



# PRODUCT CATALOG

**VOLUME 24**

**Made in Michigan**

## *About Hillsdale Terminal*

HILLSDALE TERMINAL is proud of our 48 years of continuous service to the industry. The now 3rd generation company was started back in 1976 by the founder Harry F. Condon. We are confident that you will find our quality, service and delivery to be the very best.

There are two locations in Michigan. We moved our sales, administrative offices and warehouse into our new 88,000 sq. ft. building at the end of 2022 and completed it by moving the manufacturing facility into the new building in 2023. Just around the corner is our 12,500 sq. ft. molding facility. This building houses all the injection molding and extruder processing. It also offers storage for material and stock.

Please contact a Hillsdale Terminal representative to discuss your needs or for additional information about our products and services.

Featured on Manufacturing Marvels, check us out on youtube.



## Terminal Terminology

ElectroTin Plating for Exceptional Corrosion Resistance  
 Mill Specs: MIL-T-10727C Type I  
 ASTM B 545 B. .0001-.00025 Thick

Terminals and connectors are clearly marked with size

Insulator sleeve is color coded for wire size and identification.

Our rings, spades and butt terminals are constructed from pure copper (Alloy 110), annealed & electro tin plated.

Terminals have "V" groove serrations to provide maximum contact and tensile strength after crimping.

PVC and Nylon injection molded with funnel entry for fast, easy wire insertion.

Insulators made from P.V.C., nylon or heat shrink

## Recognizing Terminal Types

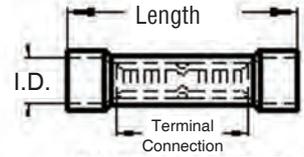
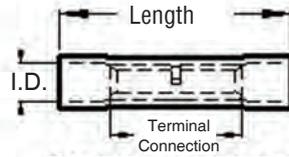
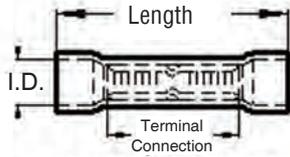
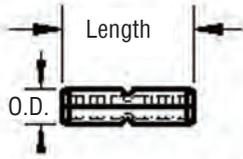
<b>10000 SERIES</b> BARE BUTTED SEAM	<b>10000BZ SERIES</b> BARE BRAZED SEAM	<b>20000 SERIES</b> EXTRUDED VINYL W/ FLARED ENTRY	<b>50000 SERIES</b> INJECTION MOLDED VINYL W/FUNNEL ENTRY	<b>50000N SERIES</b> INJECTION MOLDED NYLON W/FUNNEL ENTRY	<b>30000 SERIES</b> 3-PC NYLON W/ SUPPORT SLEEVE SEAM	<b>40000 SERIES</b> HEAT SHRINK MOISTURE PROOF	<b>60000 SERIES</b> HEAT SHRINK W/ SOLDER RING NO CRIMP	<b>70000 SERIES</b> HEAT SHRINK NYAX	<b>80000 SERIES</b> HEAT SHRINK CRIMP AND SOLDER
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# Butt Connectors



L = Length  
 M = Material Thickness

Vinyl Insulated Butted Seam Butt Connector Shown

Extruded Nylon Insulated Seamless or Butted Seam Butt Connector

Molded Nylon Insulated Seamless or Butted Seam Butt Connector

## Bare Butted Seam

Wire Size	Part No.	L	O.D.	M
22-18	10080* 10080E	.560 .560	.133/.135 .112/.115	.028 .020

16-14	10170* 10170E	.560 .560	.152/.156 .134/.135	.030 .020
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12-10	10310* 10310E	.625 .625	.212/.215 .208/.210	.035 .030
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## Bare Seamless

26-24	12403	.475	.084	.018
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22-18	10083 10083L	.565 .625	.133/.135 .133/.135	.030 .030
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16-14	10173 10173L 10173XL	.565 .630 .665	.152/.156 .152/.156 .152/.156	.030 .030 .030
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12-10	10313 10313L	.625 .810	.212/.215 .212/.215	.035 .035
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8	10624	.827	.273/.275	.049
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6	10625	1.030	.350/.352	.058
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4	10626	1.140	.438/.440	.070
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2	10627	1.250	.512/.514	.072
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22-18	11082CC	U/I Seamless Window Butt		
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16-14	11172CC	U/I Seamless Window Butt		
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12-10	11312CC	U/I Seamless Window Butt		
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## Vinyl Insulated

Wire Size	Part No.	L	Terminal	I.D.
22-18	20080* 20080E	.970 .970	10080 10080E	.160 .160

16-14	20170* 20170E	.970 .970	10170 10170E	.180 .180
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12-10	20310* 20310E	1.060 1.060	10310 10310E	.235 .235
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## Vinyl - Seamless

22-18	20080SV	.970	10083	.160
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16-14	20170SV	.970	10173	.185
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12-10	20310SV	1.060	10313	.235
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8	20624	1.460	10624	.320
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6	20625	1.740	10625	.395
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4	20626	1.930	10626	.500
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2	20627	2.250	10627	.560
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## Nylon Straight Butted Seam

Wire Size	Part No.	L	Terminal	I.D.
22-18	20081 20081E	.990 .990	10080 10080E	.135 .135
16-14	20171 20171E	.990 .990	10170 10170E	.155 .155
12-10	20311 20311E	1.070 1.070	10310 10310E	.205 .205

## Nylon Flared Butted Seam

22-18	50081 50081E	.985 .985	10080 10080E	.165 .165
16-14	50171 50171E	.985 .985	10170 10170E	.195 .195
12-10	50311 50311E	1.070 1.070	10310 10310E	.270 .270

## Nylon Flared Seamless

22-18	20083	.985	10083	.165
16-14	20173	.985	10173	.195
12-10	20313	1.070	10313	.270

## Nylon Straight Seamless

26-24	22403#	.757	12403	.080
22-18	20083S 20083LN	.990 1.06	10083 10083L	.135 .135
16-14	20173S 20173LN 20173XLN	.990 1.06 1.06	10173 10173L 10173XL	.155 .155 .155
12-10	20313S 20313LN	1.070 1.25	10313 10313L	.205 .205

8	20624N	1.500	10624	.260
6	20625N	1.780	10625	.340
4	20626N	1.980	10626	.430

## 4 Pc Nylon w/ Sleeve

22-18	30080	1.00	10080	.135
16-14	30170	1.00	10170	.155
12-10	30310	1.20	10310	.205
3 PC TOOL			20717	

## Cool Seal Nylon Butts

22-18	29083	1.00		
16-14	29173	1.00		
12-10	29313	1.20		

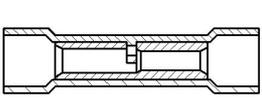
**Seals Out Moisture Causing Corrosion. A Heat-Less/Solderless Connection.**

## Step Down Butts

### Bare Seamless Step Down Butts

Wire Size	Part No.	Insulation Color & Stripe
26-24 to 22-18	10315	w/26-24 white & 22-18 red stripe
16-14 to 22-18	10316	w/22-18 red & 16-14 blue stripe
12-10 to 16-14	10317	w/16-14 blue & 12-10 yellow stripe
8 to 12-10	10318CC	w/12-10 yellow & red 8 ga stripe
6 to 8	10319	w/ 6 ga blue & 8 ga red stripe
12-10 to 22-18	10320	w/ 12-10 yellow & 22-18 red stripe
8 to 16-14	10321	w/ 8 ga red & 16-14 blue stripe
26-24 to 22-18	11315CC	U/I S/D Window 
16-14 to 22-18	11316CC	U/I S/D Window Butt 
12-10 to 16-14	11317CC	U/I S/D Window 

### Nylon/Vinyl Step Down



22-18 to 26-24	20315	red w/22-18 & 26-24 white stripe
16-14 to 22-18	20316 20316N	blue w/22-18 red & 16-14 blue stripe
12-10 to 16-14	20317 20317N	yellow w/16-14 blue & 12-10 yellow stripe
8 to 12-10	20318 20318N	red w/12-10 yellow & red 8 ga stripe
6 to 8	20319#	blue w/ red stripe
12-10 to 22-18	20320	yellow w/ red 12-10 / 22-18 ga
8 to 16-14	20321#	red w/ blue 8 ga / 16-14 ga

### Heat Shrink Step Down

22-18 to 26-24	40315	white w/ 26-24 & 22-18 red stripe
16-14 to 22-18	40316	blue w/22-18 red & 16-14 blue stripe
12-10 to 16-14	40317	yellow w/16-14 blue & 12-10 yellow stripe
8 to 12-10	40318	red w/ 12-10 yellow & red 8 ga stripe

### Heat Shrink Step Down - NYAX

16-14 to 22-18	70316	blue w/22-18 red & 16-14 blue stripe
12-10 to 16-14	70317	yellow w/16-14 blue & 12-10 yellow stripe
8 to 12-10	70318	red w/12-10 yellow & 8 red stripe

### Vinyl - Oval Butt

Wire Size	Part No.	L	Terminal	I.D.
16-14	20174	.960	10170	.180



### Nylon - Moisture Resistant

22-18	30080G	1.04	-	.145
16-14	30170G	1.04	-	.170
12-10	30310G	1.25	-	.250



### Heat Shrink Over Nylon

22-18	42083	1.800	20083S	.180
16-14	42173	1.800	20173S	.250
12-10	42313	2.000	20313S	.325



### Heat Shrink - Polyolefin 2.5 Ratio

26-22	40024	1.00	12403	.125
22-18	20082# 20082L	1.500 1.500	10083 10083L	.165 .165
16-14	20172# 20172L	1.500 1.500	10173 10173L	.196 .196
12-10	20312#	1.700	10313L	.250
8	40624	1.800	10624	.312
6	40625		* Sold Unassembled (Part# 10625 & 284)	



### Heat Shrink - NYAX

22-18	40082 40082L	1.250 1.500	10083 10083L	.200 .200
16-14	40172 40172L	1.250 1.500	10173 10173L	.250 .250
12-10	40312 40312L	1.500 1.750	10313 10313L	.280 .280



**MORE SIZES ADDED**

## Bare Butted Seam

Wire Size	Stud Size	Part No.
	4	10014
	6	10020*
	6 .187 Barrel	10020E
	6 Slim	10021
	6 Slim .187 Barrel	10021E
	8	10030*
	8 Slim	10038
<b>22-18</b>	8 Slim .187 Barrel	10038E
	10	10040*
	10 .187 Barrel	10040E
	1/4	10041*
	1/4 Slim	10044+
	1/4 Slim .187 Barrel	10044E
	5/16	10042*
	5/16 .187 Barrel	10042E
	3/8	10043+
	1/2	10204
.....		
	4	10084
	6	10086*
	6 .187 Barrel	10086E
	6 Slim	10085
	8	10090*
	8 Slim	10098
	8 Slim .187 Barrel	10098E
<b>16-14</b>	10	10100*
	10 .187 Barrel	10100E
	1/4	10101*
	1/4 Slim	10114+
	1/4 Slim .187 Barrel	10114E
	5/16	10102*
	5/16 .187 Barrel	10102E
	5/16 Wide .558	10106
	3/8	10103*
	1/2	10104+
.....		
	4	10205
	6	10210*
	6 Slim	10215
<b>12-10</b>	8	10220*
	8 Slim	10225
	10	10230*
	1/4	10240*
	1/4 Slim	10245*
	5/16	10250*
	3/8	10260*
	1/2	10233*
	*1/2 Wide	10235#



## Long Neck Bare Brazed

<b>22-18</b>	8	10030LBZ#
	10	10040LBZ#
.....		
<b>16-14</b>	8	10090LBZ#
	10	10100LBZ#
.....		
<b>12-10</b>	10	10230LBZ#



## Bare Brazed Seam

<b>24-20</b>	4	12404#
	6	12406#
	8	12408#
	10	12410#



## Bare Brazed Seam (cont.)

<b>22-18</b>	4	10014BZ
	6	10020BZ*
	6 Slim	10021BZ
	8	10030BZ*
	8 Slim	10038BZ
	10	10040BZ*
	10 .187 Barrel	10040EBZ
	1/4	10041BZ*
	1/4 Slim	10044BZ+
	1/4 Slim .187 Barrel	10044EBZ
	5/16	10042BZ*
	3/8	10043BZ+
	1/2	10204BZ
.....		
	4	10084BZ
	6	10086BZ*
	6 .187 Barrel	10086EBZ
	6 Slim	10085BZ
	8	10090BZ*
	8 Slim	10098BZ
	8 Slim .187 Barrel	10098EBZ
<b>16-14</b>	10	10100BZ*
	10 .187 Barrel	10100EBZ
	1/4	10101BZ*
	1/4 Slim	10114BZ+
	1/4 Slim .187 Barrel	10114EBZ
	5/16	10102BZ*
	3/8	10103BZ*
	1/2	10104BZ+
.....		
	6	10210BZ*
	6 Slim	10215BZ
	8	10220BZ*
	8 Slim	10225BZ
<b>12-10</b>	10	10230BZ*
	1/4	10240BZ*
	1/4 Slim	10245BZ*
	5/16	10250BZ*
	3/8	10260BZ*
	1/2	10233BZ*
.....		
	8	10608#
	10 Slim	10609#
	10	10610#
<b>8</b>	1/4	10611#
	5/16	10612#
	3/8	10613#
	1/2	10614#
	1/2 Long	10614L
	7/16	1060-716
.....		
	10	10615#
	10 Slim	10615E#
	1/4	10616#
	1/4 Slim	10616E#
<b>6</b>	5/16	10617#
	5/16 Slim .345	10617E
	3/8	10618#
	1/2	10619
	7/16	1061-716
.....		
	10 Slim	10898
	1/4	10620#
	1/4 Slim	10899
<b>4</b>	5/16	10621#
	3/8	10622#
	1/2	10623#
	7/16	1062-716
.....		
	10	10635
	1/4	10628
<b>2</b>	5/16	10629
	3/8	10630
	1/2	10631
.....		
<b>#</b>	1/4 Ring	10634#
	3/8 Ring	10632#
<b>1/0</b>	1/2 Ring	10633#
.....		
<b>2/0</b>	3/8 Ring	10636
.....		
<b>3/0</b>	3/8 Ring	10646



