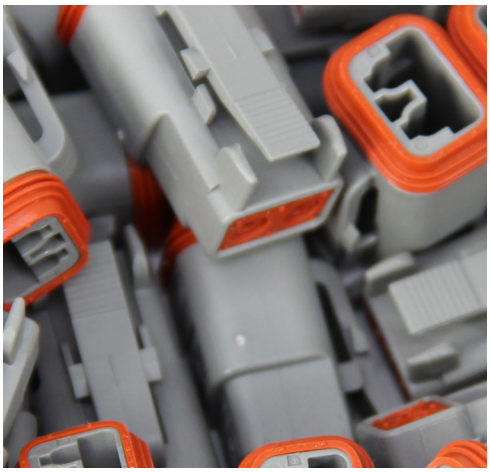
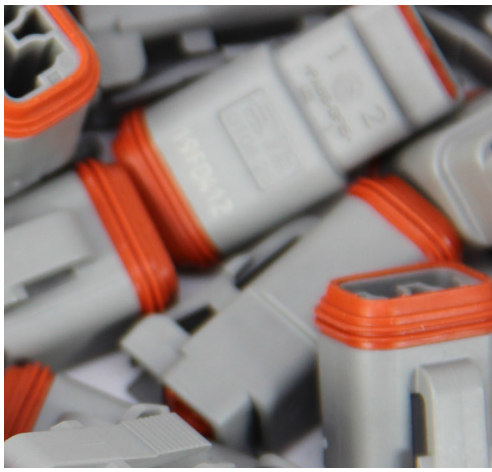
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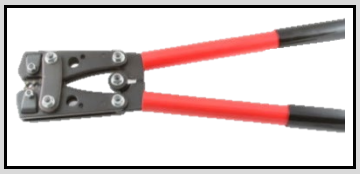
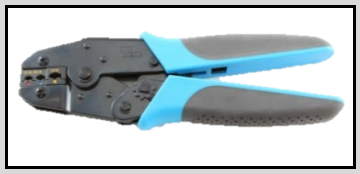
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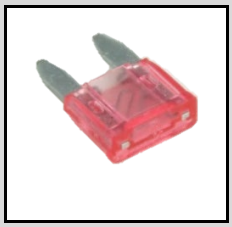
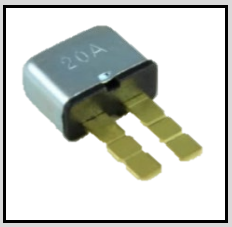




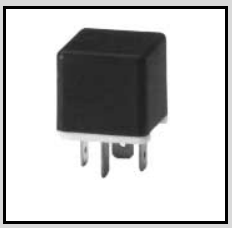









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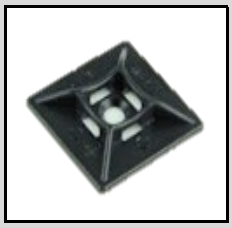
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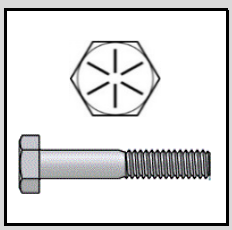














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Butt Splice Terminals

Butt Splice Terminals

Connects two wires together. Insert wires on each end until they reach the built-in wire stop in the center. Two crimps are required, one for each wire. **Compact** splices, also known as parallel splices, are 25-50% shorter than standard butt splices. Wires lie side by side within the terminal to save space and installation time. The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. The **nylon** insulation provides greater durability. It also allows you to see the wires in the splice to ensure a proper crimp. The **heavy duty** butt splices have extra thick walls for the most demanding applications. They are also extra long so you can double crimp for a better electrical connection.

Non-Insulated





Wire Size (AWG)	Standard	Pkg. Qty.	Compact	Pkg. Qty.	Heavy-Duty	Pkg. Qty.
26-22	MB-B	100	MB-P	100	-------	----
22-18	AB-B	100	AB-P	100	-------	----
16-14	BB-B	100	BB-P	100	-------	----
12-10	CB-B	100	CB-P	50	-------	----
8	DB-B	25	DB-P	25	DB-B-HD	10
6	EB-B	10	EB-P	10	EB-B-HD	5





Wire Size (AWG)	Standard	Pkg. Qty.	Compact	Pkg. Qty.	Heavy-Duty	Pkg. Qty.
4	FB-B	10	FB-P	10	FB-B-HD	5
2	GB-B	10	GB-P	10	GB-B-HD	1
1/0	HB-B	10	HB-P	10	HB-B-HD	1
2/0	JB-B	5	JB-P	10	JB-B-HD	1
3/0	KB-B	5	-------	----	KB-B-HD	1
4/0	LB-B	5	LB-P	5	LB-B-HD	1

Vinyl Insulated




Wire Size (AWG)	Color	Standard	Pkg. Qty.	Compact	Pkg. Qty.
22-18	Red	AP-B	100	AP-P	100
16-14	Blue	BP-B	100	BP-P	50
12-10	Yellow	CP-B	100	CP-P	50
8	Red	DP-B	25	-------	----




Wire Size (AWG)	Color	Standard	Pkg. Qty.	Compact	Pkg. Qty.
6	Blue	EP-B	10	-------	----
4	Yellow	FP-B	10	-------	----
2	Red	GP-B	10	-------	----

Nylon Insulated







Wire Size (AWG)	Color	Standard	Pkg. Qty.	Compact	Pkg. Qty.	Heavy Duty	Pkg. Qty.	Window Splices	Pkg. Qty.	Grease Filled	Pkg. Qty.
26-24	Yellow	MN-B	50	-------	----	-------	----	-------	----	-------	----
22-18	Red	AN-B	100	AN-P	50	AN-B-HD	25	AN-B-MS	25	AN-GB	10
16-14	Blue	BN-B	100	BN-P	50	BN-B-HD	25	BN-B-MS	25	BN-GB	25
12-10	Yellow	CN-B	50	CN-P	50	CN-B-HD	10	CN-B-MS	10	CN-GB	10

Step-Down Butt Splice Terminals

Use step-down terminals to connect two different wire sizes and to connect two wires to one wire. The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. **Heat-shrink** butt splices are for use in harsh the environments. A **heavy duty** heat-shrink jacket makes it difficult to cut into these heat-shrink terminals during the crimping process.






Wire Size Range (AWG)			Non-Insulated	Pkg. Qty.	Color	Vinyl	Pkg. Qty.	Heat-Shrink	Pkg. Qty.	Heavy Duty Heat-Shrink	Pkg. Qty.
26-24	to	22-18	HD-10315	50	Red	-------	----	HD-20315	50	-------	----
22-18	to	16-14	BB-BA	25	Blue	BP-BA	10	BS-BA	10	BSN-BA	10
22-18	to	12-10	HD-10320	10	Blue	HD-20320	10	-------	----	-------	----
16-14	to	12-10	CB-BB	10	Yellow	CP-BB	25	CS-BB	10	CSN-BB	10
16-14	to	8	HD-10321	10	Red	HD-20321	1	-------	----	-------	----
12-10	to	8	DB-BC	10	Red	DP-BC	10	DS-BC	5	DSN-BC	10
8	to	6	EB-BD	10	Blue	EP-BD	10	-------	----	-------	----

Heat-Shrink Butt Splice Terminals

For use in harsh environments. These terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat.

The **heavy duty** heat-shrink jacket makes it difficult to cut into these heat-shrink terminals during the crimping process, a common problem with basic heat-shrink terminals.

Use the **grease filled** terminals for sensitive environments where heat tools are restricted.

The **cool seal** terminal's gel is activated when the wire is inserted for a heat shrink like result, but requiring no heat. Simply strip, insert and crimp.

Solder splices have a transparent sleeve for simple installation and inspection. They have an open barrel with flux solder and an adhesive lined heat-shrink sleeve.

The **solder and crimp** butt splices are the most secure connection available. Requires one crimp on each end plus heat.










Wire (AWG)	Color	Standard	Pkg. Qty.	Heavy Duty	Pkg. Qty.	Economy	Pkg. Qty.	Cool Seal	Pkg. Qty.	Solder	Pkg. Qty.	Solder and Crimp	Pkg. Qty.
26-24	Yellow	MS-B	25	MSN-B	25	-------	----	-------	----	MSS-B	25	-------	----
22-18	Red	AS-B	25	ASN-B	25	AS-BE	25	ACS-B	10	ASS-B	10	ASSC-B	10
16-14	Blue	BS-B	25	BSN-B	25	BS-BE	25	BCS-B	10	BSS-B	10	BSSC-B	10
12-10	Yellow	CS-B	25	CSN-B	25	-------	----	CCS-B	10	CSS-B	10	CSSC-B	10
8	Red	DS-B	10	DSN-B	5	-------	----	-------	----	-------	----	-------	----

High Temperature Butt Splice Terminals

Steel construction and nickel plating provide reliable electrical connections at temperatures up to 900°F. Connects two wires together. Insert wires on each end until they reach the built-in wire stop in the center. Two crimps are required, one for each wire.

Wire Size (AWG)		Pkg. Qty.
22-18	AH-B	100
16-14	BH-B	100
12-10	CH-B	50



3-Way & 4-Way Terminals

Securely connects multiple wires with one terminal. Constructed of three or four ring terminals riveted together through the stud holes.

The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. Requires one crimp per wire.

The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely. The nylon insulation also prevents incidental metal to metal contact that can cause shorts. Requires two crimps (terminal to wire strands, terminal to insulation of wire).

Use **heat-shrink** in harsh environments, these terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal.

A **heavy duty** heat-shrink jacket makes it very difficult to cut into these heat-shrink terminals during the crimping process, a common problem with basic heat-shrink terminals. If, in a rare instance, you do pierce the jacket, during the heat-shrink process the jacket will heal itself and fill in the hole with sealant. This is the highest quality line of heat-shrink terminals available.

3-Way Terminals







Wire Size (AWG)	Non-Insulated	Pkg. Qty.	Color	Vinyl Insulated	Pkg. Qty.	Nylon Insulated	Pkg. Qty.	Heat-Shrink	Pkg. Qty.	Heavy Duty Heat-Shrink	Pkg. Qty.
22-18	HD-10400	10	Red	AP-Y	25	AN-Y	25	AS-Y	5	ASN-Y	10
16-14	BB-Y	10	Blue	BP-Y	25	BN-Y	10	BS-Y	5	BSN-Y	10
12-10	CB-Y	10	Yellow	CP-Y	25	CN-Y	10	CS-Y	5	CSN-Y	10

4-Way Terminals






Wire Size (AWG)	Non-Insulated	Pkg. Qty.	Color	Vinyl Insulated	Pkg. Qty.	Nylon Insulated	Pkg. Qty.	Heat-Shrink	Pkg. Qty.	Heavy Duty Heat-Shrink	Pkg. Qty.
22-18	HD-10430	25	Red	AP-X	10	AN-X	10	AS-X	25	-------	----
16-14	HD-10440	25	Blue	BP-X	10	BN-X	10	BS-X	5	BSN-X	10
12-10	HD-10450	25	Yellow	CP-X	10	CN-X	10	CS-X	5	CSN-X	1

Ring Terminals

Ring Terminals


Non-Insulated


Vinyl Insulated


Nylon Insulated


Mil-Spec Nylon Ins.

The **non-insulated** terminals require only one crimp onto the wire.

The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. Requires only one crimp onto the wire.

The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely. The nylon insulation also prevents incidental metal to metal contact that can cause shorts. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.

The **Mil-Spec** are rugged enough for the military, these terminals get the job done. Meets MIL-Spec MS/AS-25036.

