	AA-232-08XT	8	.146/(3.71)						
190700051	AA-233-10X	190700052	AA-233-10XT	10	.198/(5.03)						
Ⓐ 190700001	AA-2111-02X	190700002	AA-2111-02XT	2	.094/(2.39)	.197/(5.00)	.173/(4.40)	.715/(18.16)	.055/(1.40)	.031/(0.79)	
Ⓐ 190700003	AA-2111-04X	190700004	AA-2111-04XT	4	.119/(3.02)						



### SALES DRAWING

NOTE(S):  
 1. MATERIAL: COPPER  
 PLATING: ELECTROPLATE TIN  
 2. FERRULE: TIN-PLATED BRASS  
 3. INSULATION: RED MOLDED PVC  
 4. MWID=MAXIMUM WIRE INSULATION DIA.  
 5. ALL DIMENSIONS IN INCHES (MM).

UPDATE TO MX STDS EC NO. ETC2003-0206 DRWN: DLM 04/05/07 CHK: HB 04/05/07 APPR: RWD 04/05/07	QUALITY SYMBOLS MAJOR $\blacktriangle = \emptyset$ CRITICAL $\triangle = \emptyset$	GENERAL TOLERANCES: (UNLESS SPECIFIED)	SCALE NTS DESIGN UNITS <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH	THIRD ANGLE PROJECTION <input type="checkbox"/> mm <input checked="" type="checkbox"/> INCH <input type="checkbox"/> mm ONLY	SHT REV	
	DESCRIPTION A	mm    INCH 4 PLACES ±0.----- ±.----- 3 PLACES ±0.--- ±.005 2 PLACES ±0.13 ±.010 1 PLACE ±0.25 ±.---	DRAWN BY & DATE DLM 03/02/28	TITLE: RING TONGUE TERMINAL INSULKRIMP, 200-SERIES 22-18 AWG	MOLEX INCORPORATED	REVISE ON CAD ONLY
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	ANGULAR: ±1/2°	CHECKED BY & DATE SB 03/02/28	APPROVED BY & DATE RWD 03/02/28	CAD FILENAME SD19070003.DGN	MATERIAL NO. (SEE CHART) DRAWING NO. SD-19070-003 SHEET NO. 1 OF 1
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.					SIZE B

NOTES: ±.001

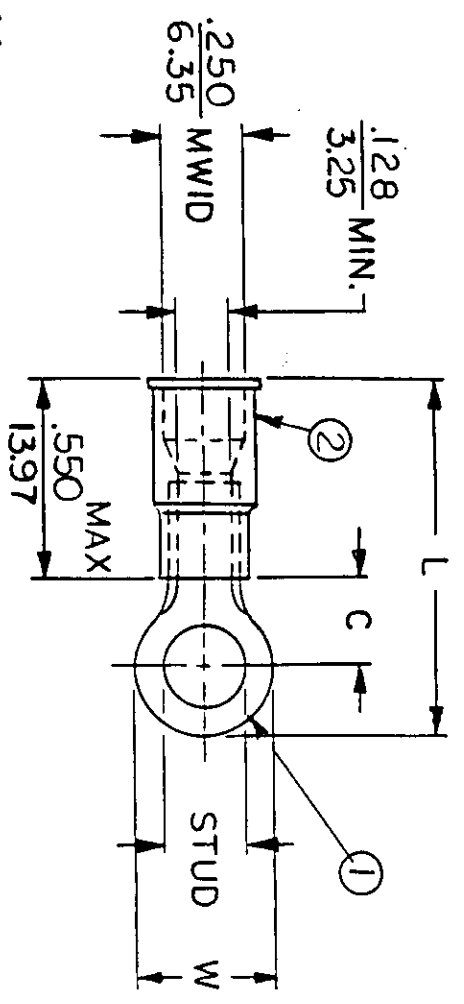
- ① MAT'L: COPPER(STOCK TKN.  $\frac{040}{1.02}$ )
- PLATING: ELECTRO-TIN (.0003 MIN.)
- ② INSULATION: MOLDED PVC (YELLOW)

STUD SIZES: ( $\pm .005$ )

02 = .094	209 = 209
04 = .119	413 = 413
06 = .146	
08 = .173	
10 = .198	
14 = .265	
56 = .328	
38 = .390	
76 = .453	
12 = .515	

"UL" LISTING # E32244  
 "CSA" LISTING # 18689

ALL DIMENSIONS =  $\frac{\text{INCHES}}{\text{MM}}$



MWID = MAXIMUM WIRE  
 INSULATION DIAMETER  
 WIRE SIZE: 12-10 AWG  
 40-60 MM<sup>2</sup>

FILE NO. C-CD-201-01

PART NUMBER	"W" ±.010	"C" MIN.	"L" MAX.	AVAILABLE STUD SIZES
C-201-	$\frac{.750}{19.05}$	$\frac{.611}{15.52}$	$\frac{1.571}{39.90}$	14X, 56X, 38X, 76X, 12X
C-228-	$\frac{.375}{9.53}$	$\frac{.303}{7.70}$	$\frac{1.076}{27.33}$	04X, 06X, 08X, 10X, 209X
C-230-	$\frac{.530}{13.46}$	$\frac{.393}{9.98}$	$\frac{1.243}{31.57}$	10X, 14X, 56X, 38X
C-236-	$\frac{.282}{7.16}$	$\frac{.306}{7.77}$	$\frac{1.032}{26.21}$	04X, 06X, 08X
C-240-	$\frac{.592}{15.04}$	$\frac{.466}{11.84}$	$\frac{1.347}{34.21}$	10X, 14X, 56X, 38X, 209X, 413X

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		REFERENCE	SCALE:	NTS	DATE	TITLE:
FRAC.	DEC.	ANG.	DRWN. BY:	JJ	10-31-84	RING TONGUE TERMINAL
±	±	±	CHKD. BY:	GZ	11-26-84	INSULKRIMP 200-SERIES
			APPRD. BY:			



DWG. NO. A CUSTOMER DWG.