## Vinyl Insulated

Wire Size	Stud Size	Part No.
24-20	4	22404#
	6	22406#
	8	22408#
	10	22410#
22-18	4	50014
	6	50020*
	6 .187 Barrel	50020E
	6 Slim	50021
	6 Slim .187 Barrel	50021E
	8	50030*
	8 Slim	50038
	8 Slim .187 Barrel	50038E
	10	50040*
	10 .187 Barrel	50040E
	1/4	50041*
	1/4 Slim	50044*
	1/4 Slim .187 Barrel	50044E
	5/16	50042*
	5/16 .187 Barrel	50042E
3/8	50043*	
1/2	50204	
16-14	4	50084
	6 Slim	50085
	6	50086*
	6 .187 Barrel	50086E
	8	50090*
	8 Slim	50098
	8 Slim .187 Barrel	50098E
	10	50100*
	10 .187 Barrel	50100E
	1/4	50101*
	1/4 Slim	50114*
	1/4 Slim .187 Barrel	50114E
5/16	50102*	
5/16 .187 Barrel	50102E	
5/16 Wide .558	50106	
3/8	50103*	
1/2	50104*	
12-10	4	50205
	6	50210*
	6 Slim	50215
	8	50220*
	8 Slim	50225
	10	50230*
	1/4	50240*
	1/4 Slim	50245*
	5/16	50250*
	3/8	50260*
1/2	50233*	
1/2 Wide	50235	
8	8	50608
	10 Slim	50609
	10	50610
	1/4	50611
	5/16	50612
	3/8	50613
	1/2	50614
	1/2 Long	50614L
	5/8	2060-58
7/16	5060-716	
6	10	50615
	10 Slim	50615E
	1/4	50616
	1/4 Slim	50616E
	5/16	50617
	5/16 Slim .345	50617E
	3/8	50618
	1/2	50619
7/16	5061-716	
4	1/4	20620
	1/2	20623

## Nylon Insulated

Wire Size	Stud Size	Part No.
24-20	4	22404N
	6	22406N
	8	22408N
	10	22410N
22-18	4	50014N
	6	50020N*
	6 .187 Barrel	50020EN
	6 Slim	50021N
	6 Slim .187 Barrel	50021EN
	8	50030N*
	8 Slim	50038N
	8 Slim .187 Barrel	50038EN
	10	50040N*
	10 .187 Barrel	50040EN
	1/4	50041N*
	1/4 Slim	50044N*
	1/4 Slim .187 Barrel	50044EN
	5/16	50042N*
	5/16 .187 Barrel	50042EN
3/8	50043N*	
1/2	50204N	
16-14	4	50084N
	6 Slim	50085N
	6	50086N*
	6 .187 Barrel	50086EN
	8	50090N*
	8 Slim	50098N
	8 Slim .187 Barrel	50098EN
	10	50100N*
	10 .187 Barrel	50100EN
	1/4	50101N*
	1/4 Slim	50114N*
	1/4 Slim .187 Barrel	50114EN
5/16	50102N*	
5/16 .187 Barrel	50102EN	
5/16 Wide .558	50106N	
3/8	50103N*	
1/2	50104N	
12-10	4	50205N
	6	50210N*
	6 Slim	50215N
	8	50220N*
	8 Slim	50225N
	10	50230N*
	1/4	50240N*
	1/4 Slim	50245N*
	5/16	50250N*
	3/8	50260N*
1/2	50233N*	
8	8	50608N
	10 Slim	50609N
	10	50610N
	1/4	50611N
	5/16	50612N
	3/8	50613N
	1/2	50614N
	1/2 Long	50614LN
7/16	5060-716N	
6	10	50615N
	10 Slim	50615EN
	1/4	50616N
	1/4 Slim	50616EN
	5/16	50617N
	5/16 Slim .345	50617EN
	3/8	50618N
	1/2	50619N
	7/16	5061-716N
4	10 Slim	50898N
	1/4	50620N
	1/4 Slim	50899N
	5/16	50621N
	3/8	50622N
	1/2	50623N
7/16	5062-716N	
2	1/4	50628N
	5/16	50629N
	3/8	50630N
2/0	1/2	50631N
	3/8	50636N

# Ring Tongue

## 3-Pc Nylon w/ Sleeve

Wire Size	Stud Size	Part No.
24-20	4	32404
	6	32406
	8	32408
	10	32410
22-18	4	30014
	6	30020
	6 Slim	30021
	8	30030
	8 Slim	30038
	10	30040
	1/4	30041
	1/4 Slim	30044
	5/16	30042
	3/8	30043
1/2	30204	
16-14	4	30084
	6	30086
	6 Slim	30085
	8	30090
	8 Slim	30098
	10	30100
	1/4	30101
	1/4 Slim	30114
	5/16	30102
	3/8	30103
1/2	30104	
12-10	4	30205
	6	30210
	6 Slim	30215
	8	30220
	8 Slim	30225
	10	30230
	1/4	30240
	1/4 Slim	30245
	5/16	30250
	3/8	30260
1/2	30233	
3 PC TOOL		20717



## Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	4	40014	70014
	6	40020	70020
	6 Slim	40021	70021
	8	40030	70030
	8 Long Neck	40030L	70030L
	8 Slim	40038	70038
	10	40040	70040
	10 Long Neck	40040L	70040L
	1/4	40041	70041
	1/4 Slim	40044	70044
16-14	5/16	40042	70042
	3/8	40043	70043
	1/2	40204	70204
	4	40084	70084
	6	40086	70086
	6 Slim	40085	70085
	8	40090	70090
	8 Long Neck	40090L	70090L
	8 Slim	40098	70098
	10	40100	70100
12-10	10 Long Neck	40100L	70100L
	1/4	40101	70101
	1/4 Slim	40114	70114
	5/16	40102	70102
	3/8	40103	70103
	1/2	40104	70104
	4	40205	70205
	6	40210	70210
	6 Slim	40215	70215
	8	40220	70220
8	8 Slim	40225	70225
	10	40230	70230
	10 Long Neck	40230L	70230L
	10 Wide	40236	70236
	1/4	40240	70240
	1/4 Slim	40245	70245
	5/16	40250	70250
	3/8	40260	70260
	1/2	40233	70233
	8	40608	70608
10 Slim	40609	70609	
10	40610	70610	
1/4	40611	70611	
5/16	40612	70612	
3/8	40613	70613	
1/2	40614	70614	
1/2 Long Neck	40614L	70614L	



# Closed End Connectors

## Copper Insert

Wire Size	Part No.
22-18	20569#
16-14 Flat top	20570# 20575#
12-10	20571#
8	20572#



## Aluminum Insert

Wire Size	Part No.
22-18	20569A#
16-14	20570A#
12-10	20571A#
8	20572A#



See Page 41 for corresponding Tool (20709)

Item #	Description	Dimensions			
10571B#	22-18 Brass Crimp Cap	L=.374	D=.295	C=.205	W=.24
10571C#	22-18 Copper Crimp Cap	L=.374	D=.295	C=.205	W=.24
10572B#	14-08 Brass Crimp Cap	L=.61	D=.366	C=.264	W=.307
10572C#	14-08 Copper Crimp Cap	L=.61	D=.366	C=.264	W=.307



## Multi Stud Ring Tongue

### Bare Butted Seam

Wire Size	Stud Size	Part No.
22-18	6-8-10	10040M*

16-14	6-8-10	10100M*
-------	--------	---------

12-10	6-8-10	10230M*
-------	--------	---------



### Bare Brazed Seam

22-18	6-8-10	10040MBZ*
-------	--------	-----------

16-14	6-8-10	10100MBZ*
-------	--------	-----------

12-10	6-8-10	10230MBZ*
-------	--------	-----------



### Vinyl Insulated

22-18	6-8-10	50040M*
-------	--------	---------

16-14	6-8-10	50100M*
-------	--------	---------

12-10	6-8-10	50230M*
-------	--------	---------



### Nylon Insulated

22-18	6-8-10	50040MN*
-------	--------	----------

16-14	6-8-10	50100MN*
-------	--------	----------

12-10	6-8-10	50230MN*
-------	--------	----------



### 3-Pc Nylon w/ Sleeve

22-18	6-8-10	30040M
-------	--------	--------

16-14	6-8-10	30100M
-------	--------	--------

12-10	6-8-10	30230M
-------	--------	--------



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### Heat Shrink

Wire Size	Stud Size	Polyolefin	NYAX
22-18	6-8-10	40040M	70040M

16-14	6-8-10	40100M	70100M
-------	--------	--------	--------

12-10	6-8-10	40230M	70230M
-------	--------	--------	--------



## Star Rings

Blades can pierce surfaces to ensure a good connection

### Bare Butted

Wire Size	Stud Size	Part No.
22-18	8	10302

### Vinyl Insulated

22-18	6	50301#
	8	50302#

16-14	8	50305#
	10	50306#

12-10	10	50308#
-------	----	--------



### WIRE SIZE CROSS REFERENCE

Metric mm <sup>2</sup>	AWG
0.5	26-22
1.25	22-16
2.0	16-14
5.5	12-10
8.0	8
14.0	6
22.0	4
35.0	2
60.0	1/0
70.0	2/0
80.0	3/0
100.0	4/0

## Bare Butted Seam

Wire Size	Stud Size	Part No.
22-18	4	10054
	6	10050*
	6 Short	10055
	8	10060*
	10	10070*
	1/4	10075
16-14	6	10140*
	6 Wide	10147
	8	10150*
	10	10160*
	1/4	10165*
12-10	6	10270*
	8	10280*
	10	10290*
	1/4	10234*



## Vinyl Insulated

Wire Size	Stud Size	Part No.
24-20	4	22414#
	6	22416#
	8	22418#
	10	22420#
22-18	4	50054
	6	50050*
	6 Short	50055
	8	50060*
	10	50070*
	1/4	50075
16-14	6	50140*
	6 Wide	50147
	8	50150*
	10	50160*
	1/4	50165*



## Bare Brazed Seam

24-20	4	12414#
	6	12416#
	8	12418#
	10	12420#
22-18	4	10054BZ
	6	10050BZ*
	6 Short	10055BZ
	8	10060BZ*
	10	10070BZ*
	1/4	10075BZ
16-14	6	10140BZ*
	8	10150BZ*
	10	10160BZ*
	1/4	10165BZ*
	12-10	6
8		10280BZ*
10		10290BZ*
1/4		10234BZ*
8	10	10607
	1/4	10606
6	1/4	10726



## Nylon Insulated

24-20	4	22414N
	6	22416N
	8	22418N
	10	22420N
22-18	4	50054N
	6	50050N*
	6 Short	50055N
	8	50060N*
	10	50070N*
	1/4	50075N
16-14	6	50140N*
	6 Wide	50147N
	8	50150N*
	10	50160N*
	1/4	50165N*
12-10	6	50270N*
	8	50280N*
	10	50290N*
	1/4	50234N*
8	10	50607N
	1/4	50606N
6	1/4	20726N#



## Stud Size Guide



### 3-Pc Nylon w/ Sleeve

Wire Size	Stud Size	Part No.
24-20	4	32414
	6	32416
	8	32418
	10	32420
22-18	4	30054
	6	30050
	6 Short	30055
	8	30060
	10	30070
	1/4	30075
16-14	6	30140
	6 Wide	30147
	8	30150
	10	30160
	1/4	30165
12-10	6	30270
	8	30280
	10	30290
	1/4	30234



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### Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	4	40054	70054
	6	40050	70050
	6 Short	40055	70055
	8	40060	70060
	10	40070	70070
	1/4	40075	70075
16-14	6	40140	70140
	8	40150	70150
	10	40160	70160
	1/4	40165	70165
12-10	6	40270	70270
	8	40280	70280
	10	40290	70290
	1/4	40234	70234



## Flanged Spades

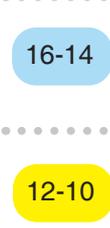
### Bare Butted Seam

22-18	6	10053
	8	10063
	10	10073
16-14	6	10143
	8	10153
	10	10163
12-10	6	10273
	8	10283
	10	10293



### Nylon Insulated

22-18	6	50053N
	8	50063N
	10	50073N
16-14	6	50143N
	8	50153N
	10	50163N
12-10	6	50273N
	8	50283N
	10	50293N



### 3 Piece Nylon

22-18	6	30053
	8	30063
	10	30073
16-14	6	30143
	8	30153
	10	30163
12-10	6	30273
	8	30283
	10	30293



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### Vinyl Insulated

22-18	6	50053
	8	50063
	10	50073
16-14	6	50143
	8	50153
	10	50163
12-10	6	50273
	8	50283
	10	50293



### Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	6	40053	70053
	8	40063	70063
	10	40073	70073
16-14	6	40143	70143
	8	40153	70153
	10	40163	70163
12-10	6	40273	70273
	8	40283	70283
	10	40293	70293



## Bare Butted Seam

Wire Size	Stud Size	Part No.
22-18	6	10052*
	6 Wide	10056
	8	10062*
	8 Slim	10068
	10	10072*



16-14	4	10144
	6	10142*
	6 Wide	10146
	8	10152*
	8 Slim	10158
	10	10162*



12-10	6	10272*
	8	10282*
	10	10292*



## Bare Brazed Seam

22-18	6	10052BZ*
	6 Wide	10056BZ
	8	10062BZ*
	8 Slim	10068BZ
	10	10072BZ*



16-14	4	10144BZ
	6	10142BZ*
	6 Wide	10146BZ
	8	10152BZ*
	8 Slim	10158BZ
	10	10162BZ*



12-10	6	10272BZ*
	8	10282BZ*
	10	10292BZ*



## Vinyl Insulated

22-18	6	50052*
	6 Wide	50056
	8	50062*
	8 Slim	50068
	10	50072*



16-14	4	50144
	6	50142*
	6 Wide	50146
	8	50152*
	8 Slim	50158
	10	50162*



12-10	6	50272*
	8	50282*
	10	50292*



## Nylon Insulated

22-18	6	50052N*
	6 Wide	50056N
	8	50062N*
	8 Slim	50068N
	10	50072N*



16-14	4	50144N
	6	50142N*
	6 Wide	50146N
	8	50152N*
	8 Slim	50158N
	10	50162N*



12-10	6	50272N*
	8	50282N*
	10	50292N*



## 3-Pc Nylon w/ Sleeve

22-18	6	30052
	6 Wide	30056
	8	30062
	8 Slim	30068
	10	30072



16-14	4	30144
	6	30142
	6 Wide	30146
	8	30152
	8 Slim	30158
	10	30162



12-10	6	30272
	8	30282
	10	30292



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## Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	6	40052	70052
	6 Wide	40056	70056
	8	40062	70062
	8 slim	40068	70068
	10	40072	70072



16-14	4	40144	70144
	6	40142	70142
	6 Wide	40146	70146
	8	40152	70152
	8 Slim	40158	70158
	10	40162	70162



12-10	6	40272	70272
	8	40282	70282
	10	40292	70292



## Bare Butted Seam

Wire Size	Stud Size	Part No.
22-18	6	10051*
	8	10061*
	10	10071*
.....		
16-14	6	10141*
	8	10151*
	10	10161*
	1/4	10231
.....		
12-10	6	10271*
	8	10281*
	10	10291*
	1/4	10241*

## Nylon Insulated

Wire Size	Stud Size	Part No.
22-18	6	50051N*
	8	50061N*
	10	50071N*
.....		
16-14	6	50141N*
	8	50151N*
	10	50161N*
	1/4	50231N
.....		
12-10	6	50271N*
	8	50281N*
	10	50291N*
	1/4	50241N*

## Bare Brazed Seam

Wire Size	Stud Size	Part No.
22-18	6	10051BZ*
	8	10061BZ*
	10	10071BZ*
.....		
16-14	6	10141BZ*
	8	10151BZ*
	10	10161BZ*
.....		
12-10	6	10271BZ*
	8	10281BZ*
	10	10291BZ*
	1/4	10241BZ*