		Non-Insulated		Vinyl Insulated			Nylon Insulated		
Stud Size	Type		Pkg. Qty.	Color		Pkg. Qty.	Color		Pkg. Qty.
26-24 Ga.									
#2	Standard	MB-R2	100	Yellow	N-1417	100	Yellow	MN-R2	25
#4	Standard	MB-R4	100	Yellow	HD-22404	100	Yellow	MN-R4	25
#6	Standard	MB-R6	100	Yellow	HD-22406	100	Yellow	MN-R6	25
#8	Standard	HD-12408	100	Yellow	HD-22408	100	Yellow	MN-R8	25
#10	Standard	HD-12410	100	Yellow	HD-22410	100	Yellow	MN-R10	25
22-18 Ga.									
#2	Standard	AB-R2	100	Red	N-1424	100	Red	AN-R2	50
#4	Standard	AB-R4	100	Red	AP-R4	100	Red	AN-R4	50
#6	Standard	AB-R6	100	Red	AP-R6	100	Red	AN-R6	50
#6	Narrow-Profile	AB-R6S	100	Red	AP-R6S	100	Red	AN-R6S	50
#6	Short-Overall Length	AB-R6SN	100	Red	HD-50021E	100	-------	-------	----
#8	Standard	AB-R8	100	Red	AP-R8	100	Red	AN-R8	50
#8	Narrow-Profile	AB-R8S	100	-------	-------	----	Red	AN-R8S	50
#8	Star-Ring	-------	----	Red	HD-50301	100	-------	-------	----
#10	Standard	AB-R10	100	Red	AP-R10	100	Red	AN-R10	50
#10	Narrow-Profile	HD-10040E	100	Red	HD-50040E	100	-------	-------	----
#10	Short-Overall Length	AB-R10SN	100	-------	-------	----	Red	AN-R10SN	50
#10	Star-Ring	-------	----	Red	HD-50302	100	-------	-------	----
1/4"	Narrow-Profile	AB-R14S	50	Red	AP-R14S	100	Red	AN-R14S	50
5/16"	Standard	AB-R56	100	Red	AP-R56	100	Red	AN-R56	50
3/8"	Standard	AB-R38	100	Red	AP-R38	100	Red	AN-R38	50
16-14 Ga.									
#4	Standard	BB-R4	100	Blue	BP-R4	100	Blue	BN-R4	50
#6	Standard	HD-10086	100	Blue	BP-R6	100	Blue	BN-R6	50
#6	Narrow-Profile	BB-R6S	100	Blue	BP-R6S	100	Blue	BN-R6S	50
#6	Mil-Spec	-------	----	-------	-------	----	Blue	BN-R6S-MS	25
#6	Short-Overall Length	BB-R6SN	25	Blue	N-1440	100	-------	-------	----
#8	Standard	BB-R8	100	Blue	BP-R8	100	Blue	BN-R8	50
#8	Narrow-Profile	BB-R8S	100	Blue	N-1448	100	Blue	BN-R8S	50
#8	Short-Overall Length	BB-R8SN	100	-------	-------	----	-------	-------	50
#8	Star-Ring	-------	----	Blue	HD-50305	100	-------	-------	----
#10	Standard	BB-R10	100	Blue	BP-R10	100	Blue	BN-R10	50
#10	Mil-Spec	-------	----	-------	-------	----	Blue	BN-R10-MS	25
#10	Star-Ring	BB-S10	100	Blue	HD-50306	100	-------	-------	----
#6, #8, #10	Multi-Stud	HD10100M	100	Blue	BP-TD10	100	Blue	BN-TD10	50
1/4"	Narrow-Profile	BB-R14S	100	Blue	BP-R14S	100	Blue	BN-R14S	50
1/4"	Mil-Spec	-------	----	-------	-------	----	Blue	BN-R14-MS	10
5/16"	Standard	BB-R56	50	Blue	BP-R56	100	Blue	BN-R56	50
5/16"	Narrow-Profile	-------	----	-------	-------	----	Blue	BN-R56S	50
3/8"	Standard	BB-R38	50	Blue	BP-R38	100	Blue	BN-R38	50
1/2"	Standard	HD-10104BZ	50	Blue	HD-50104	100	Blue	BN-R12	25
12-10 Ga.									
#4	Standard	CB-R4	50	Yellow	3M-15188	50	Yellow	3M-15181	15
#6	Standard	CB-R6	50	-------	-------	----	-------	-------	----
#6	Narrow-Profile	CB-R6S	50	Yellow	CP-R6S	50	Yellow	CN-R6S	50
#8	Standard	CB-R8	50	-------	-------	----	-------	-------	----
#8	Narrow-Profile	CB-R8S	50	Yellow	CP-R8S	50	Yellow	CN-R8S	50
#10	Standard	CB-R10	100	Yellow	CP-R10	50	Yellow	CN-R10	50
#10	Mil-Spec	-------	----	-------	-------	----	Yellow	CN-R10-MS	10
#6, #8, #10	Multi-Stud	HD-10230M	100	Yellow	HD-50230M	50	Yellow	CN-TD10	50
1/4"	Narrow-Profile	CB-R14S	100	Yellow	CP-R14S	50	Yellow	CN-R14S	50
5/16"	Standard	CB-R56	100	Yellow	CP-R56	50	Yellow	CN-R56	50
5/16"	Mil-Spec	-------	----	-------	-------	----	Yellow	CN-R56-MS	10
3/8"	Standard	CB-R38	100	Yellow	CP-R38	50	Yellow	CN-R38	50
3/8"	Mil-Spec	-------	----	-------	-------	----	Yellow	CN-R38-MS	10

(Continued on following page)

Ring Terminals **(Continued from previous page)**

		Non-Insulated		Vinyl Insulated			Nylon Insulated		
Stud Size	Type		Pkg. Qty.	Color		Pkg. Qty.	Color		Pkg. Qty.
12-10 Ga.	(Cont.)								
7/16"	Standard	-------	----	-------	-------	----	Yellow	CN-R76	50
1/2"	Standard	CB-R12	10	Yellow	CP-R12	50	Yellow	CN-R12	50
1/2"	Mil-Spec	-------	----	-------	-------	----	Yellow	CN-R12-MS	10
5/8"	Standard	CB-R58	5	-------	-------	----	-------	-------	----
8 Ga.									
#8	Standard	DB-R8	25	Red	DP-R8L	25	Red	HD-50608N	25
#10	Narrow-Profile	DB-R10S	25	Red	DP-R10S	25	Red	HD-50609N	25
1/4"	Narrow-Profile	DB-R14S	25	Red	HD-50611	25	Red	DN-R14S	25
5/16"	Standard	DB-R56	25	Red	HD-50612	25	Red	DN-R56	25
5/16"	Nylon Mil-Spec	-------	----	-------	-------	----	Red	DN-R56-MS	10
3/8"	Standard	DB-R38	25	Red	DP-R38	25	Red	HD-50613N	25
3/8"	Long Length	DB-R38L	25	-------	-------	----	-------	-------	----
1/2"	Standard	DB-R12	25	Red	DP-R12	25	Red	HD-50614N	25
9/16"	Standard	DB-R96	10	-------	-------	----	-------	-------	----
5/8"	Standard	DB-R58	10	-------	-------	----	-------	-------	----
3/4"	Standard	DB-R34	10	-------	-------	----	-------	-------	----
6 Ga.									
#10	Narrow-Profile	EB-R10S	10	Blue	HD-50615E	25	Blue	EN-R10S	10
1/4"	Narrow-Profile	EB-R14S	10	Blue	HD-50616E	25	Blue	EN-R14S	10
5/16"	Standard	EB-R56	10	Blue	EP-R56	10	Blue	HD-50617N	10
3/8"	Standard	EB-R38	10	Blue	EP-R38	10	Blue	HD-50618N	10
7/16"	Standard	EB-R76	10	-------	-------	----	-------	-------	----
1/2"	Standard	EB-R12	10	Blue	EP-R12	10	Blue	HD-50619N	10
9/16"	Standard	EB-R96	10	-------	-------	----	-------	-------	----
5/8"	Standard	EB-R58	10	-------	-------	----	-------	-------	----
3/4"	Standard	EB-R34	10	-------	-------	----	-------	-------	----
4 Ga.									
#10	Standard	FB-R10	10	Yellow	HD-50615	10	Yellow	HD-50898N	10
1/4"	Standard	FB-R14	10	-------	-------	----	Yellow	HD-50620N	10
1/4"	Narrow-Profile	FB-R14S	10	Yellow	FP-R14S	10	Yellow	HD-50899N	10
5/16"	Standard	FB-R56	10	-------	-------	----	Yellow	FN-R56	10
3/8"	Standard	FB-R38	10	-------	-------	----	Yellow	FN-R38	10
1/2"	Standard	FB-R12	10	Yellow	FP-R12	10	Yellow	HD-50623N	10
9/16"	Standard	FB-R96	10	-------	-------	----	-------	-------	----
5/8"	Standard	FB-R58	10	-------	-------	----	-------	-------	----
3/4"	Standard	FB-R34	10	-------	-------	----	-------	-------	----
2 Ga.									
#10	Standard	GB-R10	10	-------	-------	----	-------	-------	----
1/4"	Standard	GB-R14	10	-------	-------	----	Red	HD-50628N	10
5/16"	Standard	GB-R56	10	-------	-------	----	Red	HD-50629N	10
3/8"	Standard	GB-R38	10	-------	-------	----	Red	HD-50630N	10
7/16"	Standard	GB-R76	5	-------	-------	----	-------	-------	----
1/2"	Standard	GB-R12	10	-------	-------	----	Red	HD-50631N	10
9/16"	Standard	GB-R96	5	-------	-------	----	-------	-------	----
5/8"	Standard	GB-R58	5	-------	-------	----	-------	-------	----
3/4"	Standard	GB-R34	10	-------	-------	----	-------	-------	----
1/0 Ga.									
1/4"	Standard	HB-R14	10	-------	-------	----	Yellow	HN-R14	10
5/16"	Standard	HB-R56	10	-------	-------	----	-------	-------	----
3/8"	Standard	HB-R38	10	-------	-------	----	-------	-------	----
7/16"	Standard	HB-R76	5	-------	-------	----	-------	-------	----
1/2"	Standard	HB-R12	10	-------	-------	----	-------	-------	----
9/16"	Standard	HB-R96	5	-------	-------	----	-------	-------	----
5/8"	Standard	HB-R58	5	-------	-------	----	-------	-------	----
3/4"	Standard	HB-R34	5	-------	-------	----	-------	-------	----
2/0 Ga.									
1/4"	Standard	JB-R14	5	-------	-------	----	-------	-------	----
5/16"	Standard	JB-R56	5	-------	-------	----	-------	-------	----
3/8"	Standard	JB-R38	5	-------	-------	----	-------	-------	----
7/16"	Standard	JB-R76	5	-------	-------	----	-------	-------	----
1/2"	Standard	JB-R12	5	-------	-------	----	-------	-------	----
9/16"	Standard	JB-R96	5	-------	-------	----	-------	-------	----
5/8"	Standard	JB-R58	5	-------	-------	----	-------	-------	----
3/4"	Standard	JB-R34	5	-------	-------	----	-------	-------	----

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Ring Terminals

Ring Terminals (Continued from previous page)

Stud Size	Type	Non-Insulated	Pkg. Qty.	Vinyl Insulated Color		Pkg. Qty.	Nylon Insulated Color		Pkg. Qty.
3/0 Ga.									
5/16"	Standard	KB-R56	5	-------	-------	----	-------	-------	----
3/8"	Standard	KB-R38	5	-------	-------	----	-------	-------	----
7/16"	Standard	KB-R76	1	-------	-------	----	-------	-------	----
1/2"	Standard	KB-R12	5	-------	-------	----	-------	-------	----
9/16"	Standard	KB-R96	1	-------	-------	----	-------	-------	----
5/8"	Standard	KB-R58	1	-------	-------	----	-------	-------	----
3/4"	Standard	KB-R34	1	-------	-------	----	-------	-------	----
4/0 Ga.									
5/16"	Standard	LB-R56	5	-------	-------	----	-------	-------	----
3/8"	Standard	LB-R38	5	-------	-------	----	-------	-------	----
1/2"	Standard	LB-R12	5	-------	-------	----	-------	-------	----
9/16"	Standard	LB-R96	1	-------	-------	----	-------	-------	----
5/8"	Standard	LB-R58	1	-------	-------	----	-------	-------	----
3/4"	Standard	LB-R34	5	-------	-------	----	-------	-------	----
250 MCM									
5/16"	Standard	2.5MCM-56	1	-------	-------	----	-------	-------	----
3/8"	Standard	2.5MCM-38	1	-------	-------	----	-------	-------	----
1/2"	Standard	2.5MCM-12	1	-------	-------	----	-------	-------	----
5/8"	Standard	2.5MCM-58	1	-------	-------	----	-------	-------	----
300 MCM									
3/8"	Standard	3MCM-38	1	-------	-------	----	-------	-------	----
1/2"	Standard	3MCM-12	1	-------	-------	----	-------	-------	----
400 MCM									
1/2"	Standard	4MCM-12	1	-------	-------	----	-------	-------	----
500 MCM									
3/8"	Standard	5MCM-38	1	-------	-------	----	-------	-------	----
1/2"	Standard	5MCM-12	1	-------	-------	----	-------	-------	----

Non-Insulated Flag Ring Terminals



Features a 90 degree orientation making the crimp more convenient and allows the ring terminal to be used in confined spaces. Requires only one crimp onto the wire.

Stud Size (AWG)		Pkg. Qty.
22-18 Ga.		
#6	AB-R6F	100
16-14 Ga.		
#6	BB-R6F	100
#8	BB-R8F	50
#10	BB-R10F	50
12-10 Ga.		
#10	CB-R10F	25
8 Ga.		
1/4"	DB-R14F	10
5/16"	DB-R56F	10
3/8"	DB-R38F	10
6 Ga.		
#10	EB-R10F	10
5/16"	EB-R56F	10

Stud Size (AWG)		Pkg. Qty.
4 Ga.		
1/4"	FB-R14F	5
5/16"	FB-R56F	5
3/8"	FB-R38F	5
2 Ga.		
1/4"	GB-R14F	5
5/16"	GB-R56F	5
3/8"	GB-R38F	5
1/0 Ga.		
1/4"	HB-R14F	1
5/16"	HB-R56F	1
3/8"	HB-R38F	1
1/2"	HB-R12F	1

Stud Size (AWG)		Pkg. Qty.
2/0 Ga.		
5/16"	JB-R56F	1
3/8"	JB-R38F	1
1/2"	JB-R12F	1
3/0 Ga.		
5/16"	KB-R56F	1
3/8"	KB-R38F	1
1/2"	KB-R12F	1
4/0 Ga.		
5/16"	LB-R56F	1
3/8"	LB-R38F	1
1/2"	LB-R12F	1

Heavy Duty Ring Terminals

Provides durability and a longer life. These ring terminals are made from 0.050" thick copper, rather than the typical 0.032" thick stock.