## 3-Pc Nylon w/ Sleeve

Wire Size	Stud Size	Part No.
22-18	6	30051
	8	30061
	10	30071
.....		
16-14	6	30141
	8	30151
	10	30161
	1/4	30231
.....		
12-10	6	30271
	8	30281
	10	30291
	1/4	30241
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## Vinyl Insulated

Wire Size	Stud Size	Part No.
22-18	6	50051*
	8	50061*
	10	50071*
.....		
16-14	6	50141*
	8	50151*
	10	50161*
	1/4	50231
.....		
12-10	6	50271*
	8	50281*
	10	50291*
	1/4	50241*

## Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	6	40051	70051
	8	40061	70061
	10	40071	70071
.....			
16-14	6	40141	70141
	8	40151	70151
	10	40161	70161
.....			
12-10	6	40271	70271
	8	40281	70281
	10	40291	70291
	1/4	40241	70241

### Bare Butted Seam

Wire Size	Stud Size	Part No.
22-18	6	10067
	8	10077
	10	10087
.....		
16-14	6	10105*
	8	10110*
	10	10120*
.....		
12-10	6	10128
	8	10129
	10	10130*



### Nylon Insulated

Wire Size	Stud Size	Part No.
22-18	6	50067N
	8	50077N
	10	50087N
.....		
16-14	6	50105N*
	8	50110N*
	10	50120N*
.....		
12-10	6	50128N
	8	50129N
	10	50130N*



### Bare Brazed Seam

Wire Size	Stud Size	Part No.
22-18	6	10067BZ
	8	10077BZ
	10	10087BZ
.....		
16-14	6	10105BZ*
	8	10110BZ*
	10	10120BZ*
.....		
12-10	10	10130BZ*



### 3-Pc Nylon w/ Sleeve

Wire Size	Stud Size	Part No.
22-18	6	30067
	8	30077
	10	30087
.....		
16-14	6	30105
	8	30110
	10	30120
.....		
12-10	6	30128
	8	30129
	10	30130
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### Vinyl Insulated

Wire Size	Stud Size	Part No.
22-18	6	50067
	8	50077
	10	50087
.....		
16-14	6	50105*
	8	50110*
	10	50120*
.....		
12-10	6	50128
	8	50129
	10	50130*



### Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	6	40067	70067
	8	40077	70077
	10	40087	70087
.....			
16-14	6	40105	70105
	8	40110	70110
	10	40120	70120
.....			
12-10	6	40128	70128
	8	40129	70129
	10	40130	70130



The brazed seam will not separate under pressure of operating stress.  
 A funnel entry nylon insulator allows easy wire insertion.

## Rings

Wire Size	Stud Size	Part No.	
22-18	6	50020BZN+	
	8	50030BZN+	
	10	50040BZN+	
	6-8-10	50040MBZN	
	1/4	50041BZN+	
	5/16	50042BZN+	
3/8	50043BZN+		
.....			
16-14	6	50086BZN+	
	8	50090BZN+	
	10	50100BZN+	
	6-8-10	50100MBZN	
	1/4	50101BZN+	
	5/16	50102BZN+	
	3/8	50103BZN+	
1/2	50104BZN+		
.....			
12-10	6	50210BZN+	
	8	50220BZN+	
	10	50230BZN+	
	6-8-10	50230MBZN	
	1/4	50240BZN+	
	5/16	50250BZN+	
	3/8	50260BZN+	
1/2	50233BZN+		

## Multi Stud Ring

22-18	6-8-10	50040MBZN	
.....			
16-14	6-8-10	50100MBZN	
.....			
12-10	6-8-10	50230MBZN	

## Male Quick Disconnects

22-18	.250 x .032	50177BZN	
.....			
16-14	.250 x .032	50181BZN	
.....			
12-10	.250 x .032	50186BZN	

## Spades

Wire Size	Stud Size	Part No.	
22-18	6	50050BZN+	
	8	50060BZN+	
	10	50070BZN+	
.....			
16-14	6	50140BZN+	
	8	50150BZN+	
	10	50160BZN+	
.....			
12-10	6	50270BZN+	
	8	50280BZN+	
	10	50290BZN+	

## Snap Spades

22-18	6	50051BZN+	
	8	50061BZN+	
	10	50071BZN+	
.....			
16-14	6	50141BZN+	
	8	50151BZN+	
	10	50161BZN+	
.....			
12-10	6	50271BZN+	
	8	50281BZN+	
	10	50291BZN+	
	1/4	50241BZN+	

## Block Spades

22-18	6	50052BZN+	
	8	50062BZN+	
	10	50072BZN+	
.....			
16-14	6	50142BZN+	
	8	50152BZN+	
	10	50162BZN+	
.....			
12-10	6	50272BZN+	
	8	50282BZN+	
	10	50292BZN+	

Nylon Insulated Brazed Barrel

Non-Insulated Butted Seam Terminals are made of steel. They are nickel plated for temperatures up to 900° F (482° C)



## Rings

Wire Size	Tab Width	Steel Nickel Plated
22-18	6 Slim	10021HT
	6	10020HT
	8	10030HT
	8	10038HT
	10	10040HT
	1/4	10041HT
	5/16	10042HT
3/8	10043HT	
16-14	6 Slim	10085HT
	6	10086HT
	8	10090HT
	10	10100HT
	1/4 Slim	10114HT
	1/4	10101HT
	5/16	10102HT
3/8	10103HT	
12-10	6	10210HT
	8	10220HT
	10	10230HT
	1/4 Slim	10245HT
	1/4	10240HT
	5/16	10250HT
	3/8	10260HT
1/2	10233HT	
8	10	10610HT
	1/4	10611HT
	5/16	10612HT
	3/8	10613HT
6	10	10615HT
	1/4	10616HT
	5/16	10617HT
	3/8	10618HT
4	5/16	10621HT
	3/8	10622HT
2	1/4	10628HT
	5/16	10629HT
	3/8	10630HT

## Butt Connectors

22-18	10080HT
16-14	10170HT
12-10	10310HT

## Quick Connects

Wire Size	Tab Width	Steel Nickel Plated
22-18	.250 x .032 Female	10176HT
	.250 x .032 Male	10177HT
	.187 x .020 Female	10192HT
16-14	.187 x .020 Female	10195HT
	.250 x .032 Female	10180HT
	.250 x .032 Male	10181HT
12-10	.250 x .032 Female	10187HT
	.250 x .032 Male	10186HT

## Spades

22-18	6	10050HT
	8	10060HT
	10	10070HT
16-14	6	10140HT
	8	10150HT
	10	10160HT
12-10	6	10270HT
	8	10280HT
	10	10290HT
	1/4	10234HT

## Block Spade

16-14	8	10152HT
12-10	10	10292HT

## Flags

16-14	.250 Female	10189HT
-------	-------------	---------

High Temperature Terminals

**UP TO  
650°F**

### Bare Seamless

Wire Size	Stud Size	Copper Nickel Plated
22-18		10083LNP
16-14		10173XLNP
12-10		10313LNP



### Bare Brazed Rings

Wire Size	Stud Size	Copper Nickel Plated
16-14	10	10100BZNP
12-10	8	10220BZNP
12-10	10	10230BZNP
12-10	1/4	10240BZNP



### Bare Butted

22-18	10080NP
16-14	10170NP
12-10	10310NP



Non-Insulated butted, seamless and brazed seam parts are made of copper. They are nickel plated for temperatures up to 650° F (343° C).

## Piggyback Connectors

### Bare Butted Seam

Wire Size	Tab Width	Part No.
22-18	.250 x .032	10662
16-14	.250 x .032	10663
12-10	.250 x .032	10666



### Vinyl Insulated

22-18	.250 x .032	20662#
16-14	.250 x .032	20663#
12-10	.250 x .032	20664#



### Nylon Insulated

22-18	.250 x .032	20662N#
16-14	.250 x .032	20663N#
12-10	.250 x .032	20664N#



### 3-Pc Nylon w/ Sleeve

Wire Size	Tab Width	Part No.
22-18	.250 x .032	30662#
16-14	.250 x .032	30663#
12-10	.250 x .032	30664#



### 3-Pc Nylon Fully Insulated

22-18	.250 x .032	32662#
16-14	.250 x .032	32663#
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### Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX
22-18	.250 x .032	40662	70662
16-14	.250 x .032	40663	70663
12-10	.250 x .032	40664	70664



## Bare Butted Seam

Wire Size	Tab Width	Part No.
22-18	.110 x .020	10191#
	.187 x .020	10192
	.205 x .020	10193
	.250 x .032	10176

16-14	.110 x .020	10194#
	.187 x .020	10195
	.205 x .020	10196
	.250 x .032	10180

12-10	.250 x .032	10187
	.375 x .032	10166



## 3-Pc Nylon w/ Sleeve

Wire Size	Tab Width	Part No.
22-18	.110 x .020	30191#
	.187 x .020	30192#
	.205 x .020	30193#
	.250 x .032	30176#

16-14	.110 x .020	30194#
	.187 x .020	30195
	.205 x .020	30180
	.375 x .032	30375

12-10	.187 x .032	30167
	.250 x .032	30187#
	.375 x .032	30166
	Larger Barrel .250 x .032	30187B



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## Vinyl Insulated

22-18	.110 x .020	20191#
	.187 x .020	20192#
	.187 x .020	50192
	.205 x .020	20193#
	.205 x .020	50193
	.250 x .032	50176

16-14	.110 x .020	20194#
	.187 x .020	20195#
	.187 x .020	50195
	.205 x .020	20196#
	.205 x .020	50196
	.250 x .032	50180
	.375 x .032	20375
	.205 x .032	20493#

12-10	.187 x .032	20167
	.250 x .032	50187
	.375 x .032	20166
Larger Barrel	.250 X .032	50187B



## Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	.110 x .020	40191	70191
	.187 x .020	40192	70192
	.250 x .032	40176	70176

16-14	.110 x .020	40194	70194
	.187 x .020	40195	70195
	.250 x .032	40180	70180
	.250 x .032	40180BRS (Brass Sleeve)	

12-10	.250 x .032	40187	70187
	.250 x .032	40187B	70187B (Large ID)
	.250 x .032	40187BRS (Brass Sleeve)	
	.375 x .032	40166	70166



## Nylon Insulated

22-18	.110 x .032	20491N#
	.187 x .020	50192N
	.205 x .020	50193N
	.250 x .032	50176N

16-14	.187 x .020	20195N#
	.187 x .020	50195N
	.205 x .020	50196N
	.250 x .032	50180N
	.375 x .032	20375N

12-10	.187 x .032	20167N
	.250 x .032	50187N Rolled
	.375 x .032	20166N
	.250 x .032	50213N Folded



The part No.s beginning in "2"  
are Extruded Vinyl.

The parts No.s beginning in "5"  
are Injection Molded with funnel entry.

## Bare Butted Seam

Wire Size	Tab Width	Part No.
22-18	.110 x .020	10088#
	.187 x .020	10197
	.250 x .032	10177*



16-14	.110 x .020	10089
	.187 x .020	10198
	.250 x .032	10181



12-10	.250 x .032	10186*
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## Bare Brazed Seam

22-18	.250 x .032	10177BZ
	.187 x .020	10197BZ



16-14	.250 x .032	10181BZ
	.187 x .020	10198BZ



12-10	.250 x .032	10186BZ
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## Vinyl Insulated

22-18	.110 x .020	20088#
	.187 x .020	50197
	.250 x .032	50177*
	.187 x .020	20197#



16-14	.110 x .020	20089
	.187 x .020	50198
	.250 x .032	50181



12-10	.250 x .032	50186*
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## Nylon Insulated

Wire Size	Tab Width	Part No.
22-18	.250 x .032	50177N*
	.187 x .020	50197N



16-14	.187 x .020	50198N
	.187 x .020	20198N
	.250 x .032	50181N*



12-10	.250 x .032	50186N*
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## 3-Pc Nylon w/ Sleeve

22-18	.187 x .020	30197#
	.250 x .032	30177



16-14	.187 x .020	30198#
	.250 x .032	30181



12-10	.250 x .032	30186
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## Heat Shrink

Wire Size	Stud Size	Polyolefin Part No.	NYAX Part No.
22-18	.110 x .020	40088	70088
	.187 x .020	40197	70197
	.250 x .032	40177	70177

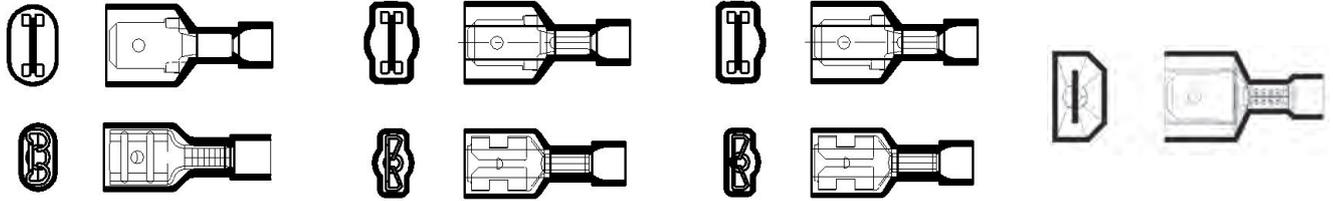


16-14	.110 x .020	40089	70089
	.187 x .020	40198	70198
	.250 x .032	40181	70181



12-10	.250 x .032	40186	70186
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Style 1

Style 2

Style 3

Style 4

## Nylon

Wire Size	Style	Tab Width	Part No.
22-18	1	.250 X .032 Male	20178#
	1	.250 X .032 Female	20179#
	1	.250 X .032 Female	50179
	2	.250 X .032 Male	50206
	2	.250 X .032 Female	50207
	3	.250 X .032 Male	50206-1 Hump
	3	.250 X .032 Female	50207-1 Hump
	4	.250 X .032 Male	50206A Flat Side#
	4	.110 X .020 Female	22191N#
	4	.187 X .020 Female	22192N#
	4	.187 X .020 Male	22197N
	4	.205 X .020 Female	22193N

16-14	1	.250 X .032 Male	20182#
	1	.250 X .032 Female	20183#
	1	.250 X .032 Female	50183
	2	.250 X .032 Male	50208
	2	.250 X .032 Female	50209
	3	.250 X .032 Male	50208-1 Hump
	3	.250 X .032 Female	50209-1 Hump
	4	.250 X .032 Male	50208A Flat Side#
	4	.110 X .020 Female	22194N#
	4	.187 X .020 Female	22195N
4	.187 X .020 Male	22198N	

12-10	2	.250 X .032 Male	50212
	2	.250 X .032 Female	50213
	3	.250 X .032 Female	50213-1 Hump
	3	.250 X .032 Female	50213L
	3	.250 X .032 Male	50212L

## 3-Pc Fully Nylon w/Sleeve

22-18	1	.110 X .020 Female	32191#
	3	.187 X .020 Male	32197#
	3	.187 X .020 Female	32192#
	3	.187 X .032	33192#
	1	.250 X .032 Male	30178#
	1	.250 X .032 Female	30179#

16-14	3	.187 X .020 Male	32198#
	3	.187 X .020 Female	32195#
	3	.187 X .032 Female	33195#
	1	.250 X .032 Male	30182#
	1	.250 X .032 Female	30183#

12-10	3	.250 X .032 Female	30199
	1	.250 X .032 Male	30212#
	1	.250 X .032 Female	30213#

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## Fully Insulated Vinyl

16-14	1	.187 X .020 Female	52195#
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## Heat Shrink

Wire Size	Style	Tab Width	Polyolefin Part No.	NYAX Part No.
22-18	1	.110 X .020 Female	42191	
	1	.250 X .032 Male	44178	74178
	1	.250 X .032 Female	44179	74179
	2	.250 X .032 Male	40206	70206
	2	.250 X .032 Female	40207	70207
	3	.187 X .020 Female	42192	
	3	.187 X .020 Male	42197	
	3	.250 X .032 Female	40207-1Hump	70207-1Hump
	3	.250 X .032 Male	40206-1Hump	70206-1Hump

16-14	1	.250 X .032 Male	44182	74182
	1	.250 X .032 Female	44183	74183
	2	.250 X .032 Male	40208	70208
	2	.250 X .032 Female	40209	70209
	3	.187 X .020 Female	42195	
	3	.187 X .020 Male	42198	
3	.250 X .032 Female	40209-1Hump	70209-1Hump	
3	.250 X .032 Male	40208-1Hump	70208-1Hump	

12-10	2	.250 X .032 Male	40212	70212
	2	.250 X .032 Female	40213	70213
	2	.250 X .032 Female	30213-HS	

NEW Style: Tubing has been shortened to expose the improved crimping area.



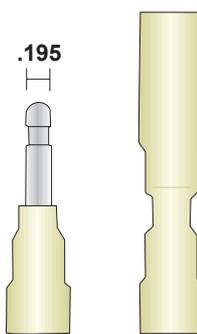
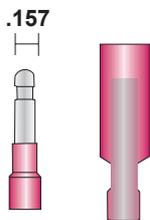
## Heat Shrink (NEW STYLE)

22-18	2	.250 X .032 MALE	90206
	2	.250 X .032 FEM	90207
	3	.187 X .020 FEM	92192

16-14	2	.250 X .032 MALE	90208
	2	.250 X .032 FEM	90209

12-10		.250 X .032 FEM	90213
		.250 X .032 MALE	99212
		.250 X .032 FEM	90213-1 Hump

Q.D. - Fully Insulated



### Bare Butted Seam

Wire Size	Tab Width	Part No.
22-18	.157 Male	10284
	.157 Female	10285
16-14	.157 Male	10184
	.157 Female	10185
	.195 Male	10484
	.180 Male	10684
12-10	.195 Male	10384

### 3-Pc Nylon w/ Sleeve

Wire Size	Tab Width	Part No.
22-18	.157 Male	30884 Fully^
	.157 Male	30284
	.157 Female	30285R^
16-14	.157 Male	30984 Fully^
	.157 Male	30184^
	.157 Female	30185^
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### Vinyl Insulated

22-18	.157 Male	20284V^
	.157 Female	20285V^
	.180 Male	20784V^
	.180 Female	20785V
16-14	.157 Male	20184V^
	.157 Female	20185V^
	.180 Male	20684V^
	.180 Female	20685V
	.195 Male	20484V^
12-10	.195 Male	20384V^
	.195 Female	20385V^

### Heat Shrink

Wire Size	Polyolefin Part No.	NYAX Part No.	
22-18	.157 N/I Fem Bullet	40285	70285N
	.157 V/I Fem Bullet		70285
	.157 3pc N/I Female	93285	
	.157 N/I Female	90285	
	.157 U/I Male Bullet	40284	70284
	.157 N/I Male Bullet		70284N
	.157 3pc N/I Male	93284	
	.157 N/I Male Bullet	90284	
	.180 V/I Fem Bullet	40785	70785
	.180 N/I Fem Bullet		70785N
	.180 N/I Fem Bullet	90785N	
	.180 V/I Male Bullet	40784	70784
16-14	.157 N/I Male Bullet		70784N
	.157 N/I Fem Bullet	40185	70185N
	.157 V/I Fem Bullet		70185
	.157 N/I Fem Bullet	90185	
	.157 U/I Male Bullet	40184	70184
	.157 N/I Male Bullet		70184N
	.157 U/I Male Bullet	90184	
	.180 V/I Fem Bullet	40685	70685
	.180 V/I Fem Bullet	90685	
	.180 N/I Fem Bullet	40685N	70685N
	.180 V/I Male Bullet	40684	70684
	12-10	.180 V/I Male Bullet	90684
.180 N/I Male Bullet		90684N	
.180 U/I Male Bullet		47684	77684
.180 N/I Male Bullet			70684N
.195 V/I Fem Bullet		40485	70485
.195 N/I Fem Bullet			70485N
12-10	.195 U/I Male Bullet	40484	70484
	.195 V/I Fem Bullet	40385	70385
12-10	.195 U/I Male Bullet	40384	70384

### Nylon Insulated

22-18	.157 Male	20884 Fully^
	.157 Male	20284^
	.157 Female	20285^
	.180 Male	20784^
	.180 Female	20785^
16-14	.157 Male	20984 Fully^
	.157 Male	20184^
	.157 Female	20185^
	.180 Male	20684^
	.180 Female	20685^
16-14	.195 Female	20485 Fully^

9 SERIES HAS AN EXPANDED CRIMP AREA

### WATERPROOF BULLETS & RECEPTACLES

Item #	No Heat Required
WP20184PC	14 GA .157 Male Bullet
WP20185PC	14 GA .157 Female Recp.
WP20284PC	18-16 .157 Male Bullet
WP20285PC	18-16 .157 Female Recp.



Bullet Connectors

## Bare Butted Seam

Wire Size	Part No.
22-18	10400
16-14	10410
12-10	10420

## Brazed Seam

22-18	10400BZ
16-14	10410BZ
12-10	10420BZ

## Vinyl

22-18	50400
16-14	50410
12-10	50420



Part No. 50460

Custom 3 and 4 way connectors can be made in any combination of 22-18, 16-14, 12-10 and 8 gauge terminals in bare, brazed, vinyl, nylon, 3 pc or heat shrink.

## Nylon

Wire Size	Part No.
22-18	50400N
16-14	50410N
12-10	50420N

## 3-Pc Nylon w/ Sleeve

22-18	30400
16-14	30410
12-10	30420

## Heat Shrink

Wire Size	Polyolefin Part No.	NYAX Part No.
22-18	40400	70400
16-14	40410	70410
12-10	40420	70420

# 4 Way Connectors

## Bare Butted Seam

22-18	10430
16-14	10440
12-10	10450

## Brazed Seam

22-18	10430BZ
16-14	10440BZ
12-10	10450BZ

## Vinyl

22-18	50430
16-14	50440
12-10	50450



## Nylon

22-18	50430N
16-14	50440N
12-10	50450N

## 3-Pc Nylon w/ Sleeve

22-18	30430
16-14	30440
12-10	30450

## Heat Shrink

Wire Size	Polyolefin Part No.	NYAX Part No.
22-18	40430	70430
16-14	40440	70440
12-10	40450	70450

## Uninsulated Butted Seam

Wire Size	Part No.
22-18	UPT1#
16-14	UPT2#
12-10	UPT5#
8	UPT8BZ Brazed#
4	UPT25-15#

## Vinyl Insulated

Wire Size	Part No.
22-18	PTV1# PTV1UL*
16-14	PTV2# PTV2UL*
12-10	PTV5# PTV5UL*

## 2-Pc Nylon

Wire Size	Part No.
22-18	PTN1#
16-14	PTN2#
12-10	PTN5#
4	PTN25BZ#

## 3-Pc Nylon w/ Sleeve

Wire Size	Part No.
22-18	PT3N1#
16-14	PT3N2#
12-10	PT3N5#

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# Flags

## Non Insulated

Wire Size	Part No.	Length	Tab Width
22-18	12188#		.187
	10188#		.250
	10999	open	.250
16-14	12189#		.187
	10189#		.250#
	10669		.250 (male)
12-10	10190#		.250
	10190B	open	.250

## Heat Shrink

Wire Size	Polyolefin Part No.	NYAX Part No.	Tab Width
22-18	42188	70188	.187
	40188		.250
16-14	42189	70189	.187
	40189		.250
12-10	40190	70190	.250

## Nylon Insulated

Wire Size	Part No.	Length	Tab Width
22-18	22188#	.53	.187
	20188#	.58	.250
	20188L#	.82	.250
16-14	22189#	.53	.187
	20189#	.58	.250
	20189L#	.82	.250
12-10	20190#	.68	.250
	20190L#	.90	.250

See Page 39 [Tool \(20594\)](#) for 22-18 and 16-14 and [Tool \(20704\)](#) for 16-14 and 12-10.

## VOLTAGE RATINGS

Insulated Copper Terminals	600 volts MAX
Insulated Brass Disconnects	300 volts MAX
Tap Splices (16-10AWG)	32 volts MAX
Tap Splices (18AWG)	18 volts MAX

# Heat Shrink Terminals

DESCRIP	WIRE SIZE	STUD/TAB SIZE	CRIMP & SEAL (A)	SOLDER & SEAL (B)	CRIMP, SOLDER & SEAL (C)	NYAX CRIMP & SEAL (A)	CLEAR VIEW CRIMP & SEAL (D)
	24-20 GA	SEAMLESS	40024	60024	80024		
BUTTS	22-18 GA	S/L WINDOW					99082
		SEAMLESS	20082	60082	80082	40082	
		S/L LONG	20082L			40082L	
	16-14 GA	S/L WINDOW					99172
		SEAMLESS	20172	60172	80172	40172	
		S/L LONG	20172L			40172L	
	12-10 GA	S/L WINDOW					99312
		SEAMLESS	20312	60312	80312	40312	
		S/L LONG				40312L	
		8 GA	SEAMLESS	40624	60624		70624
	6 GA	SEAMLESS	40625				
STEP DOWN BUTTS	26-24 TO 22-16 GA	SEAMLESS	40315		80315	70315	
	26-24 TO 22-16 GA	S/L WINDOW					78315
	22-18 TO 16-14 GA	SEAMLESS	40316		80316	70316	
	22-18 TO 16-14 GA	S/L WINDOW					78316
	16-14 TO 12-10 GA	SEAMLESS	40317		80317	70317	
		S/L WINDOW					78317
	12-10 TO 8 GA	SEAMLESS	40318		80318	70318	
WINDOW BUTTS	22-18 GA	S/L WINDOW				71082	
	16-14 GA	S/L WINDOW				71172	
	12-10 GA	S/L WINDOW				71312	
RINGS	22-18 GA	4	40014			70014	
		6	40020	60020	80020	70020	
		6 SLIM	40021			70021	
		8	40030	60030	80030	70030	
		8 LONG	40030L			70030L	
		8 SLIM	40038			70038	
		10	40040	60040	80040	70040	
		10 LONG	40040L			70040L	
		1/4	40041	60041	80041	70041	
		1/4 SLIM	40044			70044	
		5/16	40042	60042	80042	70042	
		3/8	40043	60043	80043	70043	
		6-8-10 MULTI	40040M			70040M	
		1/2	40204			70204	
RINGS	16-14 GA	4	40084			70084	
		6	40086			70086	
		6 SLIM	40085			70085	
		8	40090	60090	80090	70090	
		8 LONG	40090L			70090L	
		8 SLIM	40098			70098	
		10	40100	60100	80100	70100	
		10 LONG	40100L			70100L	
		1/4	40101	60101	80101	70101	
		1/4 SLIM	40114			70114	
		5/16	40102	60102	80102	70102	
		3/8	40103	60103	80103	70103	
		1/2	40104			70104	
		6-8-10 MULTI	40100M			70100M	
RINGS	12-10 GA	4	40205			70205	
		6	40210			70210	
		6 SLIM	40215			70215	
		8	40220			70220	
		8 SLIM	40225			70225	
		10	40230	60230	80230	70230	
		10 LONG	40230L			70230L	
		10 WIDE	40236			70236	
		1/4	40240	60240	80240	70240	
		1/4 SLIM	40245			70245	
		5/16	40250	60250	80250	70250	
		3/8	40260	60260	80260	70260	
		1/2	40233	60233	80233	70233	
		6-8-10 MULTI	40230M			70230M	

# Heat Shrink Terminals

DESCRIP	WIRE SIZE	STUD/TAB SIZE	CRIMP & SEAL	SOLDER & SEAL	CRIMP, SOLDER & SEAL (C)	NYAX CRIMP & SEAL	CLEAR VIEW CRIMP & SEAL
			(A)	(B)	(C)	(A)	(D)
RINGS	8 GA	8	40608			70608	
		10 SLIM	40609			70609	
		10	40610			70610	
		1/4	40611			70611	
		5/16	40612			70612	
		3/8	40613			70613	
		1/2	40614			70614	
	1/2 LONG	40614L			70614L		
3 WAY	22-18 GA		40400			70400	
	16-14 GA		40410			70410	
	12-10 GA		40420			70420	
4 WAY	22-18 GA		40430			70430	
	16-14 GA		40440			70440	
	12-10 GA		40450			70450	
SPADES	22-18 GA	4	40054			70054	
		6	40050			70050	
		6 SNAP	40051			70051	
		6 BLOCK	40052			70052	
		6 FLANGED	40053			70053	
		6 SHORT	40055			70055	
		6 WIDE BLOCK	40056			70056	
		8	40060			70060	
		8 SNAP	40061			70061	
		8 BLOCK	40062			70062	
		8 FLANGED	40063			70063	
		8 SLIM BLOCK	40068			70068	
		10	40070	60070	80070	70070	
		10 SNAP	40071			70071	
		10 BLOCK	40072			70072	
10 FLANGED	40073			70073			
1/4	40075			70075			
SPADES	16-14 GA	4 BLOCK	40144			70144	
		6	40140			70140	
		6 SNAP	40141			70141	
		6 BLOCK	40142			70142	
		6 FLANGED	40143			70143	
		6 WIDE BLOCK	40146			70146	
		8	40150			70150	
		8 SNAP	40151			70151	
		8 BLOCK	40152			70152	
		8 FLANGED	40153			70153	
		8 SLIM BLOCK	40158			70158	
		10	40160	60160	80160	70160	
		10 SNAP	40161			70161	
		10 BLOCK	40162			70162	
		10 FLANGED	40163			70163	
1/4	40165			70165			
SPADES	12-10 GA	6	40270			70270	
		6 SNAP	40271			70271	
		6 BLOCK	40272			70272	
		6 FLANGED	40273			70273	
		8	40280			70280	
		8 SNAP	40281			70281	
		8 BLOCK	40282			70282	
		8 FLANGED	40283			70283	
		10	40290	60290	80290	70290	
		10 SNAP	40291			70291	
		10 BLOCK	40292			70292	
		10 FLANGED	40293			70293	
		1/4	40234			70234	
1/4 SNAP	40241			70241			
HOOKS	22-18 GA	6	40067			70067	
		8	40077			70077	
		10	40087			70087	