The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely. The nylon insulation also prevents incidental metal to metal contact that can cause shorts. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.



Non-Insulated



Nylon Insulated

Stud Size	Non-Insulated	Pkg. Qty.	Nylon Insulated Color		Pkg. Qty.
16-12 Ga.					
#6	BB-R6H	25	Yellow	BN-R6H	50
#10	BB-R10H	25	Yellow	BN-R10H	25
1/4"	BB-R14H	25	Yellow	BN-R14SH	25
5/16"	BB-R56H	25	Yellow	BN-R56H	25
3/8"	BB-R38H	25	Yellow	BN-R38H	25
1/2"	BB-R12H	25	Yellow	BN-R12H	10

Heat-Shrink Ring Terminals



For use in harsh environments, these terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal.

A **heavy duty** heat-shrink jacket makes it difficult to cut into these heat-shrink terminals during the crimping process. If, in a rare instance, you do pierce the jacket, during the heat-shrink process, the jacket will heal itself and fill in the hole with sealant. These are the highest quality heat-shrink terminals available.

The **solder** heat-shrink terminals feature a heat-shrink connection that also has a solder connection. By simply applying heat, you'll melt a small amount of solder that makes a perfect connection - no crimps required. Also keeps moisture out while ensuring your wire does not pull out of the terminal.

			Standard		Heavy Duty		Solder	
Stud Size	Type	Color		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
26-24 Ga.								
#6	Standard	Yellow	MS-R6	25	-------	----	-------	----
#8	Standard	Yellow	MS-R8	25	-------	----	-------	----
#10	Standard	Yellow	MS-R10	25	-------	----	-------	----
1/4"	Standard	Yellow	MS-R14	25	-------	----	-------	----
22-18 Ga.								
#4	Standard	Red	HD-40014	50	-------	----	-------	----
#6	Standard	Red	AS-R6	25	ASN-R6	10	ASS-R6	10
#8	Standard	Red	AS-R8	25	ASN-R8	10	ASS-R8	10
#10	Standard	Red	AS-R10	25	ASN-R10	10	ASS-R10	10
#6 , #8 , #10	Multi-Stud	Red	HD-30040M	25	ASN-TD10	10	-------	----
1/4"	Standard	Red	AS-R14	25	ASN-R14	10	ASS-R14	10
5/16"	Standard	Red	AS-R56	25	ASN-R56	10	-------	
3/8"	Standard	Red	AS-R38	25	ASN-R38	10	-------	----
16-14 Ga.								
#4	Standard	Blue	HD-40084	50	HD-70084	10	-------	----
#6	Standard	Blue	BS-R6	25	BSN-R6	10	-------	----
#8	Standard	Blue	BS-R8	25	BSN-R8	10	BSS-R8	10
#10	Standard	Blue	BS-R10	25	BSN-R10	10	BSS-R10	10
#6 , #8 , #10	Multi-Stud	Blue	HD-30100M	25	BSN-TD10	10	-------	----
1/4"	Standard	Blue	BS-R14	25	BSN-R14	10	BSS-R14	10
5/16"	Standard	Blue	BS-R56	25	BSN-R56	10	-------	----
3/8"	Standard	Blue	BS-R38	25	BSN-R38	10	BSS-R38	10
1/2"	Standard	Blue	BS-R12	25	BSN-R12	10	-------	----
12-10 Ga.								
#6	Standard	Yellow	CS-R6	25	CSN-R6	10	-------	----
#8	Standard	Yellow	CS-R8	25	CSN-R8	10	-------	----
#10	Standard	Yellow	CS-R10	25	CSN-R10	10	CSS-R10	10
#6 , #8 , #10	Multi-Stud	Yellow	HD-30230M	25	CSN-TD10	10	-------	----
1/4"	Standard	Yellow	CS-R14	25	CSN-R14	10	CSS-R14	10
5/16"	Standard	Yellow	CS-R56	25	CSN-R56	10	CSS-R56	10
3/8"	Standard	Yellow	CS-R38	25	CSN-R38	10	CSS-R38	10
1/2"	Standard	Yellow	CS-R12	10	CSN-R12	5	CSS-R12	10
8 Ga.								
#8	Standard	Red	HD-40608	10	HD-70608	10	-------	----
#10	Standard	Red	DS-R10	10	DSN-R10	10	-------	----
1/4"	Standard	Red	DS-R14	10	DSN-R14	10	-------	----
5/16"	Standard	Red	DS-R56	10	DSN-R56	10	-------	----
3/8"	Standard	Red	DS-R38	10	DSN-R38	10	-------	----
1/2"	Standard	Red	DS-R12	10	DSN-R12	5	-------	----

High Temperature Ring Terminals



One piece steel construction and nickel plating provide reliable electrical connections at temperatures up to 900°F. Requires only one crimp onto the wire.

Wire Size (AWG)		Pkg. Qty.
22-18 Ga.		
#6	AH-R6	50
#8	AH-R8	50
#10	AH-R10	50
1/4"	AH-R14	50
5/16"	AH-R56	50
3/8"	HD-10043HT	100
16-14 Ga.		
#6	BH-R6	50
#8	BH-R8	50
#10	BH-R10	50

Wire Size (AWG)		Pkg. Qty.
16-14 Ga.		
1/4"	BH-R14S	50
5/16"	BH-R56	50
3/8"	BH-R38	50
12-10 Ga.		
#6	CH-R6	50
#8	CH-R8	50
#10	CH-R10	50
1/4"	CH-R14S	25
5/16"	CH-R56	25
3/8"	CH-R38	25

Wire Size (AWG)		Pkg. Qty.
12-10 Ga.	(Cont.)	
1/2"	HD-10233HT	25
8 Ga.		
#10	DH-R10S	25
1/4"	DH-R14S	25
5/16"	DH-R56	25
3/8"	DH-R38	25
6 Ga.		
#10	HD-10615HT	25
1/4"	EH-R14	5
5/16"	EH-R56	5

Wire Size (AWG)		Pkg. Qty.
6 Ga.	(Cont.)	
3/8"	EH-R38	5
4 Ga.		
1/4"	FH-R14	5
5/16"	HD-10621HT	10
3/8"	FH-R38	5
2 Ga.		
1/4"	HD-10628HT	10
5/16"	HD-10629HT	10
3/8"	HD-10630HT	10

Fork Terminals

Fork Terminals

The **non-insulated** terminals require only one crimp onto the wire. The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely.


Non-Insulated


Vinyl Insulated


Nylon Insulated

		Non-Insulated		Vinyl Insulated			Nylon Insulated		
Stud Size	Type		Pkg. Qty.	Color		Pkg. Qty.	Color		Pkg. Qty.
26-24 Ga.									
#2	Standard	-------	----	-------	-------	----	Yellow	MN-F2	25
#4	Standard	-------	----	-------	-------	----	Yellow	MN-F4	25
#6	Standard	-------	----	-------	-------	----	Yellow	MN-F6	25
24-20 Ga.									
#4	Standard	MB-F4	100	Yellow	HD-22414	50	Yellow	HD-32414	25
#6	Standard	MB-F6	100	Yellow	HD-22416	50	Yellow	HD-32416	25
#8	Standard	HD-12418	100	Yellow	HD-22418	50	Yellow	HD-32418	25
#10	Standard	HD-12420	100	Yellow	HD-22420	50	Yellow	HD-32420	25
22-18 Ga.									
#4	Standard	AB-F4	100	Red	AP-F4	100	Red	AN-F4	50
#6	Standard	HD-10050	100	Red	AP-F6	100	Red	AN-F6	50
#6	Block	AB-FB6	100	Red	HD-50052	100	Red	AN-FB6	50
#6	Narrow-Profile Block	AB-FB6S	100	Red	AP-FB6S	100	Red	AN-FB6S	50
#6	Narrow/Short	AB-F6XS	100	-------	-------	----	Red	AN-F6XS	50
#6	Flange Block	AB-FBF6	100	Red	AP-FBF6	100	Red	AN-FBF6	50
#6	Snap Spade	AB-SS6	100	Red	AP-SS6	100	Red	AN-SS6	50
#6	Narrow-Profile Snap Spade	-------	----	-------	-------	----	Red	AN-SS6S	50
#8	Standard	AB-F8	100	Red	AP-F8	100	Red	AN-F8	50
#8	Block	AB-FB8	100	Red	AP-FB8	100	Red	AN-FB8	50
#8	Flange Block	HD-10068	200	Red	HD-50068	100	Red	AN-FBF8	50
#8	Snap Spade	HD-10061BZ	100	Red	AP-SS8	100	Red	AN-SS8	50
#10	Standard	AB-F10	100	Red	AP-F10	100	Red	AN-F10	50
#10	Block	AB-FB10	100	Red	AP-FB10	100	Red	AN-FB10	50
#10	Flange Block	AB-FBF10	100	Red	AP-FBF10	100	Red	AN-FBF10	50
#10	Snap Spade	HD-10071BZ	100	Red	AP-SS10	100	Red	AN-SS10	50
1/4"	Standard	HD-10075BZ	100	Red	HD-50075	100	Red	AN-F14	50
16-14 Ga.									
#4	Standard	BB-F4	100	Blue	BP-F4	100	Blue	BN-F4	50
#6	Flag	BB-F6F	100	-------	-------	----	-------	-------	----
#6	Block	BB-FB6	100	Blue	HD-50146	100	Blue	BN-FB6	50
#6	Narrow-Profile Block	BB-FB6S	100	Blue	BP-FB6S	100	Blue	BN-FB6S	50
#6	Narrow/Short	N-1132	125	Blue	BP-FB6XS	50	Blue	BN-FB6XS	50
#6	Narrow-Profile Long Block	2LY-3.5S	100	-------	-------	----	Blue	BN-FB6S-L	50
#6	Long Block	-------	----	Blue	BP-FB6L	100	-------	-------	----
#6	Flange Block	BB-FBF6	100	Blue	BP-FBF6	100	Blue	BN-FBF6	25
#6	Snap Spade	BB-SS6	100	Blue	BP-SS6	100	Blue	BN-SS6	50
#6	Narrow-Profile Snap Spade	2LY3.5S	100	Blue	N-1535	100	-------	-------	----
#8	Standard	BB-F8	100	Blue	BP-F8	100	Blue	BN-F8	50
#8	Flag	BB-F8F	50	-------	-------	----	-------	-------	----
#8	Block	BB-FB8	100	Blue	BP-FB8	100	Blue	BN-FB8	50
#8	Flange Block	BB-FBF8	100	Blue	HD-50153	100	Blue	BN-FBF8	50
#8	Snap Spade	HD-10061BZ	100	Blue	BP-SS8	100	Blue	BN-SS8	50
#10	Standard	BB-F10	100	Blue	BP-F10	100	Blue	BN-F10	50
#10	Flag	BB-F10F	50	-------	-------	----	-------	-------	----
#10	Block	BB-FB10	100	Blue	BP-FB10	100	Blue	BN-FB10	50
#10	Flange Block	BB-FBF10	100	Blue	BP-FBF10	50	Blue	BN-FBF10	50
#10	Snap Spade	BB-SS10	100	Blue	BP-SS10	100	Blue	BN-SS10	50
1/4"	Standard	BB-F14	50	Blue	HD-10165BZ	100	Blue	BN-F14	25
5/16"	Standard	BB-F56	50	Blue	N-1504	60	-------	-------	----
12-10 Ga.									
#6	Standard	CB-F6	100	Yellow	CP-F6	100	Yellow	CN-F6	50
#6	Block	HD-10272	100	Yellow	CP-FB6	50	Yellow	CN-FB6	50
#6	Flange Block	CB-FBF6	50	Yellow	CP-FBF6	50	Yellow	CN-FBF6	25
#6	Snap Spade	HD-10271	100	Yellow	CP-SS6	50	Yellow	CN-SS6	50
#8	Standard	CB-F8	100	Yellow	CP-F8	100	Yellow	CN-F8	50
#8	Block	CB-FB8	100	Yellow	CP-FB8	50	Yellow	CN-FB8	50
#8	Flange Block	HD-10283	100	Yellow	HD-50283	50	Yellow	CN-FBF8	50

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Fork Terminals (Continued from previous page)

		Non-Insulated		Vinyl Insulated			Nylon Insulated		
Stud Size	Type		Pkg. Qty.	Color		Pkg. Qty.	Color		Pkg. Qty.
12-10 Ga.	(Cont.)								
#8	Snap Spade	HD-10281	100	Yellow	CP-SS8	50	Yellow	CN-SS8	50
#10	Standard	CB-F10	100	Yellow	CP-F10	50	Yellow	CN-F10	50
#10	Block	CB-FB10	100	Yellow	HD-50292	100	Yellow	CN-FB10	50
#10	Flange Block	CB-FBF10	50	Yellow	CP-FBF10	50	Yellow	CN-FBF10	50
#10	Snap Spade	HD-10291	100	Yellow	CP-SS10	50	Yellow	CN-SS10	50
1/4"	Standard	CB-F14	50	Yellow	HD-50234	50	Yellow	CN-F14	25
8 Ga.									
#10	Standard	HD-10607	25	Red	HD-50607	25	Red	HD-50607N	25
1/4"	Standard	HD-10606	25	Red	HD-50606	25	Red	HD-50606N	25
6 Ga.									
1/4"	Standard	HD-10726	10	-------	-------	----	Blue	HD-20726N	1

Heat-Shrink Fork Terminals



Standard



Heavy Duty Snap Spade

For use in harsh environments, these terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal.