# Heat Shrink Terminals

DESCRIP	WIRE SIZE	STUD/TAB SIZE	CRIMP & SEAL (A)	SOLDER & SEAL (B)	CRIMP, SOLDER & SEAL (C)	NYAX CRIMP & SEAL (A)	CLEAR VIEW CRIMP & SEAL (D)
HOOKS	16-14 GA	6	40105			70105	
		8	40110			70110	
		10	40120			70120	
HOOKS	12-10 GA	6	40128			70128	
		8	40129			70129	
		10	40130			70130	
FLAGS	22-18	.187 TAB FEM	42188			70188	
		.250 TAB FEM	40188			70188	
	16-14	.187 TAB FEM	42189			70189	
		.250 TAB FEM	40189			70189	
	12-10	.250 TAB FEM	40190			70190	
QUICK CONNECTS	22-18 GA	.110 TAB MALE	40088			70088	
		.110 TAB FEM	40191			70191	
		.187 TAB FEM	40192			70192	
		.187 TAB MALE	40197			70197	
		.250 TAB FEM	40176	60176	80176	70176	
		.250 TAB MALE	40177	60177	80177	70177	
QUICK CONNECTS	16-14 GA	.110 TAB MALE	40089			70089	
		.110 TAB FEM	40194			70194	
		.187 TAB FEM	40195			70195	
		.187 TAB MALE	40198				
		.250 TAB FEM	40180	60180	80180	70180	
		.250 TAB MALE	40181	60181	80181	70181	
QUICK CONNECTS	12-10 GA	.250 TAB FEM	40187			70187	
		.250 TAB MALE	40186			70186	
		.375 TAB FEM	40166			70166	
BULLETS	22-18 GA	.157 N/I FEM BULLET	40285			70285N	
		.157 V/I FEM BULLET				70285	
		.157 U/I MALE BULLET	40284			70284	
		.157 N/I MALE BULLET				70284N	
		.180 V/I FEM BULLET	40785			70785	
		.180 N/I FEM BULLET				70785N	
		.180 V/I MALE BULLET	40784			70784	
		.157 N/I MALE BULLET				70784N	
BULLETS	16-14 GA	.157 N/I FEM BULLET	40185			70185N	
		.157 V/I FEM BULLET				70185	
		.157 U/I MALE BULLET	40184			70184	
		.157 N/I MALE BULLET				70184N	
		.180 V/I FEM BULLET	40685			70685	
		.180 N/I FEM BULLET	40685N			70685N	
		.180 V/I MALE BULLET	40684			70684	
		.180 U/I MALE BULLET	47684			77684	
		.180 N/I MALE BULLET				70684N	
		.195 V/I FEM BULLET	40485			70485	
		.195 N/I FEM BULLET				70485N	
		.195 U/I MALE BULLET	40484			70484	
BULLETS	12-10 GA	.195 V/I FEM BULLET	40385			70385	
		.195 U/I MALE BULLET	40384			70384	
PIGGYBACKS	22-18	.250 TAB FEMALE	40662			70662	
	16-14	.250 TAB FEMALE	40663			70663	
	12-10	.250 TAB FEMALE	40664			70664	
FULLY INS	22-18 GA	.250 TAB FEMALE	40207	60179	80179	70207	
		.250 TAB MALE	40206			70206	
QUICK CONNECTS	22-18 GA	.250 TAB FEMALE	40207-1H			70207-1H	
		.250 TAB MALE	40206-1H			70206-1H	
	16-14 GA	.250 TAB FEMALE	40209	60183	80183	70209	
		.250 TAB MALE	40208			70208	
	12-10 GA	.250 TAB FEMALE	40209-1H			70209-1H	
		.250 TAB MALE	40208-1H			70208-1H	
		.250 TAB FEMALE	40213	60199	80199	70213	
		.250 TAB MALE	40212			70212	

DESCRIP	WIRE SIZE	STUD/TAB SIZE	CRIMP & SEAL (A)	SOLDER & SEAL (B)	CRIMP, SOLDER & SEAL (C)	NYAX CRIMP & SEAL (A)	CLEAR VIEW CRIMP & SEAL (D)
	22-18 GA	.250 TAB FEMALE	44179			74179	
		.250 TAB MALE	44178			74178	
		.110 TAB FEMALE	42191				
		.187 TAB FEMALE	42192				
		.187 TAB MALE	42197				
	16-14 GA	.250 TAB FEMALE	44183			74183	
		.250 TAB MALE	44182			74182	
		.187 TAB FEMALE	42195				
		.187 TAB MALE	42198				
EXPANDED CRIMP AREA	22-18 GA	.250 TAB MALE	90206				
		.250 TAB FEMALE	90207				
		.187 TAB FEMALE	92192				
EXPANDED CRIMP AREA	16-14 GA	.250 TAB MALE	90208				
		.250 TAB FEMALE	90209				
EXPANDED CRIMP AREA	12-10 GA	.250 TAB MALE	99212				
		.250 TAB FEMALE	90213				
		.250 TAB FEMALE	90213-1H				
EXPANDED CRIMP AREA	22-18 GA	.157 N/I MALE BULLET	90284				
		.157 N/I FEM BULLET	90285				
		.180 N/I FEM BULLET	90785N				
EXPANDED CRIMP AREA	16-14 GA	.157 N/I FEM BULLET	90185				
		.157 N/I MALE BULLET	90184				
		.180 V/I MALE BULLET	90684				
		.180 N/I MALE BULLET	90684N				
		.180 V/I FEM BULLET	90685				
		.180 N/I FEM BULLET	90685N				
HYDRA LINK	24-22	STEP DOWN					HL40315
	22-18	STEP DOWN					HL40316
	16-14	STEP DOWN					HL40317
	12-10	STEP DOWN					HL40318
	22-14 GA	CLOSED END					HL40570
18-10 GA	CLOSED END					HL40571	

Crimp & Seal (A) (D)



Crimp & Seal (A)

Solder & Seal (B)



Solder & Seal (B)

Crimp, Solder & Seal (C)



Crimp, Solder & Seal (C)

The terminals are copper (.110 alloy). The tubing is a high quality polyolefin or Nyax. Seamless connectors used on butts. Multiple wall heat shrinkable tubing, clearly marked. Rings and spades are brazed seam. Color coded with wire size.

DUAL WALL		ADHESIVE LINED						
SHRINK RATIO	OD X LENGTH	COLOR	PART #					
2.5 TO 1	3/16" X 6"	RED	23280					
2.5 TO 1	1/4" X 6"	BLUE	23281					
2.5 TO 1	5/16" X 6"	YELLOW	23282					
THIN WALL		NO ADHESIVE						
2 TO 1	1/4" X 3"	BLACK	23123					
2 TO 1	3/8" X 3"	BLACK	23125					
2 TO 1	1/2" X 3"	BLACK	23127					
RATIO	OD X LENGTH	BLACK	CLEAR	RED	ORANGE	BLUE	GREEN	WHITE
2 TO 1	3/64" X 100 FT		23364C					
2 TO 1	3/64" X 1320 FT	23617						
2 TO 1	1/16" X 100 FT	23116	23116C					
2 TO 1	3/32" X 100 FT	23332						
2 TO 1	1/8" X 100FT	23610			23610-OR	23610-BU		
2 TO 1	3/16" X 100FT	23611	23611C				23611GN	23611WH
2 TO 1	1/4" X 100 FT	23612						
2 TO 1	3/8" X 100 FT	23613						
2 TO 1	1/2" X 100 FT	23614		23614RD				
2 TO 1	5/8" X 100 FT			23618RD				
2 TO 1	3/4" X 100 FT	23615		23609R-100				
2 TO 1	3/4" X 330 FT			23615R-330	23615OR-330			23615WH-330
2 TO 1	1" X 100 FT	23616		23616RD				
2 TO 1	3" X 82 FT			23623R-82FT				
SINGLE WALL		NO ADHESIVE						
RATIO	OD X LENGTH	BLACK	CLEAR	RED	YELLOW	BLUE	GREEN	WHITE
2 TO 1	3/64" X 4'	23601						
2 TO 1	1/16" X 4'	23600-48BK			23600-48YE			
2 TO 1	3/32" X 4'		23602-CL					
2 TO 1	1/8" X 4'	23603	23603-CL	23603-RD				23603-WH
2 TO 1	3/16" X 4'	23604	23604-CL	23604-RD		23604-BU		
2 TO 1	1/4" X 4'	23605	23605-CL	23605-RD		23605-BU		23605-WH
2 TO 1	5/16" X 4'	23606						
2 TO 1	3/8" X 4'	23607	23607-CL	23607-RD		23607-BU		
2 TO 1	1/2" X 4'	23608		23608-RD				
2 TO 1	5/8" X 4'	23618-48B						
2 TO 1	3/4" X 4'	23609-48B		23609-48R				
2 TO 1	1" X 4'	23616-48B		23616-48RD			23616-48GR	
2 TO 1	1.5" X 4'	23620-48B		23620-48RD				
2 TO 1	2" X 4'	23619-48B						
DUAL WALL		ADHESIVE LINED						
RATIO	OD X LENGTH	BLACK	CLEAR	RED				
3 TO 1	1/8" X 660'	23710	23710C	23710R				
3 TO 1	3/16" X 330'	23711	23711C	23711R				
3 TO 1	1/4" X 330'	23712	23712C					
3 TO 1	1/4" X 100'			23712R-100				
3 TO 1	3/8" X 330'	23713	23713C	23713R				
3 TO 1	1/2" X 100'	23714	23714C	23714R				
3 TO 1	3/4" X 100'	23715	23715C	23715R				
3 TO 1	1" X 100'	23716	23716C	23716R				
DUAL WALL		ADHESIVE LINED						
RATIO	OD X LENGTH	BLACK		RED				
3 TO 1	1/8" X 4'	23525-48B		23525-48R				
3 TO 1	3/16" X 4'	23530-48B		23530-48R				
3 TO 1	1/4" X 4'	23535-48B		23535-48R				
3 TO 1	5/16" X 4'	23575-48B						
3 TO 1	3/8" X 4'	23540-48B		23540-48R				

3 TO 1	1/2" X 4'	23545-48B		23545-48R				
3 TO 1	3/4" X 4'	23550-48B		23550-48R				
3 TO 1	1" X 4'	23555-48B		23555-48R				
3 TO 1	1.25" X 4'	23560-48B						
3 TO 1	1.5" X 4'	23565-48B						
3 TO 1	2" X 4'	23570-48B						
<b>DUAL WALL ADHESIVE LINED</b>								
<b>RATIO</b>	<b>OD X LENGTH</b>	<b>BLACK</b>	<b>CLEAR</b>	<b>RED</b>				
3 TO 1	1/8" X 6"	23525-06B	23525-06C	23525-06R				
3 TO 1	3/16" X 6"	23530-06B	23530-06C	23530-06R				
3 TO 1	1/4" X 6"	23535-06B	23535-06C	23535-06R				
3 TO 1	3/8" X 6"	23540-06B	23540-06C	23540-06R				
3 TO 1	1/2" X 6"	23545-06B	23545-06C	23545-06R				
3 TO 1	3/4" X 6"	23550-06B	23550-06C	23550-06R				
3 TO 1	1" X 6"	23555-06B	23555-06C	23555-06R				
3 TO 1	1 1/4" X 6"	23560-06B	23560-06C	23560-06R				
3 TO 1	1 1/2" X 6"	23565-06B	23565-06C	23565-06R				
3 TO 1	2" X 6"	23570-06B	23570-06C	23570-06R				
<b>HEAVY WALL</b>								
3 TO 1	3/8" X 48"	23590-48B		23590-48R				
3 TO 1	3/4" X 6"	23591-06B		23591-06R				
3 TO 1	3/4" X 48"	23591-48B		23591-48R				

SHRINK TUBING CHART						
Tubing O.D.	Non Insulated	Vinyl/ Nylon	Copper Lugs	Heavy Duty Lugs	Battery Terminals	
3/32"	26-24					
1/8"	22-18	26-24				
3/16"	16-14	22-18				
1/4"	12-10	16-14				
3/8"	8-6	12-10	8-6	8-4		
1/2"	4-2	8-6	4-1/0	1	4	
3/4"	1/0-3/0	4-1/0	2/0-4/0	1/0-3/0	1-3/0	
1"		2/0-3/0	250MCM	4/0	4/0	

## Heat Shrink Box Kits



**Red & Black HS Box Kit**

Part No.:  
5990-74BR

6": (10) Black 1/8", (10) Red 1/8",  
 (10) Black 3/16", (10) Red 3/16",  
 (5) Black 1/4", (5) Red 1/4",  
 (4) Black 3/8", (4) Red 3/8",  
 (5) Black 1/2", (5) Red 1/2"  
 (3) Black 3/4", (3) Red 3/4"



**Black HS Box Kit**

Part No.:  
5990-62 BLACK

4": (20) 1/8", (20) 3/16", (10) 1/4",  
 (5) 3/8", (5) 1/2", (2) 3/4"  
 3:1 Shrink Ratio-UL & CUL.  
 Certified at 600V 125 degree C  
 temp. 90-120 degree C-UL FILE  
 E333465 RoHS Compliant



**Color HS Box Kit**

Part No.:  
5990-160 MULTI

4" Colors: Black, Blue, Clear, Green,  
 Red, White, Yellow  
 (60) 1/16", (35) 3/32", (25) 1/8",  
 (20) 3/16", (10) 1/4", (10) 3/8"  
 2:1 Shrink Ratio-UL & CUL.  
 Certified at 600V 125 degree C temp.  
 90-120 degree C-UL FILE E333465  
 RoHS Compliant



**Black HS Box Kit**

Part No.:  
5990-160 BLACK

4": (60) 1/16", (35) 3/32",  
 (25) 1/8", (20) 3/16", (10) 1/4", (10)  
 3/8"  
 2:1 Shrink Ratio-UL & CUL.  
 Certified at 600V 125 degree C temp.  
 90-120 degree C-UL FILE E333465  
 RoHS Compliant

# Heavy Duty Electrical Lugs

## Unplated

Wire Size	Stud Size	Part No.			
8	10	8101-00#			
	1/4	8141-00#			
	5/16	8562-00#			
	3/8	8382-00#			
	1/2	8503-00#			
6	10	6101-00#			
	1/4	6141-00#			
	5/16	6562-00#			
	3/8	6382-00#			
	1/2	6503-00#			
4	10	4101-00#			
	1/4	4141-00#			
	5/16	4562-00#			
	3/8	4382-00#			
	1/2	4503-00#			
2	1/4	2141-00#			
	5/16	2561-00#			
	3/8	2381-00#			
	1/2	2503-00#			
	1	1/4		1141-00#	
5/16		1561-00#			
3/8		1381-00#			
1/2		1503-00#			
1/0		1/4	10141-00#		
	5/16	10561-00#			
	3/8	10381-00#			
	1/2	10501-00#			
	2/0	1/4	20141-00#		
5/16		20561-00#			
3/8		20381-00#			
1/2		20501-00#			
3/0		3/8	30381-00#		
	1/2	30501-00#			
	5/16	30561-00#			
	4/0	3/8	40381-00#		
		1/2	40501-00#		