The **standard** heat-shrink terminal requires one crimp plus heat.

A **heavy duty** heat-shrink jacket makes it difficult to cut into these heat-shrink terminals during the crimping process, a common problem with basic heat-shrink terminals. If, in a rare instance, you do pierce the jacket, during the heat-shrink process, the jacket will heal itself and fill in the hole with sealant. This is the highest quality line of heat of heat-shrink terminals available. Requires one crimp plus heat.

The **solder** heat-shrink terminal features a heat-shrink connection that also has an internal sealant. By simply applying heat, you'll melt a small amount of solder that makes a perfect connection - no crimps required. Also keeps moisture out while ensuring your wire does not pull out of the terminal.

			Standard		Heavy Duty		Solder	
Stud Size	Type	Color		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
22-18 Ga.								
#4	Standard	Red	HD-40054	50	HD-70054	25	-------	----
#6	Standard	Red	AS-F6	25	ASN-F6	10	-------	----
#6	Snap Spade	Red	HD-40051	50	ASN-SS6	25	-------	----
#8	Standard	Red	AS-F8	25	ASN-F8	10	-------	----
#8	Snap Spade	Red	HD-40061	50	ASN-SS8	25	-------	----
#10	Standard	Red	AS-F10	25	ASN-F10	10	ASS-F10	10
#10	Snap Spade	Red	HD-40071	50	ASN-SS10	25	-------	----
1/4"	Standard	Red	HD-40075	50	HD-70075	25	-------	----
16-14 Ga.								
#6	Standard	Blue	BS-F6	25	BSN-F6	10	-------	----
#6	Snap Spade	Blue	HD-40141	25	BSN-SS6	25	-------	----
#8	Standard	Blue	BS-F8	25	BSN-F8	10	-------	----
#8	Snap Spade	Blue	HD-40151	25	BSN-SS8	25	-------	----
#10	Standard	Blue	BS-F10	25	BSN-F10	10	BSS-F10	10
#10	Snap Spade	Blue	BS-SS10	25	BSN-SS10	10	-------	----
1/4"	Standard	Blue	HD-40165	25	HD-70165	25	-------	----
12-10 Ga.								
#6	Standard	Yellow	CS-F6	25	CSN-F6	10	-------	----
#6	Snap Spade	Yellow	HD-40271	25	CSN-SS6	10	-------	----
#8	Standard	Yellow	CS-F8	25	CSN-F8	10	-------	----
#8	Snap Spade	Yellow	HD-40281	25	CSN-SS8	10	-------	----
#10	Standard	Yellow	CS-F10	25	CSN-F10	10	CSS-F10	10
#10	Block, Flange	Yellow	HD-40293	25	CSN-FBF10	10	-------	----
#10	Snap Spade	Yellow	HD-40291	25	CSN-SS10	10	-------	----
1/4"	Standard	Yellow	HD-40234	25	HD-70234	10	-------	----
1/4"	Snap Spade	Yellow	HD-40241	25	CSN-SS14	10	-------	----

High Temperature Fork Terminals



One piece steel construction and nickel plating provide reliable electrical connections at temperatures up to 900°F. Requires only one crimp onto the wire.

Stud Size		Pkg. Qty.
22-18 Ga.		
#6	AH-F6	50
#8	HD-10060HT	200
#10	HD-10070HT	200

Stud Size		Pkg. Qty.
16-14 Ga.		
#6	BH-F6	50
#8	BH-F8	50
#10	BH-F10	50

Stud Size		Pkg. Qty.
12-10 Ga.		
#6	CH-F6	50
#8	CH-F8	50
#10	CH-F10	50
1/4"	HD-10234HT	100

Hook Terminals & Heat Shrink and Nylon Terminal Kits

Hook Terminals



Non-Insulated



Vinyl Insulated



Heavy Duty Heat-Shrink

The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. Requires only one crimp onto the wire.

The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely. The nylon insulation also prevents incidental metal to metal contact that can cause shorts. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.

Use the **heavy duty** heat-shrink in harsh environments. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal. Requires one crimp plus heat.

		Non-Insulated			Vinyl Insulated		Nylon Insulated		Heavy Duty Heat-Shrink	
Wire Size (AWG)	Stud Size		Pkg. Qty.	Color		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
22-18	#6	HD-10067	100	Red	HD-50067	100	HD-30067	25	-------	----
22-18	#8	AB-H8	100	Red	AP-H8	100	AN-H8	50	-------	----
22-18	#10	HD-10087	100	Red	HD-50087	100	HD-30087	25	ASN-H10	25
16-14	#6	HD-10105	200	Blue	HD-50105	100	HD-30105	50	-------	----
16-14	#8	BB-H8	100	Blue	BP-H8	100	BN-H8	50	-------	----
16-14	#10	BB-H10	100	Blue	HD-50120	100	HD-30120	50	BSN-H10	25
12-10	#6	HD-10128	200	Yellow	HD-50128	100	HD-30128	50	-------	----
12-10	#8	CB-H8	50	Yellow	CP-H8	50	CN-H8	25	-------	----
12-10	#10	HD-10130	200	Yellow	HD-50130	100	HD-30130	25	-------	----

Heat-Shrink Terminal Kit

Great for maintenance applications, this kit contains 23 different heat-shrink terminals, 300 pieces, sizes 22 to 8 gauge, including rings, butt splices, and quick-disconnect terminals. Comes in a large metal box, 18"w x 12"d x 3"h.



Part # SHRINK TERM KIT

Kit Contains	Description	Qty.
AS-B	22-18 Ga., Butt Splice Terminals	25
AS-R6	22-18 Ga., #6 Ring Terminals	20
AS-R10	22-18 Ga., #10 Ring Terminals	20
AS3-MQ5	22-18 Ga., 0.250" W., Male Quick Disc.	10
AS3-FQ5	22-18 Ga., 0.250" W., Female Quick Disc.	10
BS-B	16-14 Ga., Butt Splice Terminals	25
BS-R6	16-14 Ga., #6 Ring Terminals	20
BS-R10	16-14 Ga., #10 Ring Terminals	20
BS-R14	16-14 Ga., 1/4" Ring Terminals	10
BS-R56	16-14 Ga., 5/16" Ring Terminals	10
BS-R38	16-14 Ga., 3/8" Ring Terminals	10
BS3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	10

(Cont.)	Description	Qty.
BS3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	10
BS3-MZ5	16-14 Ga., 0.250" W., Male Fully Insulated	10
BS3-FZ5	16-14 Ga., 0.250" W., Female Fully Insulated	10
CS-B	12-10 Ga., Butt Splice Terminals	15
CS-BB	16-14 To 12-10 Ga., Step-Down Butt Splices	5
CS-R10	12-10 Ga., #10 Ring Terminals	15
CS-R14	12-10 Ga., 1/4" Ring Terminals	10
CS-R56	12-10 Ga., 5/16" Ring Terminals	10
CS-R38	12-10 Ga., 3/8" Ring Terminals	10
CS-R12	12-10 Ga., 1/2" Ring Terminals	10
DS-B	8 Ga., Butt Splice Terminals	5

Crimping Tool for Heat Shrink Terminals



Crimps:
- 22-8 gauge heat shrink terminals
- 22-8 gauge insulated terminals

Features:
- Release lever
- Ratcheting tool

Part # SHRINK 22-8

Large Nylon-Insulated Terminal Kit

This kit contains 20 different terminals, 370 pieces, sizes 22 to 10 gauge, including rings, forks, quick-disconnects, quick splices, and butt splices. Comes in a large metal box, 18"w x 12"d x 3"h.



Part # TERM KIT NYL-LG

Kit Contains	Description	Qty.
AN-B	22-18 Ga., Butt Splice Terminals	20
AN-R6S	22-18 Ga., #6 Narrow Ring Terminals	20
AN-R10	22-18 Ga., #10 Ring Terminals	20
BN-B	16-14 Ga., Butt Splice Terminals	25
BN-R6S	16-14 Ga., #6 Ring Terminals	20
BN-R10	16-14 Ga., #10 Ring Terminals	20
BN-R14S	16-14 Ga., 1/4" Ring Terminals	20
BN3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	20
BN3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	20
BN-F10	16-14 Ga., #10 Fork Terminals	20

(Cont.)	Description	Qty.
BN-SP56	16-14 Ga., 0.156" Dia., Male Bullet Term.	15
BN-SR56	16-14 Ga., 0.156" Dia., Female Bullet Term.	15
CN-B	12-10 Ga., Butt Splice Terminals	20
CN-R10	12-10 Ga., #10 Ring Terminals	15
CN-R14S	12-10 Ga., 1/4" Ring Terminals	15
CN-R38	12-10 Ga., 3/8" Ring Terminals	15
CN3-FQ5	12-10 Ga., 0.250" W., Female Quick Disc.	15
T-4	18-14 Ga., Quick Splices	15
56M-15	16-14 Ga., 56 Series Male Unsealed Term.	20
56F-15	16-14 Ga., 56 Series Female Unsealed Term.	20

Crimping Tool for Insulated Terminals



Crimps:
- 22-8 gauge insulated terminals

Features:
- Release lever
- Pressure adjustment lever
- Ratcheting tool

Part # 500 RATCHET

Quick-Disconnect Terminals

Also known as slip-on or fast-on connectors, these quick-disconnect terminals offer the fastest way to connect and disconnect two wires. They are also reconnectable. Simply slide the male terminal into the female terminal.

Non-insulated quick-disconnects require only one crimp onto the wire.

The **vinyl** insulation prevents incidental metal to metal contact that can cause shorts. Requires only one crimp onto the wire.

The **nylon** insulation provides relief from vibration that can cause the wire to fail prematurely. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.

The **fully** insulated terminals provide a "mini-enclosure" for the point at which the two contacts meet, keeping liquids and contaminants away from the electrical connection. Requires only one crimp onto the wire.





	Non-Insulated				Vinyl Insulated			Nylon Insulated		
Tab Width & Thickness	Female	Male	Pkg. Qty.	Color	Female	Male	Pkg. Qty.	Female	Male	Pkg. Qty.
26-24 Ga.										
0.110" x 0.020"	-------	-------	----	Yellow	-------	-------	----	MN2-FQ1	-------	50
0.187" x 0.020"	MB2-FQ8	-------	100	Yellow	-------	-------	----	MN2-FQ8	-------	50
22-18 Ga.										
0.110" x 0.020"	AB2-FQ1	AB2-MQ1	50	Red	AP2-FQ1	AP2-MQ1	50	AN2-FQ1	AN2-MQ1	50
0.110" x 0.032"	-------	-------	----		-------	-------	----	AN3-FQ1*	-------	50
0.187" x 0.020"	AB2-FQ8	AB2-MQ8	50	Red	AP2-FQ8	AP2-MQ8	50	AN2-FQ8	AN2-MQ8	50
0.187" x 0.032"	-------	-------	----	Red	-------	-------	----	AN3-FQ8*	-------	50
0.205" x 0.020"	AB2-FQ0	-------	50	Red	AP2-FQO	-------	50	-------	-------	----
0.250" x 0.032"	AB3-FQ5	AB3-MQ5	50	Red	AP3-FQ5	AP3-MQ5	50	AN3-FQ5	AN3-MQ5	50
0.250" x 0.032"	HD-10176*	-------	100	Red	AP3-FQ5-E*	HD-50177	50	-------	HD-50177N	100
16-14 Ga.										
0.110" x 0.020"	BB2-FQ1	BB2-MQ1	50	Blue	BP2-FQ1	BP2-MQ1	100	BN2-FQ1	BN2-MQ1	25
0.187" x 0.020"	BB2-FQ8	BB2-MQ8	50	Blue	BP2-FQ8	BP2-MQ8	100	BN2-FQ8	BN2-MQ8	25
0.187" x 0.020"	HD-10195*	HD-10198	100	Blue	HD-50195*	HD-50198	----	BN2-FQ8-E*	HD-20198N	25
0.187" x 0.032"	-------	-------	----	Blue	BP3-FQ8	-------	100	-------	-------	----
0.250" x 0.032"	BB3-FQ5	BB3-MQ5	50	Blue	BP3-FQ5	BP3-MQ5	100	BN3-FQ5	BN3-MQ5	25
0.250" x 0.032"	BB3-FQ5-E*	-------	50	Blue	BP3-FQ5-E*	HD-50181	100	BN3-FQ5-E*	HD-30181	25
0.300" x 0.032"	-------	-------	----	Blue	-------	-------	----	BN3-FQ30	-------	25
0.375" x 0.032"	-------	-------	----	Blue	HD-20375	-------	25	HD-30375	-------	25
14-12 Ga.										
0.250" x 0.032"	-------	-------	----	Yellow	-------	-------	----	CN3-FQ5S	-------	50
12-10 Ga.										
0.187" x 0.032"	-------	-------	----	Yellow	CP3-FQ8	-------	50	HD-20167N	-------	----
0.250" x 0.032"	CB3-FQ5	CB3-MQ5	100	Yellow	CP3-FQ5	CP3-MQ5	50	CN3-FQ5	CN3-MQ5	50
0.250" x 0.032"	HD-10187*	HD-10186	100	Yellow	CP3-FQ5-E*	HD-50186	50	CN3-FQ5-E*	-------	50
0.340" x 0.047"	-------	-------	----	Yellow	-------	-------	----	CN3-FQ9	-------	50
0.375" x 0.032"	HD-10166	-------	25	Yellow	HD-20166	-------	50	HD-30166	-------	50

* Rolled Edge

Fully Nylon Insulated Terminals





Tab Width & Thickness	Color	Double Bump Female	Double Bump Male	Pkg. Qty.	Single Bump Female	Single Bump Male	Pkg. Qty.	Oval Female	Oval Male	Pkg. Qty.
26-24 Ga.										
0.110" x 0.020"	Yellow	MN2-FZ1	-------	50	-------	-------	---	-------	-------	---
0.187" x 0.020"	Yellow	MN2-FZ8	-------	25	-------	-------	---	-------	-------	---
0.250" x 0.032"	Yellow	MN3-FZ5	-------	50	-------	-------	---	-------	-------	---
22-18 Ga.										
0.110" x 0.020"	Red	AN2-FZ1	-------	50	-------	-------	---	HD-32191	-------	50
0.187" x 0.020"	Red	AN2-FZ8	AN2-MZ8	50	HD-32192	HD-32197	50	-------	-------	---
0.250" x 0.032"	Red	AN3-FZ5	AN3-MZ5	50	HD-50207-1HUMP	HD-50206-1HUMP	50	HD-20179	HD-20178	50
0.250" x 0.032"	Red	AN3-FZ5-E*	AN3-MZ5-E	50	-------	-------	---	HD-30179*	HD-30178	50
16-14 Ga.										
0.110" x 0.020"	Blue	BN2-FZ1	-------	25	-------	-------	---	-------	-------	---
0.187" x 0.020"	Blue	BN2-FZ8	-------	25	HD-32195	HD-32198	25	-------	-------	---
0.187" x 0.020"	Blue	BN2-FZ8C	BN2-MZ8C	25	-------	-------	---	-------	-------	---
0.250" x 0.032"	Blue	BN3-FZ5	BN3-MZ5	25	HD-50209-1HUMP	HD-50208-1HUMP	25	HD-20183	HD-20182	25
0.250" x 0.032"	Blue	BN3-FZ5-E*	HD-50208	25	-------	-------	---	HD-30183*	HD-30182	25
12-10 Ga.										
0.250" x 0.032"	Yellow	CN3-FZ5	CN3-MZ5	50	HD-50213-1HUMP	-------	50	-------	-------	---
0.250" x 0.032"	Yellow	CN3-FZ5-E*	CN3-MZ5-E	50	HD-30199*	-------	50	HD-30213*	HD-30212	50

* Rolled Edge

Quick-Disconnect Terminals, Tools & Kit

High-Temperature Quick-Disconnect Terminals

Steel construction and nickel plating provide reliable electrical connections at temperatures up to 900°F. Requires only one crimp onto the wire.


Female


Male

Wire Size	Gender		Pkg. Qty.
Standard			
0.187" Tab Width x .020" Tab Thickness			
22-18	Female	HD-10192HT	100
16-14	Female	BH2-FQ8	50
0.250" Tab Width x .032" Tab Thickness			
22-18	Female	AH3-FQ5	50
22-18	Male	AH3-MQ5-6	50
16-14	Female	BH3-FQ5	50

Wire Size	Gender		Pkg. Qty.
Standard	(Cont.)		
0.250" Tab Width x .032" Tab Thickness			
16-14	Male	BH3-MQ5	50
12-10	Female	CH3-FQ5	50
12-10	Male	CH3-MQ5	50
90° Flag			
0.250" Tab Width x .032" Tab Thickness			
16-14	Female	BH3-FFQ5	50

Flag Quick-Disconnect Terminals


Non-Insulated Female

Features a 90 degree orientation making the crimp more convenient and allows the quick-disconnect terminal to be used in confined spaces. The thickness of the 0.187" tab width is 0.020" and the 0.250" tab width is 0.032".

	Non-Insulated				Fully Nylon Insulated			Heat -Shrink Fully Insulated		
Tab Width	Female	Male	Pkg. Qty.	Color	Female	Male	Pkg. Qty.	Female	Male	Pkg. Qty.
22-18 Ga.										
0.187"	AB2-FFQ8	------	50	Red	AN2-FFZ8	------	50	HD-42188	------	50
0.250"	AB3-FFQ5	------	50	Red	AN3-FFZ5	------	50	HD-40188	------	50
16-14 Ga.										
0.187"	BB2-FFQ8	------	50	Blue	BN2-FFZ8	------	25	HD-42189	------	25
0.250"	BB3-FFQ5	HD-10669	50	Blue	BN3-FFZ5	------	25	HD-40189	------	25
0.250"	BB3-FFQ5L	------	25	Blue	BN3-FFZ5L	------	10	------	------	-----
12-10 Ga.										
0.250"	CB3-FFQ5	------	50	Yellow	CN3-FFZ5	------	50	HD-40190	------	50

Crimping Tools for Flag Terminals

Crimps Non-Insulated Flag Terminals



Crimps:
- 22-10 gauge non-insulated flag terminals
- 26-14 gauge insulated terminals
- 26-6 gauge non-insulated terminals
- 26-10 gauge closed end connectors

Strips:
- 20-8 gauge wire

Features:
- Heavy-duty multi-purpose 3M tool

Part # TH-450

Crimps Insulated Quick Connect Flag Terminals



Crimps:
- 22-14 gauge insulated terminals

Features:
- Pressure adjustment wheel
- Release lever
- Ratcheting tool

Part # FLAG-INS 2214



Crimps:
- 14-10 gauge insulated terminals

Features:
- Pressure adjustment wheel
- Release lever
- Ratcheting tool

Part # FLAG-INS 1410

Crimping Tool for Heat Shrink Terminals



Crimps:
- 22-8 gauge heat shrink terminals
- 22-8 gauge insulated terminals

Features:
- Release lever
- Ratcheting tool

Part # SHRINK 22-8

Quick Disconnect Terminal Kit

This kit contains 20 different terminals, 600 pieces, sizes 16 to 10 gauge, including bare, nylon, fully insulated, and heat-shrink, quick disconnect terminals. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part #QC-KIT

Kit Contains	Gauge	Tab	Description	Qty.
AN2-FQ8	22-18 Ga.	0.187"	Female Nylon Insulated	25
AB3-FQ5	22-18 Ga.	0.187"	Female Non-Insulated	50
AN3-FQ5	22-18 Ga.	0.250"	Female Nylon Insulated	50
AN3-MZ5	22-18 Ga.	0.250"	Male Nylon Fully Insulated	25
AN3-FZ5	22-18 Ga.	0.250"	Female Nylon Fully Insulated	25
AS3-FZ5	22-18 Ga.	0.250"	Female Shrink Fully Insulated	25
BN2-FQ8	16-14 Ga.	0.187"	Female Nylon Insulated	25
BB3-MQ5	16-14 Ga.	0.250"	Male Non-Insulated	50
BB3-FQ5	16-14 Ga.	0.250"	Female Non-Insulated	50
BB3-FFQ5	16-14 Ga.	0.250"	Female Non-Insulated Flag	25

(Cont.)	Gauge	Tab	Description	Qty.
BN3-FQ5	16-14 Ga.	0.250"	Female Nylon Insulated	50
BN3-MZ5	16-14 Ga.	0.250"	Male Nylon Fully Insulated	25
BN3-FZ5	16-14 Ga.	0.250"	Female Nylon Fully Insulated	25
BS3-FZ5	16-14 Ga.	0.250"	Female Shrink Fully Insulated	25
CB3-FQ5	12-10 Ga.	0.250"	Female Non-Insulated	50
CN3-FQ5	12-10 Ga.	0.250"	Female Nylon Insulated	25
CN3-MZ5	12-10 Ga.	0.250"	Male Nylon Fully-Insulated	15
CN3-FZ5	12-10 Ga.	0.250"	Female Nylon Insulated	15
MMFA	-------	0.250"	Female To Two Male Connector	10
PBT-2	-------	0.250"	Male and Female Connector	10

Heat-Shrink Quick-Disconnect Terminals

Also known as slip-on or fast-on connectors, these quick-disconnect terminals offer the fastest way to connect and disconnect two wires. They are also reconnectable. Simply slide the male terminal into the female terminal.

The **standard** heat-shrink terminals are made for use in harsh environments These terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal.

A **heavy duty** heat-shrink jacket makes it very difficult to cut into these heat-shrink terminals during the crimping process, a common problem with basic heat-shrink terminals.

Use the **solder heat-shrink** in harsh environments. These terminals feature a heat-shrink connection that also has an internal sealant. By simply applying heat, you'll also melt a small amount of solder that makes a perfect connection - no crimps required. Also keeps moisture out while ensuring your wire does not pull out of the terminal.

Partially insulated quick disconnect terminals are economical. Use **fully insulated** terminals to keep moisture away from where the male and female terminals mate.





Tab Width and Thickness	Color	Insulation Style	Standard Female	Standard Male	Standard Pkg. Qty.	Heavy Duty Female	Heavy Duty Male	Heavy Duty Pkg. Qty.	Solder Female	Solder Male	Solder Pkg. Qty.
22-18 Ga.											
0.110" x 0.020"	Red	Partially	HD-40191	-------	25	-------	-------	----	-------	-------	----
0.187" x 0.020"	Red	Partially	HD-40192	HD-40197	25	ASN2-FQ8	ASN2-MQ8	25	-------	-------	----
0.250" x 0.032"	Red	Partially	AS3-FQ5	AS3-MQ5	25	ASN3-FQ5	ASN3-MQ5	25	HD-60176	HD-60177	10
0.250" x 0.032"	Red	Fully	AS3-FZ5	AS3-MZ5	25	ASN3-FZ5	ASN3-MZ5	10	HD-60179	-------	10
0.250" x 0.032"	Red	Fully	AS3-FZ5-E	-------	10	-------	-------	----	-------	-------	----
16-14 Ga.											
0.110" x 0.020"	Blue	Partially	HD-40194	-------	25	-------	-------	----	-------	-------	----
0.187" x 0.020"	Blue	Partially	HD-40195	HD-40198	25	BSN2-FQ8	BSN2-MQ8	25	-------	-------	----
0.250" x 0.032"	Blue	Partially	BS3-FQ5	BS3-MQ5	25	BSN3-FQ5	BSN3-MQ5	10	BSS-FQ5	BSS-MQ5	10
0.250" x 0.032"	Blue	Fully	BS3-FZ5	BS3-MZ5	25	BSN3-FZ5	BSN3-MZ5	10	HD-60183	-------	10
12-10 Ga.											
0.250" x 0.032"	Yellow	Partially	CS3-FQ5	CS3-MQ5	25	CSN3-FQ5	CSN3-MQ5	10	CSS-FQ5	CSS-MQ5	10
0.250" x 0.032"	Yellow	Fully	CS3-FZ5	CS3-MZ5	10	CSN3-FZ5	CSN3-MZ5	10	HD-60199	-------	1

Stud Mount Quick-Disconnect Terminals

Tab Width and Thickness	Standard	Pkg. Qty.
#6 Stud Size		
0.250" x 0.032"	250/R6	25

Tab Width and Thickness	Standard	Pkg. Qty.	90°	Pkg. Qty.
#10 Stud Size				
0.250" x 0.032"	250/R10	25	-------	----
0.250" x 0.032"	-------	----	250-R10/90	50


Standard

90°

Mount these male quick-disconnect terminals to a stud rather than to a wire. Simply mount on a screw, no crimp required.

Quick-Disconnect Terminal Adapters

These non-insulated terminals connect two male quick-disconnect terminals to one female quick-disconnect terminal.






Tab Width and Thickness	Pkg. Qty.	Tab Width and Thickness	Pkg. Qty.	Tab Width and Thickness	Pkg. Qty.	Tab Width and Thickness	Pkg. Qty.
0.250" x 0.032"	FAS 50	0.250" x 0.032"	VWA-O 50	0.187" x 0.020"	MMFA-187 25	0.250" x 0.032"	MMFA 25

Insulated Quick-Disconnect Butt-Splice Adapter



This item acts as a butt connector, but it accepts female quick-disconnect terminals. Requires no crimps - just plug in two 0.250" width female quick-disconnect terminals.

Tab Width and Thickness		Pkg. Qty.
0.250" x 0.032"	250-2NY	25

Piggy-Back Quick-Disconnect Terminals

Connects a male 0.250" x 0.032" tab quick-disconnect terminal to one female 0.250" x 0.032" tab quick-disconnect terminal and a wire. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.