## Plated

Wire Size	Stud Size	Part No.	
8	10	8101-60#	
	1/4	8141-60#	
	5/16	8562-60#	
	3/8	8382-60#	
	1/2	8503-60#	
6	10	6101-60#	
	1/4	6141-60#	
	5/16	6562-60#	
	3/8	6382-60#	
	1/2	6503-60#	
4	10	4101-60#	
	1/4	4141-60#	
	5/16	4562-60#	
	3/8	4382-60#	
	1/2	4503-60#	
2	1/4	2141-60#	
	5/16	2561-60#	
	3/8	2381-60#	
	1/2	2503-60#	
	1	1/4	
5/16		1561-60#	
3/8		1381-60#	
1/2		1503-60#	
1/0		1/4	10141-60#
	5/16	10561-60#	
	3/8	10381-60#	
	1/2	10501-60#	
	2/0	1/4	20141-60#
5/16		20561-60#	
3/8		20381-60#	
1/2		20501-60#	
3/0		1/4	30141-60#
	5/16	30561-60#	
	3/8	30381-60#	
	1/2	30501-60#	
	4/0	1/4	40141-60#
5/16		40561-60#	
3/8		40381-60#	
1/2		40501-60#	

8GA 1/4	8141-60-90#
6GA 5/16	6562-60-90#
4GA 3/8	4382-60-90#
4GA 1/4	4141-60-90#
4 GA 5/16	4562-60-90#
2GA 5/16	2561-60-90#
2/0 3/8	20381-60-90#
3/0 3/8	30381-60-90#
4/0 5/16	40561-60-90#

Other Sizes Available

### Metric & AWG Wire Size

mm <sup>2</sup>	AWG
1	16
2	14
3	12
4-5	10
6-8	8
9-13	6
14-21	4
22-35	2
36-42	1
43-53	1/0
54-68	2/0
69-86	3/0
87-107	4/0

8 - 4/0

### Plated

Wire Size	Part No.
8	8001-25#
6	6001-25#
4	4001-25#
2	2001-25#
1	1001-25#
1/0	10001-25#
2/0	20001-25#
3/0	30001-25#
4/0	40000-25#



Electrical Lugs

## Top Post Straights

Wire Size	Post Type	Part No.	Color Code
6 GA	Universal	C2101T	Gray
4 GA	Universal	C2102T	Gray
4 GA	Negative	C2103T	Gray
4 GA	Positive	C2104T	Gray
2 GA	Negative	C2105T	Green
2 GA	Positive	C2106T	Green
1 GA	Negative	C2107T	Pink
1 GA	Positive	C2108T	Pink
1/0	Negative	C2109T	Black
1/0	Positive	C2110T	Black
2/0	Negative	C2111T	Orange
2/0	Positive	C2112T	Orange
3/0	Negative	C2113T	Purple
3/0	Positive	C2114T	Purple
4/0	Negative	C2115T	Yellow
4/0	Positive	C2116T	Yellow



## Top Post Right Angles (Flag)

1/0	Negative	C2209T	Black
1/0	Positive	C2210T	Black
2/0	Negative	C2211T	Orange
2/0	Positive	C2212T	Orange
3/0	Negative	C2213T	Purple
3/0	Positive	C2214T	Purple
4/0	Negative	C2215T	Yellow
4/0	Positive	C2216T	Yellow



## Top Post Right Elbows

1/0	Negative	C2309T	Black
1/0	Positive	C2310T	Black
2/0	Negative	C2311T	Orange
2/0	Positive	C2312T	Orange
3/0	Negative	C2313T	Purple
3/0	Positive	C2314T	Purple
4/0	Negative	C2315T	Yellow
4/0	Positive	C2316T	Yellow



## Top Post Left Elbows

1/0	Negative	C2409T	Black
1/0	Positive	C2410T	Black
2/0	Negative	C2411T	Orange
2/0	Positive	C2412T	Orange
3/0	Negative	C2413T	Purple
3/0	Positive	C2414T	Purple
4/0	Negative	C2415T	Yellow
4/0	Positive	C2416T	Yellow



## 3/8 Stud - Side Mount Straights

4 GA	Universal	C2602T	Green
1-2 GA	Universal	C2607T	Pink
1/0	Universal	C2609T	Black
2/0	Universal	C2611T	Orange
3/0	Universal	C2613T	Purple



## Stud - Side Mount (Splice)

1/0	Universal	C2709T	Black
2/0	Universal	C2711T	Orange
3/0	Universal	C2713T	Purple



Exceeds SAE conductivity standards

High temperature PVC construction  
 rated at 190° F / 90° C.

## Medium Duty Starter

Wire Size	Color	Part No.
8-2	Black	7001B
	Red	7001R



## Alternator Caps

1-8-10	Black	7003B
	Red	7003R
6-2/0	Black	7703B
	Red	7703R



## Straight Covers

8-6	Black	7006B
	Red	7006R
1/0	Black	7007B
	Red	7007R
2/0	Black	7008B
	Red	7008R
3/0	Black	7109B
	Red	7109R



## Oval Covers

4/0	Black	5707B
	Red	5707R



## Eyelet Insulator

2-2/0	Black	5735B
	Red	5735R
2/0-3/0	Black	5736B
	Red	5736R



## Starter Eyelet Insulator

3/0	Red	7718R
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## Terminal Insulator

Wire Size	Width x Height (Inches)	Part No.
18-10	.48 x .70	7009R
	.55 x .75	7010R
	.73 x .87	7011R
.....		
8-1	.48 x .70	7012R
	.55 x .75	7013R
	.65 x .80	7014R
	.73 x .87	7015R
	.81 x .95	7016B
	.81 x .95	7016R
.....		
2-2/0	.81 x .95	7017R
	.87 x 1.05	7018R
	.95 x 1.13	7019B
	.95 x 1.13	7019R
	1.20 x 1.40	7020R



## Universal Marine Cap

This cap will swivel to accommodate the cable direction. For use with single or multiple cables up to 19mm (0.75")

4/0	7024R
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Nuts and Bolts A. 5/16" x 18 x 1 1/4" - Standard for Above Parts

Nuts and Bolts B. 5/16" - 18 x 1 1/2"



### Slimlines - 18 lb Tensile Strength

	Width	Tensile Strength	Clear Part No.	Black Part No.
4	.100	18	20564	20564B
5.5	.100	18	20561	20561B
8	.100	18	20565	20565B

### Intermediate - 40 lb Tensile Strength

5.5	.140	40	20562	20562B
8.5	.140	40	20563	20563B

### Standard - 50 lb Tensile Strength

7	.190	50	20568	20568B
11	.190	50	20566	20566B
14.5	.190	50	20567	20567B

### Heavy Duty - 120 - 175 lb Tensile Strength

14.5	.300	120	20567X	20567XB
17.7	.350	120		20588XB
24	.350	175	20559X	20559XB
36	.350	175	20560X	20560XB

### Mount Head - 50 lb Tensile Strength

7.5	.190	50	20557	20557B
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### Releasable Tie

- Part # 20536 5" 50LB Release Clear
- Part # 20536B 5" 50LB Release Black
- Part # 20537 8" 50LB Release Clear
- Part # 20537B 8" 50LB Release Black
- Part # 20538 11" 50LB Release Clear
- Part # 20538B 11" 50LB Release Black
- Part # 20539 14" 50LB Release Clear
- Part # 20539B 14" 50LB Release Black

### Cable Tie Cutter

Part No.  
20710



### Heavy Duty Cable Tie Tool

Part No.  
20708

- Recommended use for 120-175 Lb. Wire Ties



### Cable Tie Tool

Part No. 20609

- Automatically cuts excess cable ties flush
- Adjustable tension settings
- Recommended use for 18-50 Lb. Wire Ties



### Adhesive Mount

Size	Color	Part No.
3/4 x 3/4	Clear	23060
3/4 x 3/4	Black	23060B
1 x 1	Clear	23061
1 x 1	Black	23061B



## Battery Cables

Battery Cable is the OEM standard. Our battery cable meets or exceeds standards established by the Society of Automotive Engineers, (SAE). Battery cable, insulated with PVC, is flame retardant & resistant to fuel, oil, acid and salt. 50 volts



Gauge	Color Coded Stripe	Battery Cable with PVC insulation		TRAILER CABLE	WIRE	FT	CONDUCTOR	COLOR
		Black	Red					
8	Gray	58008-25B	58008-25R	59124	12	100	4	BK,RD,BR,WH
6	Gray	58006-25B	58006-25R	59144-A	14	100	4	YL, RD, GR, BR
4	Gray	58004-25B	58004-25R	59144-B	14	100	4	WH, BR, YL, GR
2	Green	58002-25B	58002-25R	59144-C	14	100	4	BK, RD, BR, WH
1	Pink	58001-25B	58001-25R	59164-A	16	100	4	YL, RD, GR, BR
1/0	Black	58010-25B	58010-25R	59164-B	16	100	4	BK, RD, BR, WH
2/0	Orange	58020-25B	58020-25R	59126	12	100	6	RD, GR, BR, WH, BK, YL
3/0	Purple	58030-25B	58030-25R	59146-A	14	100	6	RD, BL, GR, YL, BR, BK
4/0	Yellow	58040-25B	58040-25R	59146-B	14	100	6	RD, GR, BR, WH, BK, YL
				59166-A	16	100	6	GR, BL, YL, BK, RD, BR
				59166-B	16	100	6	RD, GR, BR, WH, BK, YL
				59147	14	100	7	RD, GR, BR, WH, BK, YL, BL

## GPT Primary Wire - Stranded



**100 ft  
ROLL**

	8 GA	10 GA	12 GA	14 GA	16 GA	18 GA	20 GA
Purple		54100	54120	54140	54160	54180	
Black	54081	54101	54121	54141	54161	54181	54201
Orange		54102	54122	54142	54162	54182	
Green		54103	54123	54143	54163	54183	
White	54084	54104	54124	54144	54164	54184	
Brown		54105	54125	54145	54165	54185	
Pink		54106	54126	54146	54166	54186	
Red	54087	54107	54127	54147	54167	54187	54207
Blue		54108	54128	54148	54168	54188	
Yellow		54109	54129	54149	54169	54189	
Gray		541010	541210	541410	541610	541810	

80°C 60 Volt PVC Insulation

500 ft. and 1,000 ft. spools available on request

Made in the U.S.A.

### Recommended Uses

- 10 GA For generator, heater switch, air conditioner, meter & panel lights
- 12 GA Light switches & ignition switches
- 14 GA Horn button circuit, head lights, gas gauge to coil & cigarette lighter
- 16 GA Header leads, gas gauge, directionals, stop signal & generator to starter
- 18 GA Single, bulb, low amp circuits & clock

### Trailer Wire

(100 ft. Spools)

Wire Size	2 Conductor Black-Red
14	53142
16	53162
18	53182



### Jacketed Primary Wire

(100 ft. Spools)

Wire Size	2 Conductor Black-White
8	55082
10	55102
12	55122
14	55142
16	55162



### Trailer Wire

(100 ft. Spools)

Wire Size	3 Conductor Brown-Green-Yellow
14	53143
16	53163
18	53183



### Jacketed Primary Wire

(100 ft. Spools)

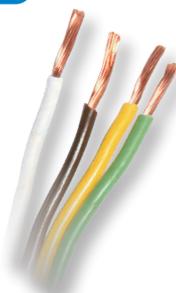
Wire Size	3 Conductor Black-Green-White
10	55103
12	55123
14	55143
16	55163



### Trailer Wire

(100 ft. Spools)

Wire Size	4 Conductor Brown-Green Yellow-White
14	53144
16	53164
18	53184



### Jacketed Primary Wire

(100 ft. Spools)

Wire Size	4 Conductor Black-Green Red-White
10	55104
12	55124
14	55144
16	55164



Recommended for RVs, boats and utility trailers.

Recommended for auto, truck, agriculture, construction and light marine applications. Heavy Duty flat PVC outer jacket is abrasion resistant and protects against moisture, oil, acid & salt.

## Finger Grip Connectors

Rated to 105°C (221°F) 600 volt max

Wire Size	Min.	Max	Part No.
18-10	2 #18	3 #12	20584*
18-8	3 #16	5 #12	20586*
18-8	3 #14 w/1 #18	3 #10	20588*
14-6	2 #10 w/1 #12	1 #8 w/3 #10	20589*
<i>For a wider range of coverage</i>			
22-8	3 #22	4 #12	20509*



## Screw On Connectors

Rated 105°C (221°F) 300/600 Volt Max.

Wire Size	Min.	Max	Part No.
22-14	2 #22	1 #16 w/1 #18	20501#
22-14	2 #22	3 #16	20502#
22-14	1 #18 w/ 1 #20	4 #16 w/ 1 #20	20503#
22-10	3 #20	2 #12 w/ 2 #14	20504#
22-10	3 #18	2 #20 w/2 #12	20506#



## Performance Plus Connectors

Rated 105°C (221°F) 300/600 Volt Max.  
 Replaces eight standard connectors

22-12	2 #22	2 #12	20540*
18-8	2 #18	2 #8	20541*
14-8	4 #14	5 #12	20542*



## Ceramic Connectors

Rated 1000°F Max. 600 V

22-14	1 #14 w/ 1 #16	2 #14	20543
22-10	3 #14	2 #10	20544
18-8	3 #14 w/ 3 #16	2 #8	20545



## Winged Grounding Connector

Color coded GREEN for quick identification as a grounding conductor for copper wire only.  
 Rated to 105°C (221°F) 1000 volt max

14-10	2 #14	5 #12	20583*
-------	-------	-------	--------



## IDC Connectors - Gel Filled

P/N	Photo	Wire Gauge	Max OD	How to use
20528 Yellow		(22-26 AWG)	1.52mm	
20527 Orange		(18-26AWG)	2.08mm	
20526 Red		(19-26AWG)	1.67mm	
20525 Red		(19-26AWG)	2.08mm	

## W/P Connector Kits

Part No.: 5990-34  
 34 pc. Aqua W/P Connector Kit  
 20580\* - 20 pc.  
 20581\* - 10 pc.  
 20582\* - 4 pc.