Wire Size (AWG)	Color	Vinyl Insulated	Vinyl Insulated Pkg. Qty.	Nylon Insulated	Nylon Insulated Pkg. Qty.
22-18	Red	-------	----	PBA-2	25
16-14	Blue	-------	----	PBT-2	25
12-10	Yellow	PBC-2	25	-------	----



Open Barrel / Non-Insulated Quick-Disconnect Terminals

The open barrel design provides relief from vibration that can cause the wire to fail prematurely. These require a standard crimp and a "B" crimp.

Tang design prevents terminal from backing out of the housing. With a click, the tang locks the terminal in the housing.

Tab Width and Thickness	Open Barrel Female	Open Barrel Male	Open Barrel Pkg. Qty.	Open Barrel with Tang Female	Open Barrel with Tang Male	Open Barrel with Tang Pkg. Qty.
16-14 Ga.						
0.250" x 0.032"	BB3-FQ5SS	-------	50	BB3-FQ5ST	BB3-MQ5ST	25



Bullet and Quick-Disconnect Terminals

Standard Bullet Terminals

Bullet terminals are often used as a substitute for quick-disconnect terminals due to their ability to quickly mate and their reconnect ability. Simply slide the male terminal into the female terminal.

The vinyl insulation prevents incidental metal to metal contact that can cause shorts. Requires only one crimp onto the wire.

The nylon insulation provides relief from vibration that can cause the wire to fail prematurely. The nylon insulation also prevents incidental metal to metal contact that can cause shorts. Requires two crimps (terminal to wire strands, terminal to insulation of wire). Standard tools perform both crimps. For heavier usage, use a tool that performs both crimps at the same time.






	Non-Insulated				Vinyl Insulated			Nylon Insulated		
Bullet Plug Size	Female	Male	Pkg. Qty.	Color	Female	Male	Pkg. Qty.	Female	Male	Pkg. Qty.
22-18 Ga.										
0.156"	-------	AB-SP56	100	Red	-------	AP-SP56	50	AN-SR56	AN-SP56	25
0.180"	-------	-------	----	Red	-------	AP-SP80	50	AN-SR80	AN-SP80	25
16-14 Ga.										
0.156"	-------	BB-SP56	100	Blue	-------	BP-SP56	50	BN-SR56	BN-SP56	25
0.156"	-------	-------	----	Blue	-------	-------	----	BN-SR56-2*	-------	50
0.180"	-------	BB-SP80	100	Blue	-------	BP-SP80	50	BN-SR80	BN-SP80	25

* Accepts 0.156" male bullet terminals on each end, acts as splice.

Heat-Shrink Bullet Terminals

Bullet terminals are often used as a substitute for quick-disconnect terminals due to their ability to quickly mate and their reconnect ability. Simply slide the male terminal into the female terminal.

Use the heat-shrink bullet terminals in harsh environments. These terminals feature a heat-shrink connection that also has an internal sealant. After crimping the terminal onto the wire, simply apply heat. Keeps moisture out while ensuring your wire does not pull out of the terminal.

A heavy duty heat-shrink jacket makes it very difficult to cut into these heat-shrink terminals during the crimping process, a common problem with basic heat-shrink terminals.






	Standard				Heavy Duty			
Bullet Plug Size	Color	Female	Male	Pkg. Qty.	Color	Female	Male	Pkg. Qty.
22-18 Ga.								
0.156"	Red	AS-SR56	AS-SP56	25	Red	HD-70285	ASN-SP56	10
16-14 Ga.								
0.156"	Blue	BS-SR56	BS-SP56	25	Blue	HD-70185	BSN-SP56	10
0.180"	Blue	BS-SR80	BS-SP80	25	Blue	HD-70785	BSN-SP80	10

Insulated Knife Disconnect Terminals



Similar to quick-disconnect terminals, except two of the same terminals will mate with each other like a handshake - no male/female issues. Simply slide two terminals together and a tongue locks them in place. Reusable, simple splice. Requires only one crimp onto the wire.

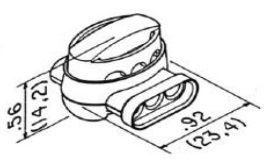
Wire Size	Non-Insulated		Vinyl Insulated		
(AWG)		Pkg. Qty.	Color		Pkg. Qty.
22-18	-------	----	Red	AP-K	25
16-14	BB-K	25	Blue	BP-K	25
12-10	CB-K	25	Yellow	CP-K	25

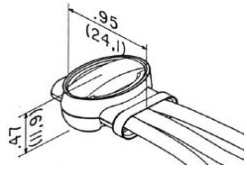
Self-Stripping Connector



Part #**ET-314** electrically connects two or three wire ends, insulates the connection, and provides a moisture resistant seal. UL listed and CSA certified. Voltage rated at 600 volts maximum and operating temperature of 221° F.

Use 22-14 gauge solid or stranded, tinned or untinned wire. Common insulated wires: T, TF, TFF, TFN, TFFN, AWN, TEW, SAE-GPT with a maximum insulation diameter of 0.15 inches.





Instructions:

1. Insert 2 or 3 unstripped wires completely into connector and check their position by looking through the translucent connector body.
2. Hold tool perpendicular to the wires and make the connection by driving the cap down flush with the edge of the connector body.

Ideal Wire Connectors

Terminate wires in these color-coded Ideal wire connectors. No pre-twisting required, plus they're reusable.



Wire Combinations Minimum	to Maximum	Color		Pkg. Qty.
(2) 22 Ga.	(2) 16 Ga.	Gray	71B	100
(2) 22 Ga.	(2) 16 Ga.	Blue	72B	100
(2) 20 Ga.	(2) 18 Ga.	Orange	73B	100
(2) 22 Ga.	(2) 16 Ga.	Yellow	74B	100
(2) 14 Ga.	(2) 12 Ga.	Red	76B	50

Easy-Twist Ideal Wire Connectors

Exterior grips make these easy to twist onto your wire. No pre-twisting required, plus they're reusable.



Wire Combinations Minimum	to Maximum	Color		Pkg. Qty.
(2) 18 Ga.	(2) 12 Ga.	Yellow	451	50
(2) 18 Ga.	(2) 10 Ga.	Red	452	50
(2) 12 Ga.	(2) 6 Ga.	Blue	454	10

Ceramic High-Temp Wire Connectors

For use in the most demanding, high-temperature environments. Max temperature 320ºF.



Wire Combinations Minimum	to Maximum		Pkg. Qty.
(2) 18 Ga.	(1) 16 & (1) 14 Ga.	HT-1	25
(2) 18 Ga.	(2) 18 & (2) 16 Ga.	HT-2	25
(2) 18 Ga.	(3) 18 & (1) 14 Ga.	HT-3	25
(2) 14 Ga.	(2) 12 Ga.	HT-4	10

Fits-All Ideal Wire Connectors

Accepting a wide range of wire sizes allows you to stock fewer wire connectors. Exterior grips make these easy to twist onto your wire. No pre-twisting required, plus they're reusable.



Wire Combinations Minimum	to Maximum	Color		Pkg. Qty.
(3) 22 Ga.	(3) 10 Ga.	Tan	341-TWST	50
(3) 14 Ga.	(3) 8 Ga.	Red	342-TWST	25

Clear Crimp-Style Wire Connectors

Simply crimp the wire in the housing like you would with wire into a terminal. Also known as closed end wire connectors. Nylon insulation over copper insert. UL listed.



Wire Size (AWG)		Pkg. Qty.
22-16	EC-2216	100
16-14	EC-1614	100
12-10	EC-1210	100
8	EC-0808	100

Electrical Spring Connectors

The original color-coded wire connectors are flexible, yet durable. The soft outer shell is easy on the fingers and the inner shell prevents the wire from poking through.



Wire Size (AWG)	Color		Pkg. Qty.
22-8	Red and Yellow	R/Y	50
22-8	Tan and Red	T/R	50

T-Taps

T-taps are nylon insulated self-stripping disconnects. Mates with male fully insulated quick-connects.



Opened



Closed

Wire Range (AWG)			Color	Terminal Type	Mates with		Pkg. Qty.
22	to	18	Red	Disconnect	AN3-MZ5	T-250R	100
18	to	14	Blue	Disconnect	BN3-MZ5	T-250	100
12			Yellow	Disconnect	CN3-MZ5	T-250Y	100

Quick Splices

(A)



(B)



(C)



(D)



(E)



(F)



(G)



(H)



Quick splices, also known as self stripping connectors, require no wire stripping or twisting. Solvent resistant plastic construction. No special tools are required.

	Wire Range (AWG)			Color	Connection		Pkg. Qty.
(A)	18	to	14	White	Double Run	T-4	50
(B)	18	to	14	Blue	Run and Tap	T-4B	50
(C)	22	to	18	Red	Run and Tap	T-4R	50
(D)	18	to	16	Blue	Instant Tap with Sealant	T4-BG	25

	Wire Range (AWG)			Color	Connection		Pkg. Qty.
(E)	18	to	16	Black	Bullet Disconnect	T-5	50
(F)	18	to	10	Brown	Run and Tap	T-6	25
(G)	12	to	10	Yellow	Run and Tap	T-7	25
(H)	22	to	14	Blue	Moisture Resistant Seal	ET-314	10

Terminal Kits

Non-Insulated Terminal Kit

This kit contains 20 different terminals, 460 pieces, sizes 16 to 10 gauge, including rings, hooks, forks, and butt splices. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part # TERM KIT NON-SM

Kit Contains	Description	Qty.
BB-R6S	16-14 Ga., #6 Narrow Ring Terminals	25
BB-R8	16-14 Ga., #8 Ring Terminals	25
BB-R10	16-14 Ga., #10 Ring Terminals	25
BB-R14S	16-14 Ga., 1/4" Narrow Ring Terminals	25
BB-R56	16-14 Ga., 5/16" Ring Terminals	25
BB-R38	16-14 Ga., 3/8" Ring Terminals	25
BB-H8	16-14 Ga., #8 Hook Terminals	25
BB-FB6S	16-14 Ga., #6 Narrow Block Fork Terminals	25
BB-F8	16-14 Ga., #8 Fork Terminals	25
BB-F10	16-14 Ga., #10 Fork Terminals	25

(Cont.)	Description	Qty.
BB-P	16-14 Ga., Compact Butt Splice Terminals	25
BB-B	16-14 Ga., Butt Splice Terminals	25
CB-R10	12-10 Ga., #10 Ring Terminals	25
CB-R14S	12-10 Ga., 1/4" Ring Terminals	15
CB-R56	12-10 Ga., 5/16" Ring Terminals	15
CB-R38	12-10 Ga., 3/8" Ring Terminals	15
CB-R12	12-10 Ga., 1/2" Ring Terminals	15
CB-F10	12-10 Ga., #10 Fork Terminals	25
CB-P	12-10 Ga., Compact Butt Splices	25
CB-B	12-10 Ga., Butt Splice Terminals	25

PVC-Insulated Terminal Kit

This kit contains 24 different terminals, 530 pieces, sizes 16 to 6 gauge, including rings, hooks, forks, quick-disconnects, and butt splices. Comes in a large metal box, 18"w x 12"d x 3"h.



Part # LG PVC-KIT

Kit Contains	Description	Qty.
BP-B	16-14 Ga., Butt Splice Terminals	25
BP-R6S	16-14 Ga., #6 Narrow Ring Terminals	25
BP-R10	16-14 Ga., #10 Ring Terminals	25
BP-R14S	16-14 Ga., 1/4" Ring Terminals	25
BP-R38	16-14 Ga., 3/8" Ring Terminals	25
BP3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	25
BP3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	25
BP-FB6S	16-14 Ga., #6 Narrow Fork Block Terminals	25
BP-F10	16-14 Ga., #10 Fork Terminals	25
BP-H8	16-14 Ga., #8 Hook Terminals	25
BP-X	16-14 Ga., 4-Way Terminals	10
BP-SP56	16-14 Ga., 0.156" Dia., Male Bullet Term.	25

(Cont.)	Description	Qty.
BN-SR56	16-14 Ga., 0.156" Dia., Female Bullet Term.	25
CP-B	12-10 Ga., Butt Splice Terminals	25
CP-BB	16-14 To 12-10 Ga., Step-Down Terminals	10
CP-R10	12-10 Ga., #10 Ring Terminals	25
CP-R14S	12-10 Ga., 1/4" Ring Terminals	25
CP-R56	12-10 Ga., 5/16" Ring Terminals	25
CP-R38	12-10 Ga., 3/8" Ring Terminals	25
CP-F10	12-10 Ga., #10 Fork Terminals	25
DB-R10S	8 Ga., #10 Ring Terminals	15
DB-R14S	8 Ga., 1/4" Non-Insulated Ring Terminals	15
EB-R14S	6 Ga., 1/4" Non-Insulated Ring Terminals	15
EB-R38	6 Ga., 3/8" Non-Insulated Ring Terminals	15

Nylon-Insulated Terminal Kit

This kit contains 18 different terminals, 243 pieces, sizes 22 to 10 gauge, including rings, quick-disconnects, quick splices, and butt splices. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part # TERM KIT NY-SM

Kit Contains	Description	Qty.
AN-B	22-18 Ga., Butt Splice Terminals	20
AN-R10	22-18 Ga., #10 Ring Terminals	15
AN-R6S	22-18 Ga., #6 Narrow Ring Terminals	15
BN-B	16-14 Ga., Butt Splice Terminals	20
BN-R6S	16-14 Ga., #6 Narrow Ring Terminals	15
BN-R10	16-14 Ga., #10 Ring Terminals	15
BN-R14S	16-14 Ga., 1/4" Ring Terminals	15
BN-R38	16-14 Ga., 3/8" Ring Terminals	12
BN3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	10

(Cont.)	Description	Qty.
BN3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	15
BN3-MZ5	16-14 Ga., 0.250" W., Male Fully-Ins., Quick	10
BN3-FZ5	16-14 Ga., 0.250" W., Fem. Fully-Ins., Quick	15
CN-B	12-10 Ga., Butt Splice Terminals	15
CN-R10	12-10 Ga., #10 Ring Terminals	15
CN-R14S	12-10 Ga., 1/4" Ring Terminals	10
CN-R38	12-10 Ga., 3/8" Ring Terminals	10
CN3-FQ5	12-10 Ga., 0.250" W., Female Quick Disc.	10
T-4	18-14 Ga., Quick Splices	6

Large Nylon-Insulated Terminal Kit

This kit contains 20 different terminals, 370 pieces, sizes 22 to 10 gauge, including rings, forks, quick-disconnects, quick splices, and butt splices. Comes in a large metal box, 18"w x 12"d x 3"h.