### Purchase Individually

20580 22-12 Orange W/P Connector  
 20581 22-8 Red W/P Connector  
 20582 14-6 Blue W/P Connector



# Instant Tap Connectors



**Rated 105°C 600 volts**

**75°C 300 volts**

20510   
 #20510UL import  
 22-18 with stop

20500   
 #20500J import  
 18-14 with stop

20512   
 #20512UL import  
 18-14 no stop

20511   
 #20511UL  
 12-10 with stop

**Flame Retardant**

#20517 no stop   
 #20529 with stop   
 18-14



WITH WIRE STOP



WITH NO WIRE STOP

Made in U.S.A

## T-Tap Connectors



**Rated 105°C 600 volts**

**Rated 105°C 600 volts**

20513  
 24-20

20514   
 #20514UL  
 22-16

20515   
 #20515UL  
 16-14

20516K  
 #20516UL  
 12-10

20514DB#  
 22-16

20515DB#  
 16-14

20516DB#  
 12-10



### IDC Connectors

Wire Size	Description	Part No.
22-14	Blue w/ Gel 3M 314 IMP	20518* 20518A#
22-14	Clear 3M 314U	20519+
22-16	Black w/Gel 3M 316IR	20520#



### Misc. Connectors

Wire Size	Description	Part No.
18-14 / 12-10	Brown Dual Tap 3M 902 IMP	20521* 20521A#
22-16 / 12-10	Red Dual Tap 3M 558 IMP	20555+ 20555A#
18-16	Blue Tap w/ Gel 3M 804 IMP	20522+ 20522A#
18-16	Bullet Style Tap .157 Male 3M 901 IMP	20523+ 20523A#
18-16	Auto Fuse Holder 3M 972 IMP	20524 20524A#

Tap Connector

## Fuse Puller

### Length Part No.

1.3" 90500  
 For Mini, Standard & Maxi Fuses



### Length Part No.

2" 90600  
 For Mini, Standard, Maxi Fuses & Glass Fuses



### Length Part No.

4.1" 90700  
 For Mini, Standard, Maxi Fuses & Glass Fuses



## Micro Fuse Low Profile

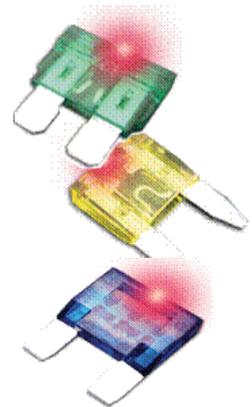
Amp	Color	Part No.
5	Tan	63205
7.5	Brown	63207
10	Red	63210
15	Blue	63215
20	Yellow	63220
25	Clear	63225
30	Green	63230



## LED Fuses

### Mini Led Fuse

Part No.	Color	Amp
65002	Gray	2
65003	Violet	3
65004	Pink	4
65005	Tan	5
65007	Brown	7.5
65010	Red	10
65015	Blue	15
65020	Yellow	20
65025	Clear	25
65030	Green	30



### Mini Fuse

Amp	Color	Part No.
2	Gray	63002
3	Violet	63003
4	Pink	63004
5	Tan	63005
7.5	Brown	63007
10	Red	63010
15	Blue	63015
20	Yellow	63020
25	Clear	63025
30	Green	63030



### Standard Fuse

Amp	Color	Part No.
1	Black	63101
2	Grey	63102
3	Violet	63103
4	Pink	63104
5	Tan	63105
7.5	Brown	63107
10	Red	63110
15	Blue	63115
20	Yellow	63120
25	Clear	63125
30	Green	63130
35	Purple	63135
40	Orange	63140

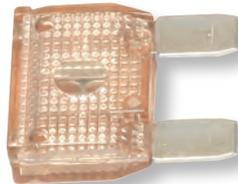


### Standard Led Fuse

Part No.	Color	Amp
65102	Gray	2
65103	Violet	3
65104	Pink	4
65105	Tan	5
65107	Brown	7.5
65110	Red	10
65115	Blue	15
65120	Yellow	20
65125	Clear	25
65130	Green	30

### Maxi Fuse

Amp	Color	Part No.
20	Yellow	63420
30	Green	63430
40	Orange	63440
50	Red	63450
60	Blue	63460
70	Brown	63470
80	Clear	63480
100	Violet	63490



## Micro2 Blade Type Fuses

Amp	Color	Part No.
5	Tan	66205
7.5	Brown	66207
10	Red	66210
15	Blue	66215
20	Yellow	66220
25	Clear	66225
30	Green	66230



## Micro3 Blade Type Fuses

Amp	Color	Part No.
5	Tan	67305
7.5	Brown	67307
10	Red	67310
15	Blue	67315



## Mini Fuse Holder w/ 12" wire

Wire Range	Part No.
12GA - Rated to 30 Amp	90012
14GA - Rated to 20 Amp	90014
16GA - Rated to 10 Amp	90016
18GA - Rated to 5 Amp	90018



## Standard Holder w/ 12" wire

12GA - Rated to 30 Amp	90312
14GA - Rated to 20 Amp	90314
16GA - Rated to 10 Amp	90316
18GA - Rated to 5 Amp	90318



## Standard Holder w/ 8" wire

10GA - Rated to 40 Amp	90110
12GA - Rated to 30 Amp	90112
14GA - Rated to 20 Amp	90114
16GA - Rated to 10 Amp	90116
18GA - Rated to 5 Amp	90118



## Maxi Fuse Holder w/ 12" wire

8GA - Rated to 60 Amp	90408
10GA - Rated to 40 Amp	90410



## Standard Holder w/ 12" wire

10GA - Rated to 40 Amp	90210
12GA - Rated to 30 Amp	90212
14GA - Rated to 20 Amp	90214
16GA - Rated to 10 Amp	90216
18GA - Rated to 5 Amp	90218



## Add-A-Circuit

Mini Fuse 16 Ga 10 Amp	90515
Standard Fuse 16 Ga 10 Amp	90516
Micro2 16 Ga 10 Amp	99510
Micro3 16 Ga 10 Amp	99516
Low Profile 16 Ga 10 Amp	99515



## Micro2 Blade Fuse Holder

12GA - Rated to 30 Amp	99230
14GA - Rated to 20 Amp	99220
16GA - Rated to 10 Amp	99210
18GA - Rated to 5 Amp	99205



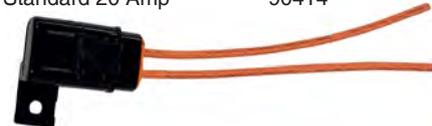
## Micro3 Blade Fuse Holder

14GA - Rated to 20 Amp	99314
16GA - Rated to 10 Amp	99316



## Waterproof Fuse Holders w/12" wire

12GA - W/P Mini 30 Amp	90512
14GA - W/P Mini 20 Amp	90514
12GA - W/P Standard 30 Amp	90412
14GA - W/P Standard 20 Amp	90414



## Split Loom

I.D. Size	Part No.
1/4" X 25,000 FT	56014
1/4" X 1000 FT	56014-1M
1/4" X 50 FT	56014-50
1/4" X 500 FT	56014-5C
1/4" X 100 FT	56014-C
1/4" X 100 FT BOX	56014-CBOX
3/8" X 15,000 FT	56038
3/8" X 1,000 FT	56038-1M
3/8" X 50 FT	56038-50
3/8" X 500 FT	56038-5C
3/8" X 100 FT	56038-C
3/8" X 100 FT BOX	56038-CBOX
1/2" X 8,500 FT	56050
1/2" X 1,000 FT	56050-1M
1/2" X 50 FT	56050-50
1/2" X 500 FT	56050-5C
1/2" X 100 FT	56050-C
1/2" X 100 FT BOX	56050-CBOX
5/8" X 6,000 FT	56058
5/8" X 50FT	56058-50
5/8" X 500FT	56058-5C
5/8" X 100 FT	56058-C
5/8" X 100FT BOX	56058-CBOX
3/4" X 4,200 FT	56075
3/4" X 1,000FT	56075-1M
3/4" X 50 FT	56075-50
3/4" X 500FT	56075-5C
3/4" X 100FT	56075-C
3/4" X 100FT BOX	56075-CBOX
7/8" X 3,000 FT	56085
1" X 3,000 FT	56100
1" X 25FT	56100-25
1" X 50FT	56100-50
1" X 100FT	56100-C
1" X 100FT BOX	56100-CBOX
1 1/4" X 1,800FT	56125
1 1/4" X 100FT	56125-C
1 1/2" X 1,800FT	56150
1 1/2" X 100FT	56150-C
2" X 100FT	56200-C

- Provides a Neat Appearance
- Insulates and Protects Wire
- Easy Insulation
- Polyethylene
- -40° to +185° F



## Spiral Wrap

I.D. Size	Part No.
1/8"	57012
1/4"	57025
3/8"	57038
1/2"	57050
3/4"	57075
1"	57100

- Insulates and Protects Wire
- Bundle Multiple Wires For A Neat Installation
- Wires Can Be Fed Through The Wrap To Different Locations



100ft SPOOL

## Cutting Tools

Part No.	Description
20774	Cutting Tool for Loom & Wrap
10774	Replacement Blade



## Accessories

Part No.	Description
73181	Solder - 16 oz. spool, 1/8" dia. 40/60 tin/lead
73183	Solder Flux - 4 oz. zinc chloride solder paste flux
73185	Quick Flux - Cleans and prepares surface
73187	Dielectric Grease - 5oz. Tube
73188	Dielectric Grease - 2 gram pillow pack



## Solder Pellets

Pre-measured solder pellets ensure the right amount of solder for each connection

Part Number	Wire Size	Color Stripe
SP-6	6 GA	Grey
SP-4	4 GA	Grey
SP-2	2 GA	Green
SP-1	1 GA	Pink
SP-1-0	1/0	Black
SP-2-0	2/0	Orange
SP-3-0	3/0	Purple
SP-4-0	4/0	Yellow

## Miscellaneous Tools

### Wire Stripper

Wire Size	Length	Lbs.	Part No.
26-10	8"	.66#	20604



### Cable Cutter

Wire Size	Length	Lbs.	Part No.
20-4/0	8"	.66#	20605



### Cutter/Stripper

Size	Length	Lbs.	Part No.
24-12	5"	.16#	20607



### QuickStip Cable Stripper

Part No.	Features
20706	<ul style="list-style-type: none"> <li>• Strips up to 4/0 gauge</li> <li>• Includes spare blade</li> <li>• Only 5 1/2" long</li> </ul>



### Nylon Clamps

Screw Size	Max Bundle	Part Number
8	.12	23427
8	.25	23429
8	.50	23434



### Steel Cushioned Clamps

Screw Size	Max Bundle	Part Number
1/4	.250	23436#
1/4	.375	23438
1/4	.500	23440
1/4	.625	23441
1/4	.750	23443
1/4	.875	23442
1/4	1.00	23444
1/4	1.25	23445



## Ratchet Controlled

Gives the same results whenever you use them



20591\*  
 Non-Insulated 22-8 ga.  
 Length 10.8" Lbs. 1#



20592\*  
 Insulated 22-14 ga.  
 Length 9.7" Lbs. 1.1#



20593\*  
 Insulated 12-10 ga.  
 Uninsulated 8 ga.  
 Length 12.8" 2.02#



20594  
 Insulated 22-18 & 16-14  
 Flags Part # 20188 & 20189



20595  
 Insulated 22-10 Female QDC  
 Length 8.875" Lbs. 1.2#



20700  
 Insulated 22-10 ga. Female  
 Length 9" Lbs. 1.2#



20608Y (yellow)  
 20608R (red)  
 Insulated 22-10 ga.  
 Length 9.5" Lbs. 1.27#



TR-490  
 Insulated & Non-Insulated 22-10 ga.  
 Nylon, Vinyl, Butted, or Brazed



20704 Insulated Flag 16-10 ga.    20705 Insulated Flag 22-14 ga.    20713 Non-Insulated Flag 22-14 ga.



20709  
 Closed End Connectors 22-10 ga.

\* UL & CSA listed tools with Hillsdale's Terminals

## Hand Crimpers



**20600**  
 Upfront Stripper  
 22-10 ga.  
 Length 9.25" Lbs. 1.3#



**22601**  
 Upfront Crimper  
 26-8 ga.  
 Length 8.25" Lbs. .72#



**20597**  
 Crimper  
 22-10 ga.  
 Length 9" Lbs. .7#



**20716**  
 Multi-Function Crimping Tool  
 Cuts/Strips/Crimps  
 22-10 ga.  
 Non and Insulated Terminals, Flag Terminals, Bolts,  
 W/ Pliar Tip and Spring Loaded Handle  
 Length 8-5/8"



**20717**  
 3 Pc. Tool  
 22-10 ga.



**20603**  
 Econo Crimper  
 22-10 ga.  
 Length 7.5" Lbs. .66#

## Heat Shrink Torches & Tools



**20606**  
 Mini Torch  
 Refillable Lighter  
 Electronic Igniter



**20590**  
 Butane Torch  
 Interchangeable Tips  
 120 min. of operation



**20596**  
 Heat Shrink Insulated  
 Ratchet Controlled Crimper  
 20-8 ga.  
 Length 11" Lbs. 1.2#



**20715**  
 Heat Shrink Butt Connectors  
 Ratchet Controlled Crimper  
 22-8 ga.  
 Length 9" Lbs. 1.2#

## HexCrimp Sr.™

- |                   |  |
|-------------------|--|
| Part No.<br>20701 | <ul style="list-style-type: none"> <li>• Hand-held 26" overall length</li> <li>• Crimps all major brands of connectors</li> <li>• 8 GA - 250 mcm</li> <li>• Made in USA</li> </ul> |
|-------------------|--|



## Quick Cutter 2™

- |                   |  |
|-------------------|--|
| Part No.<br>20703 | <ul style="list-style-type: none"> <li>• Cuts cable up to 250 MCM (6/0GA)</li> <li>• 22" handles for easier cutting</li> <li>• Blades made of 1075 carbon steel, heat treated for long life can be resharpened</li> <li>• Made in USA</li> </ul> |
|-------------------|--|



## The Crimp Master

- |                   |   |
|-------------------|---|
| Part No.<br>20599 | <ul style="list-style-type: none"> <li>• 24" Length</li> <li>• Crimps 8 - 4/0</li> <li>• Triangular crimp</li> <li>• Made in USA</li> </ul> |
|-------------------|---|



## 6-2 Ga. UL Tool

- |                     |  |
|---------------------|--|
| Part No.<br>6220CT* | <ul style="list-style-type: none"> <li>• 18" Length</li> <li>• Crimps 6-2 ga.</li> <li>• Uninsulated</li> <li>• Made in the USA</li> </ul> |
|---------------------|--|



## Brute Hammer Crimper

- |                   |  |
|-------------------|--|
| Part No.<br>20707 | <ul style="list-style-type: none"> <li>• Inexpensive, simple crimping tool</li> <li>• Use with hammer or vise</li> <li>• Crimps 8 thru 4/0 gauge connectors</li> <li>• Spring loaded pin locks in "up" position for loading connector and cable, when released pin holds connector securely during crimping</li> </ul> |
|-------------------|--|



### Bare Seamless

Wire Size	Part No.
22-18	10647
16-14	10648
12-10	10649
8	10650
6	10651
4	10652
2	10653



\*Only one crimp needed to complete splice



### 2 Pc. Nylon

Wire Size	Part No.
22-18	20647N
16-14	20648N
12-10	20649N
8	20650N
6	20651N



### Vinyl Insulated

22-18	20647
16-14	20648
12-10	20649
8	20650



### Heat Shrink

22-18	40647
16-14	40648
12-10	40649
8	40650



# Adapters

### Double Male Single Female Brass

10664^  
10664 PLTD



### 3-Way Adapter Brass

10665  
10665 Plated



### Chair Adapter Brass

10667



### 2-Way Bullet Receptacle

10668



### Insulated Double Male 75°C 300 volts

10670  
10670-L



### Insulated Triple Male 75°C 300 volts max

10671



### ATO Fuse Tap Brass

10672  
10672-mini



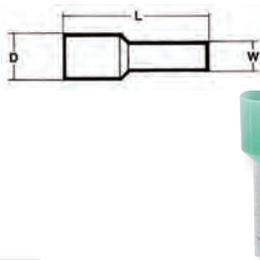
### Glass Fuse Tap Brass

10673



All Adapters have .250 tabs, except the 2-Way Bullet Receptacle which has a .157 Tab

# Ferrule Wire Ends



Wire Size	Color	Part No.	Dimensions
22	White	10822+	.551 x .051 x .122
20	Blue	10820+	.551 x .061 x .130
18	Red	10818+	.551 x .061 x .138
16	Black	10816+	.551 x .083 x .157
14	Gray	10814+	.551 x .102 x .185
12	Orange	10812+	.669 x .134 x .213
10	Green	10810+	.787 x .161 x .272
6	Blue	10806^	

\* Copper Ferrule with nylon insulation  
 Temp Range - 40° c up to 105° c



Crimps 22-10  
 Part # 20598  
 Length 9.3"

## The MCTM-101



Our mylar tape fed products are universally spaced and can be applied with the MTCM - 101 and other standard electric applications.