Part # TERM KIT NYL-LG

Kit Contains	Description	Qty.
AN-B	22-18 Ga., Butt Splice Terminals	20
AN-R6S	22-18 Ga., #6 Narrow Ring Terminals	20
AN-R10	22-18 Ga., #10 Ring Terminals	20
BN-B	16-14 Ga., Butt Splice Terminals	25
BN-R6S	16-14 Ga., #6 Ring Terminals	20
BN-R10	16-14 Ga., #10 Ring Terminals	20
BN-R14S	16-14 Ga., 1/4" Ring Terminals	20
BN3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	20
BN3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	20
BN-F10	16-14 Ga., #10 Fork Terminals	20

(Cont.)	Description	Qty.
BN-SP56	16-14 Ga., 0.156" Dia., Male Bullet Term.	15
BN-SR56	16-14 Ga., 0.156" Dia., Female Bullet Term.	15
CN-B	12-10 Ga., Butt Splice Terminals	20
CN-R10	12-10 Ga., #10 Ring Terminals	15
CN-R14S	12-10 Ga., 1/4" Ring Terminals	15
CN-R38	12-10 Ga., 3/8" Ring Terminals	15
CN3-FQ5	12-10 Ga., 0.250" W., Female Quick Disc.	15
T-4	18-14 Ga., Quick Splices	15
56M-15	16-14 Ga., 56 Series Male Unsealed Term.	20
56F-15	16-14 Ga., 56 Series Female Unsealed Term.	20

Heat-Shrink Terminal Kit

Great for maintenance applications, this kit contains 23 different heat-shrink terminals, 300 pieces, sizes 22 to 8 gauge, including rings, butt splices, and quick-disconnect terminals. Comes in a large metal box, 18"w x 12"d x 3"h.

Kit Contains	Description	Qty.
AS-B	22-18 Ga., Butt Splice Terminals	25
AS-R6	22-18 Ga., #6 Ring Terminals	20
AS-R10	22-18 Ga., #10 Ring Terminals	20
AS3-MQ5	22-18 Ga., 0.250" W., Male Quick Disc.	10
AS3-FQ5	22-18 Ga., 0.250" W., Female Quick Disc.	10
BS-B	16-14 Ga., Butt Splice Terminals	25
BS-R6	16-14 Ga., #6 Ring Terminals	20
BS-R10	16-14 Ga., #10 Ring Terminals	20
BS-R14	16-14 Ga., 1/4" Ring Terminals	10
BS-R56	16-14 Ga., 5/16" Ring Terminals	10
BS-R38	16-14 Ga., 3/8" Ring Terminals	10
BS3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	10

(Cont.)	Description	Qty.
BS3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	10
BS3-MZ5	16-14 Ga., 0.250" W., Male Fully Insulated	10
BS3-FZ5	16-14 Ga., 0.250" W., Female Fully Insulated	10
CS-B	12-10 Ga., Butt Splice Terminals	15
CS-BB	16-14 To 12-10 Ga., Step-Down Butt Splices	5
CS-R10	12-10 Ga., #10 Ring Terminals	15
CS-R14	12-10 Ga., 1/4" Ring Terminals	10
CS-R56	12-10 Ga., 5/16" Ring Terminals	10
CS-R38	12-10 Ga., 3/8" Ring Terminals	10
CS-R12	12-10 Ga., 1/2" Ring Terminals	10
DS-B	8 Ga., Butt Splice Terminals	5



Part # SHRINK TERM KIT

Heavy Duty Nylon Heat-Shrink Terminal Kit

These heavy duty nylon heat-shrink terminals make installation easy and will even repair themselves in the heat shrink process. Great for maintenance applications, this kit contains 23 different heat-shrink terminals, 300 pieces, sizes 22 to 8 gauge, including splices, and quick disconnect terminals. Comes in a large metal box, 18"w x 12"d x 3"h.

Kit Contains	Description	Qty.
ASN-B	22-18 Ga., Nylon Butt Splice Terminals	25
ASN-R6	22-18 Ga., #6 Nylon Ring Terminals	20
ASN-R10	22-18 Ga., #10 Nylon Ring Terminals	20
ASN3-MQ5	22-18 Ga., 0.250" Nylon Male Quick Disc.	10
ASN3-FQ5	22-18 Ga., 0.250" Nylon Female Quick Disc.	10
BSN-B	16-14 Ga., Nylon Butt Splice Terminals	25
BSN-R6	16-14 Ga., #6 Nylon Ring Terminals	20
BSN-R10	16-14 Ga., #10 Nylon Ring Terminals	20
BSN-R14	16-14 Ga., 1/4" Nylon Ring Terminals	10
BSN-R56	16-14 Ga., 5/16" Nylon Ring Terminals	10
BSN-R38	16-14 Ga., 3/8" Nylon Ring Terminals	10
BSN3-MQ5	16-14 Ga., 0.250" Nylon Male Quick Disc.	10

(Cont.)	Description	Qty.
BSN3-FQ5	16-14 Ga., 0.250" Nylon Female Quick Disc.	10
BSN3-MZ5	16-14 Ga., 0.250" Nylon Male Fully Insulated	10
BSN3-FZ5	16-14 Ga., 0.250" Nylon Female Fully Insulated	10
CSN-B	12-10 Ga., Nylon Butt Splice Terminals	15
CSN-BB	16-14 to 12-10 Ga., Nylon Step-Down Splices	5
CSN-R10	12-10 Ga., #10 Nylon Ring Terminals	15
CSN-R14	12-10 Ga., 1/4" Nylon Ring Terminals	10
CSN-R56	12-10 Ga., 5/16" Nylon Ring Terminals	10
CSN-R38	12-10 Ga., 3/8" Nylon Ring Terminals	10
CSN-R12	12-10 Ga., 1/2" Nylon Ring Terminals	10
DSN-B	8 Ga., Nylon Butt Splice Terminals	5



Part # NY SHK TERM KIT

Heat-Shrink Terminals and Tool Kit

A compact kit contains 6 different types of heat-shrink terminals, 3 sizes of heat-shrink butt splices and 3 sizes of heat-shrink ring terminals. Also included is a ratcheting crimp tool, a wire stripping tool, and a mini torch. All contained in a soft sided case with zipper.

Kit Contains	Description	Qty.
AS-B	22-18 Ga., Heat-Shrink Butt Splices	20
BS-B	16-14 Ga., Heat-Shrink Butt Splices	20
CS-B	10-12 Ga., Heat-Shrink Butt Splices	15
AS-R10	22-18 Ga., #10 Heat-Shrink Ring Term.	20
BS-R10	16-14 Ga., #10 Heat-Shrink Ring Term.	20

(Cont.)	Description	Qty.
CS-R10	12-10 Ga., #10 Heat-Shrink Ring Term.	15
500 RATCHET UL	22-10 Ga., Heat-Shrink Crimp Tool	1
-------	22-10 Ga. Stripping and Crimping Tool	1
-------	Turbo Lite Mini Torch	1
-------	Soft 6 Compartment Case	1



Part # CS-KIT

Small Heat-Shrink Butt Splice Terminals and Tool Kit

This portable heat-shrink kit contains 3 different sizes of butt splices. Also included is an economy crimping, stripping, and cutting tool and a mini torch. All contained in a soft sided case with a zipper.

Kit Contains	Description	Qty.
AS-B	22-18 Ga., Heat-Shrink Butt Splices	20
BS-B	16-14 Ga., Heat-Shrink Butt Splices	20
CS-B	10-12 Ga., Heat-Shrink Butt Splices	15

(Cont.)	Description	Qty.
MPT	Crimper/Stripper/Cutter Tool	1
-------	Turbo Lite Mini Torch	1
-------	Soft 3 Compartment Case	1



Part # CS-SPLICE-KIT

Torch and Heat-Shrink Terminal Kit

The torch and terminal kit has 9 different types of nylon heavy-duty heat-shrink terminals, ranging in size from 22 to 10 gauge. You will find a 2500° pocket size butane torch along with rings, forks, all in a large metal box, 18"w x 12"d x 3"h.

Kit Contains	Description	Qty.
PT-4000	Compact Pen Torch	1
ASN-B	22-18 Ga., Butt Splice Terminals	50
BSN-B	16-14 Ga., Butt Splice Terminals	50
BSN-R6	16-14 Ga., #6 Ring Terminals	50
BSN-R10	16-14 Ga., #10 Ring Terminals	50

(Cont.)	Description	Qty.
BSN3-FQ5	16-14 Ga., 1/4" Ring Terminals	50
CSN-B	12-10 Ga., Butt Splice Terminals	25
CSN-R10	12-10 Ga., #10 Ring Terminals	25
CSN-R14	12-10 Ga., 1/4" Ring Terminals	25
CSN-R38	12-10 Ga., 3/8" Ring Terminals	25



Part # TORCH HD SHRINK

Terminal Kits

Solder Shrink Kit

Solder heat-shrink terminals are used in harsh environments. This kit contains 480 terminals and range from 26 to 10 gauge. There are butt splices, forks, rings, and quick-disconnect terminals. Comes in a large metal box, 18"w x 12"d x 3"h.



Part # SOLDER SHRK KIT

Kit Contains	Description	Qty.
MSS-B	26-24 Ga., Butt Splice Terminals	25
ASS-B	22-18 Ga., Butt Splice Terminals	25
ASS-R6	22-18 Ga., #6 Ring Terminals	25
ASS-R8	22-18 Ga., #8 Ring Terminals	25
ASS-R10	22-18 Ga., #10 Ring Terminals	25
ASS-R14	22-18 Ga., 1/4" Ring Terminals	25
ASS-F10	22-18 Ga., #10 Fork Terminals	25
BSS-B	16-14 Ga., Butt Splice Terminals	25
BSS-R10	16-14 Ga., #10 Ring Terminals	25
BSS-R14	16-14 Ga., 1/4" Ring Terminals	25
BSS-R38	16-14 Ga., 3/8" Ring Terminals	25

(Cont.)	Description	Qty.
BSS-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	25
BSS-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	25
BSS-F10	16-14 Ga., #10 Fork Terminals	25
CSS-B	12-10 Ga., Butt Splice Terminals	25
CSS-R10	12-10 Ga., #10 Ring Terminals	15
CSS-R14	12-10 Ga., 1/4" Ring Terminals	15
CSS-R38	12-10 Ga., 3/8 Ring Terminals	15
CSS-R12	12-10 Ga., 1/2" Ring Terminals	15
CSS-MQ5	12-10 Ga., 0.250" W., Male Quick Disc.	15
CSS-FQ5	12-10 Ga., 0.250" W., Female Quick Disc.	15
CSS-F10	12-10 Ga., #10 Fork Terminals	15

Micro Terminal Kit

This kit has gained popularity as more and more computers with 26-22 gauge wire are installed in mobile applications. Kit contains 17 different 26-20 gauge terminals, over 400 pieces, including rings, forks, butt splices, quick-disconnects, and heat-shrink terminals. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part # MICRO TERM KIT

Kit Contains	Description	Qty.
MB-R2	26-24 Ga., #2 Non-Ins. Ring Terminals	25
MB-R4	26-24 Ga., #4 Non-Ins. Ring Terminals	25
MB-R6	26-24 Ga., #6 Non-Ins. Ring Terminals	25
MB-F4	24-20 Ga., #4 Non-Ins. Fork Terminals	25
MB-F6	24-20 Ga., #6 Non-Ins. Fork Terminals	25
MB2-FQ8	26-24 Ga., 0.187" W., Female Quick Disc.	25
MN-B	26-24 Ga., Nylon Butt Splice Terminals	25
MN-R2	26-24 Ga., #2 Nylon Ring Terminals	25
MN-R4	26-24 Ga., #4 Nylon Ring Terminals	25