The MCTM - 101 is heavy duty, durable and simple to operate. Powered by 85-100 PSI air pressure and 110 VAC. Fully automatic and foot actuated.

The MCTM - 101 machine comes with three sets of dies. One set for each size: 22-18, 16-14 and 12-10 gauge. Each die crimps bare, vinyl, and heat shrink.

**8 ga. die available**

MTCM-101		22-8 GA MYLAR TAPE CRIMP MACHINE
MTCM-102	1 SET (2 PCS)	22-18 U/I CRIMP DIES DIMPLE CRIMP OPTION
MTCM-103	1 SET (2 PCS)	16-14 U/I CRIMP DIES DIMPLE CRIMP OPTION
MTCM-104	1 SET (2 PCS)	12-10 U/I CRIMP DIES DIMPLE CRIMP OPTION
MTCM-109	1 SET (4 PCS)	22-18 INS CRIMP DIES - OEM
MTCM-110	1 SET (4 PCS)	16-14 INS CRIMP DIES - OEM
MTCM-111	1 SET (4 PCS)	12-10 INS CRIMP DIES - OEM
MTCM-112	1 SET (4 PCS)	12-10 FULLY INS CRIMP DIES
MTCM-113	1 SET (4 PCS)	8 GA V/I CRIMP DIES
MTCM-114	1 SET (2 PCS)	8 GA U/I HEX CRIMP DIES

**FOR SPARE PARTS PLEASE CALL**

## Machine Specifications:



- Most rings, spades and butt connectors can be ordered by adding "MT" as a suffix. Call customer service with questions.

Weight 70 Lbs.  
 Air: 1/4" NPT Inlet  
 Stroke Rate: 1000 SPH  
 Foot Pedal: Momentary switch. 5ft. cord  
 Dimensions: 12" Wide - 20" Deep - 17"  
 Height Electrical: 110V 5 ft. grounded standard plug  
 Reel Size: 14" outside dia reel with 3/4" core  
 Built in counter  
 Operates with PLC programmable controller  
 Buzzer to alert operator of machine malfunction  
 Index feature for single or double spaced terminals

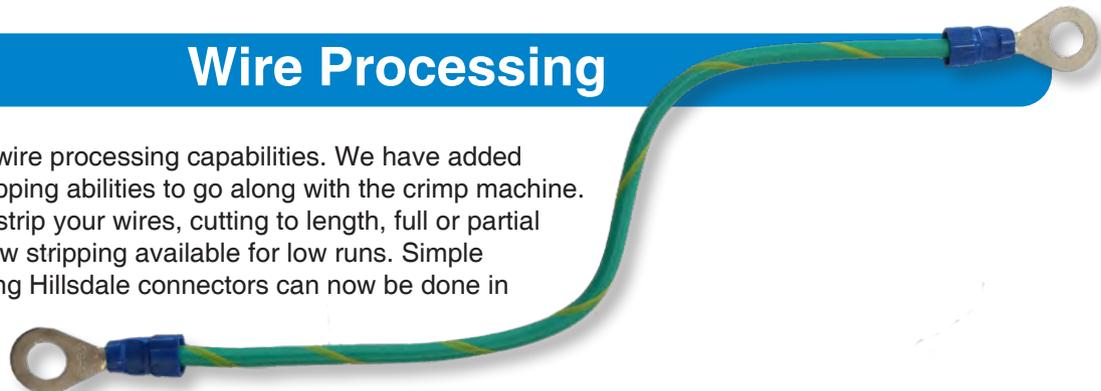
## Vinyl Electrical Tape



<u>Length</u>	<u>Description</u>	<u>Part No.</u>	<u>Length</u>	<u>Description</u>	<u>Part No.</u>
3/4 x 60'	Black 7 mil	TAPE-BK	3/4 x 60'	White 7 mil	TAPE-WH
3/4 x 60'	Blue 7 mil	TAPE-BL	3/4 x 60'	Yellow 7 mil	TAPE-YL
3/4 x 60'	Green 7 mil	TAPE-GN	3/4 x 60'	Brown 7 mil	TAPE-BR
3/4 x 60'	Orange 7 mil	TAPE-OR	3/4 x 66'	3M Super 33 7 mil	TAPE-33
3/4 x 60'	Red 7 mil	TAPE-RD	3/4 x 66'	3M Super 88 8.5 mil	TAPE-88

## Wire Processing

Call about our wire processing capabilities. We have added cutting and stripping abilities to go along with the crimp machine. Let us cut and strip your wires, cutting to length, full or partial strip and window stripping available for low runs. Simple harnesses, using Hillsdale connectors can now be done in house.





**65 PC Heat Shrink Assortment**  
 Part # 5990-65 7 x 3.5"

- 10 pcs. - 16-14 & 22-18 Butt Splice
- 5 pcs. - 12-10 Butt Splice
- 5 pcs. - 22-18, 16-14 & 12-10 Ring 10
- 5 pcs. - 22-18, 16-14 & 12-10 Spade 10
- 5 pcs. - 16-14 .250 QDC M/F



**140 PC Heat Shrink Butt Connector Kit**  
 Part # 5990-140 8 x 4.5"

- 50 pcs. - 22-18 butt
- 75 pcs. - 16-14 butt
- 15 pcs. - 12-10 butt



**68 PC Heat Shrink Tubing Kit**  
 Part # 5990-68 8 x 4.5"

- 20 pcs. - Red 3/16" x 1.5"
- 20 pcs. - Blue 1/4" x 1.5"
- 10 pcs. - Yellow 5/16" x 1.625"
- 10 pcs. - Red 3/8" x 1.875"
- 5 pcs. - Black 3/8" x 2"
- 3 pcs. - Black 1/2" x 3"



**38 PC Heat Shrink Tubing Kit**  
 Part # 5990-38 11 x 6.5"

- 10 pcs. - Red 3/16"
- 10 pcs. - Blue 1/4"
- 5 pcs. - Yellow 5/16"
- 5 pcs. - Black 3/8"
- 5 pcs. - Black 1/2"
- 3 pcs. - Black 3/4"



18 x 12"



9 x 13"

**480 PC Assortment Kit**  
 Vinyl or Heat Shrink  
 Part # 5990-480VP = Vinyl Plastic Kit  
 Part # 5990-480VM = Vinyl Metal Kit  
 Part # 5990-480HSP = Heat Shrink Plastic Kit  
 Part # 5990-480HSM = Heat Shrink Metal Kit

- 20 pcs. - 22-18, 16-14 & 12-10 Butt
- 20 pcs. - 22-18, 16-14 & 12-10 Spades #10
- 20 pcs. - 22-18 Rings #10, 1/4, 5/16 & 3/8
- 20 pcs. - 16-14 Rings #10, 1/4, 5/16 & 3/8
- 20 pcs. - 12-10 Rings #10, 1/4, 5/16 & 3/8
- 20 pcs. - 22-18, 16-14 & 12-10 .250 QDC M/F



**706 PC Heat Shrink Kit w/ Ratchet Tool**  
 Part # 5990-706 18.5" x 12"

- 50 pcs. - 22-18 & 16-14 butt
- 30 pcs. - 12-10 butt
- 15 pcs. - 8 ga. butt
- 10 pcs. - Rings 22-18, 16-14, 12-10, Stud Sizes 6, 8, 10, 1/4, 5/16, 3/8
- 15 pcs. - Rings 8 ga., #10, 3/8
- 10 pcs. - Spades 22-18, 16-14, 12-10, Stud Sizes 6, 8, 10
- 25 pcs. - QDC Male & Female .250, 22-18, 16-14, 12-10
- 15 pcs. - 16-14 Male & Female .157
- 10 pcs. - QDC Male & Female .250, Fully Insulated, 22-18, 16-14, 12-10
- 10 pcs. - Step Down butts, 16-14 to 22-18, 12-10 to 16-14
- 1 - Ratchet Tool (Part No.- 20596)
- 4 - Crimp Nest



**190 PC Closed End Connector Kit**  
 Part No.: 5990-190

- 20569 - 100 pc.
- 20570 - 60 pc.
- 20571 - 20 pc.
- 20572 - 10 pc.



**76 PC Closed End Connector Kit**  
 Part No.: 5990-76

- 20569 - 40 pc.
- 20570 - 20 pc.
- 20571 - 10 pc.
- 20572 - 6 pc.





**100 PC Mini Fuse Kit**  
 Part # 5990-100 7 x 3.5"

- 20 pcs. - 10 amp
- 10 pcs. - 3, 4, 5, 7.5, 15, 20, 25 & 30 amp



**60 PC Standard Fuse Kit**  
 Part # 5990-60 7 x 3.5"

- 10 pcs. - 25 amp
- 5 pcs. - 3, 4, 5, 7.5, 10, 15, 20, 30, 35 and 40 amp



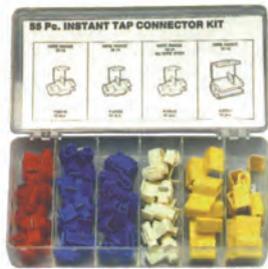
**20 PC Maxi Fuse Kit**  
 Part # 5990-20 7 x 3.5"

- 2 pcs. - 30, 70, 80 & 100 amp
- 4 pcs. - 40, 50 & 60 amp



**130 PC Micro Fuse Low Profile Kit**  
 Part # 5990-130

- 10 pcs. - 5 & 7.5 amp
- 20 pcs. - 10, 15, 25 & 30 amp
- 30 pcs. - 20 amp



**55 PC Instant Tap Connector Kit**  
 Part # 5990-55 8 x 4.5"

- 10 pcs. - 22-18 Red
- 25 pcs. - 18-14 Blue
- 10 pcs. - 18-14 White
- 10 pcs. - 12-10 Yellow



**120 PC Screw On Connector Kit**  
 Part # 5990-120 8 x 4.5"

- 40 pcs. - 22-16 Grey
- 30 pcs. - 22-14 Blue
- 20 pcs. - 22-14 Orange
- 15 pcs. - 18-12 Yellow
- 10 pcs. - 18-10 Red
- 5 pcs. - 14-8 Grey



**180 PC Solderless Quick Connector Kit**  
 Part # 5990-180 11 x 6.5"

- 10 pcs. ea. of the following:
- 22-18 & 16-14 .250 N/I Flag
- 22-18 & 16-14 .250 V/I Male
- 22-18 & 16-14 .110, .187, .205 & .250 V/I Female
- 22-18 & 16-14 .250 Fully Insulated Male & Female
- 12-10 .250 V/I Male & Female



**175 PC Assortment**  
 Part # 5990-175N = Nylon  
 Part # 5990-175V = Vinyl  
 11 x 6.5"

- 4 pcs. - 12-10 Butt Splice
- 11 pcs. - 16-14 Butt Splice
- 11 pcs. - 22-18 Butt Splice
- 4 pcs. - 12-10 Rings #10 & 3/8
- 11 pcs. - 16-14 Rings #6, #8 & #10
- 9 pcs. - 16-14 Ring 1/4
- 11 pcs. - 16-14 Spades #6, #8 & #10
- 11 pcs. - 16-14 .250 QDC Male & Female
- 11 pcs. - 22-18 Ring #10
- 11 pcs. - 22-18 Spades #6 & #10
- 11 pcs. - 22-18 .250 QDC Female



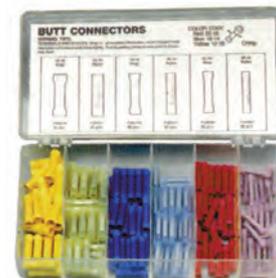
**240 PC Terminal Kit with Tool**  
 Part # 5990-240N = Nylon  
 Part # 5990-240V = Vinyl  
 11 x 6.5"

- 1 pc. - Economy Crimper (Part No.- 20603)
- 20 pcs. - 12-10 Butt Splice
- 20 pcs. - 16-14 Butt Splice
- 20 pcs. - 22-18 Butt Splice
- 10 pcs. - 12-10 Rings #8, #10, 5/16 & 3/8
- 10 pcs. - 12-10 Spades #6 & #10
- 10 pcs. - 16-14 Rings #6 & #10
- 10 pcs. - 16-14 Spades #6 & #10
- 10 pcs. - 16-14 .250 QDC Male & Female
- 10 pcs. - 22-18 Rings #6 & #10
- 10 pcs. - 22-18 Spades #6 & #10
- 10 pcs. - 22-18 .250 QDC Male & Female



**2400 PC Starter Kit**  
 Part # 5990-2400N = Nylon  
 Part # 5990-2400V = Vinyl  
 Metal Box 18.5 x 12"

- 100 pcs. - 22-18 Rings, Stud Size #8, 10, 1/4, 5/16
- 100 pcs. - 16-14 Rings #10, 1/4, 5/16, 3/8
- 100 pcs. - 12-10 Rings #10, 1/4, 5/16, 3/8
- 100 pcs. - 22-18, 16-14, 12-10 Butt
- 100 pcs. - 22-18, 16-14, 12-10 Spade #10
- 100 pcs. - 22-18, 16-14, 12-10 Male 1/4
- 100 pcs. - 22-18, 16-14, 12-10 Female 1/4



**170 PC Butt Connector Kit**  
 Part # 5990-170 7 x 3.5"

- 25 pcs. - 12-10 Vinyl & Nylon
- 30 pcs. - 16-14 Vinyl & Nylon
- 30 pcs. - 22-18 Vinyl & Nylon



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