(Cont.)	Description	Qty.
MN-R6	26-24 Ga., #6 Nylon Ring Terminals	25
MN2-FQ1	26-24 Ga., 0.110" W., Nylon Female Disc.	25
MN2-FQ8	26-24 Ga., 0.187" W., Nylon Female Disc.	25
MN2-FZ1	26-22 Ga., 0.110" W., Nylon Female Disc.	25
MN-F2	26-24 Ga., #2 Nylon Fork Terminals	25
MN-F4	26-24 Ga., #4 Nylon Fork Terminals	25
MN-F6	26-24 Ga., #6 Nylon Fork Terminals	25
MS-B	26-22 Ga., Heat-Shrink Butt Splices	25

Micro Terminal Kit with Crimping Tool

This kit has gained popularity as more and more computers with 26-22 gauge wire are installed in mobile applications. Kit contains 22 different 26-20 gauge terminals, over 500 pieces, including rings, forks, butt splices, quick-disconnects, and heat-shrink terminals. It also contains the versatile 3M® TH-450 crimping tool to crimp those tiny terminals onto the tiny wire. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part # MICRO TER KT-LG

Kit Contains	Description	Qty.
MB-B	26-22 Ga., Non-Ins. Butt Splice Terminals	25
MB-R2	26-24 Ga., #2 Non-Ins. Ring Terminals	25
MB-R4	26-24 Ga., #4 Non-Ins. Ring Terminals	25
MB-R6	26-24 Ga., #6 Non-Ins. Ring Terminals	25
MB2-FQ8	26-24 Ga., 0.187" W., Female Quick Disc.	25
MB-F4	24-20 Ga., #4 Non-Ins. Fork Terminals	25
MB-F6	24-20 Ga., #6 Non-Ins. Fork Terminals	25
MN-B	26-24 Ga., Nylon Butt Splice Terminals	25
MN-R2	26-24 Ga., #2 Nylon Ring Terminals	25
MN-R4	26-24 Ga., #4 Nylon Ring Terminals	25
MN-R6	26-24 Ga., #6 Nylon Ring Terminals	25
MN-R8	26-24 Ga., #8 Nylon Ring Terminals	25

(Cont.)	Description	Qty.
MN-R10	26-24 Ga., #10 Nylon Ring Terminals	25
MN2-FQ1	26-24 Ga., 0.110" W., Nylon Female Disc.	25
MN2-FQ8	26-24 Ga., 0.187" W., Nylon Female Disc.	25
MN2-FZ1	26-22 Ga., 0.110" W., Nylon Female Disc.	25
MN3-FZ5	26-22 Ga., 0.250" W., Nylon Female Disc.	25
MN2-FZ8	26-22 Ga., 0.187" W., Nylon Female Disc.	25
MN-F2	26-24 Ga., #2 Nylon Fork Terminals	25
MN-F4	26-24 Ga., #4 Nylon Fork Terminals	25
MN-F6	26-24 Ga., #6 Nylon Fork Terminals	25
MS-B	26-22 Ga., Heat-Shrink Butt Splices	25
TH-450	3M, Heavy Duty Crimper/Stripper	1

High-Temperature Terminal Kit

These 900°F terminals are made of nickel plated steel. This kit contains 20 different high-temperature terminals, 500 pieces, sizes 22 to 10 gauge, including rings, forks, butt splices, and quick-disconnect terminals. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.



Part # HIGH TEMP KIT

Kit Contains	Description	Qty.
AH-B	22-18 Ga., Butt Splice Terminals	25
AH-R6	22-18 Ga., #6 Ring Terminals	25
AH-R8	22-18 Ga., #8 Ring Terminals	25
AH-R10	22-18 Ga., #10 Ring Terminals	25
AH-F6	22-18 Ga., #6 Fork Terminals	25
BH-B	16-14 Ga., Butt Splice Terminals	25
BH-R6	16-14 Ga., #6 Ring Terminals	25
BH-R8	16-14 Ga., #8 Ring Terminals	25
BH-R10	16-14 Ga., #10 Ring Terminals	25
BH-F6	16-14 Ga., #6 Fork Terminals	25

(Cont.)	Description	Qty.
BH-F10	16-14 Ga., #10 Fork Terminals	25
BH3-MQ5	16-14 Ga., 0.250" W., Male Quick Disc.	25
BH3-FQ5	16-14 Ga., 0.250" W., Female Quick Disc.	25
CH-B	12-10 Ga., Butt Splice Terminals	25
CH-R6	12-10 Ga., #6 Ring Terminals	25
CH-R8	12-10 Ga., #8 Ring Terminals	25
CH-R10	12-10 Ga., #10 Ring Terminals	25
CH-R14S	12-10 Ga., 1/4" Ring Terminals	25
CH3-FQ5	12-10 Ga., 0.250" W., Female Quick Disc.	25
CH-F10	12-10 Ga., #6 Fork Terminals	25

Terminal Maintenance Kit

This kit contains 21 different vinyl insulated terminals, 450 pieces, sizes 22 to 10 gauge, including rings, forks, butt splices, quick-disconnect, and bullet terminals, as well as 8" cable ties. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.

Kit Contains	Description	Qty.
AP-B	22-18 Ga., Vinyl Butt Splice Terminals	25
BP-B	16-14 Ga., Vinyl Butt Splice Terminals	25
BP-R6S	16-14 Ga., #6 Vinyl Ring Terminals	25
BP-R10	16-14 Ga., #10 Ring Terminals	25
BP-R14S	16-14 Ga., 1/4" Ring Terminals	25
BP-R38	16-14 Ga., 3/8" Vinyl Ring Terminals	25
BP3-MQ5	16-14 Ga., 0.250" W., Vinyl Male Disc.	25
BP3-FQ5	16-14 Ga., 0.250" W., Vinyl Female Disc.	25
BP-SP56	16-14 Ga., 0.156" Dia., Nylon Male Bullet	15
BN-SR56	16-14 Ga., 0.156" Dia., Nylon Fem. Bullet	15
BP-FB6S	16-14 Ga., #6 Narrow Fork Block Term.	25

(Cont.)	Description	Qty.
BP-F10	16-14 Ga., #10 Vinyl Fork Terminals	25
BP-H8	16-14 Ga., #8 Hook Terminals	25
CP-B	12-10 Ga., Vinyl Butt Splice Terminals	20
CP-R10	12-10 Ga., #10 Vinyl Ring Terminals	20
CP-R14S	12-10 Ga., 1/4" Ring Terminals	15
CP-R56	12-10 Ga., 5/16" Ring Terminals	25
CP-R38	12-10 Ga., 3/8" Ring Terminals	15
CP-F10	12-10 Ga., #10 Vinyl Fork Terminals	20
VWA-O	0.250" W. Female To Two Stacked Male	15
T50-7-C	8", 50 lb. White, Standard Cable Ties	25



Part #
SM MAIT KIT PVC

Heating Ventilation Air Conditioning Kit

A handy kit to have when working on heating, ventilation and air conditioning. The kit contains 26 different types of terminals, ranging from 22 to 10 gauge. There are vinyl rings, splices, bullets, quick-disconnects, forks, adapters, and cable ties. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.

Kit Contains	Description	Qty.
AP-B	22-18 Ga., Vinyl Butt Splice Terminals	25
AP-R6S	22-18 Ga., #6 Narrow Vinyl Ring Terminals	25
AP3-FQ5	22-18 Ga., 0.250" W., Vinyl Female Disc.	25
BP-B	16-14 Ga., Vinyl Butt Splice Terminals	25
BP-R6S	16-14 Ga., #6 Vinyl Ring Terminals	25
BP-R38	16-14 Ga., 3/8" Vinyl Ring Terminals	25
BP3-MQ5	16-14 Ga., 0.250" W., Vinyl Male Disc.	25
BP3-FQ5	16-14 Ga., 0.250" W., Vinyl Female Disc.	25
BP2-FQ8	16-14 Ga., 0.187" W., Vinyl Female Disc.	25
BN3-FZ5	16-14 Ga., 0.250" W., Nylon Female Disc.	25
BP-F10	16-14 Ga., #10 Vinyl Fork Terminals	25

(Cont.)	Description	Qty.
BP-SP56	16-14 Ga., 0.156" Dia., Nylon Male Bullet	15
BB3-FFQ5	16-14 Ga., 0.250" W., Female Quick Disc.	25
BN-SR56	16-14 Ga., 0.156" Dia., Nylon Female Bullet	15
CP-B	12-10 Ga., Vinyl Butt Splice Terminals	20
CP-R10	12-10 Ga., #10 Vinyl Ring Terminals	20
CP-F10	12-10 Ga., #10 Vinyl Fork Terminals	20
MMFA	Female To Two Male Connector, 0.250" W.	15
PBT-2	Male And Female Quick Disc., 0.250" W.	15
VWA-O	0.250" W. Female To Two Stacked Male	15
T50-7	Standard 8", 50Lb. White Cable Ties	25



Part #
HVAC-KIT

Quick Disconnect Terminal Kit

This kit contains 20 different terminals, 600 pieces, sizes 16 to 10 gauge, including bare, nylon, fully insulated, and heat-shrink, quick disconnect terminals. Comes in a small metal box, 13 3/8"w x 9 1/4"d x 2"h.

Kit Contains	Description	Qty.
AN2-FQ8	22-18 Ga., 0.187" W., Female Nylon Ins.	25
AB3-FQ5	22-18 Ga., 0.187" W., Female Non-Ins.	50
AN3-FQ5	22-18 Ga., 0.250" W., Female Nylon Ins.	50
AN3-MZ5	22-18 Ga., 0.250" W., Male Nylon Fully Ins.	25
AN3-FZ5	22-18 Ga., 0.250" W., Female Nylon Fully Ins.	25
AS3-FZ5	22-18 Ga., 0.250" W., Female Shrink Fully Ins.	25
BN2-FQ8	16-14 Ga., 0.187" W., Female Nylon Ins.	25
BB3-MQ5	16-14 Ga., 0.250" W., Male Non-Ins.	50
BB3-FQ5	16-14 Ga., 0.250" W., Female Non-Ins.	50
BB3-FFQ5	16-14 Ga., 0.250" W., Female Non-Ins. Flag	25

(Cont.)	Description	Qty.
BN3-FQ5	16-14 Ga., 0.250" W., Female Nylon Ins.	50
BN3-MZ5	16-14 Ga., 0.250" W., Male Nylon Fully Ins.	25
BN3-FZ5	16-14 Ga., 0.250" W., Female Nylon Fully Ins.	25
BS3-FZ5	16-14 Ga., 0.250" W., Female Shrink Fully Ins.	25
CB3-FQ5	12-10 Ga., 0.250" W., Female Non-Ins.	50
CN3-FQ5	12-10 Ga., 0.250" W., Female Nylon Ins.	25
CN3-MZ5	12-10 Ga., 0.250" W., Male Nylon Fully-Ins.	15
CN3-FZ5	12-10 Ga., 0.250" W., Female Nylon Ins.	15
MMFA	0.250" W., Female To Two Male Connector	10
PBT-2	0.250" W., Male and Female Connector	10



Part #
QC-KIT

Wire Ferrule Kit

Kit contains 6 types of insulated ferrules, from 22 gauge to 12 gauge. 600 ferrules in a plastic box, 11"w x 6 3/4"d x 1 3/4"h.
Part #FERR-KIT NYLON

Kit Contains	Description	Qty.
FER-22	22 Gauge White Insulated Ferrules	100
FER-20	20 Gauge Light Blue Insulated Ferrules	100
FER-18	18 Gauge Red Insulated Ferrules	100

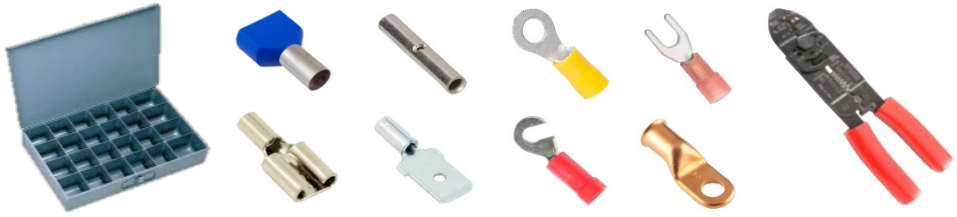
(Cont.)	Description	Qty.
FER-16	16 Gauge Black Insulated Ferrules	100
FER-14	14 Gauge Gray Insulated Ferrules	100
FER-12	12 Gauge Orange Insulated Ferrules	100



Let Us Customize A Kit For You

Let us build a kit that will suit your needs.

You choose the terminals, tools, and whatever else you may need. We put it all together in a plastic or metal box. You now have everything you need right at your fingertips.



Wire Ferrules & Pin and Blade Terminals

Non-Insulated Wire Ferrules



Create a better connection under set screws, pressure plates, and in terminal blocks by capturing all of the wire strands at the contact point. Ferrules also hold up to vibration, can be reconnected multiple times without damage and make stronger mechanical connections than ring or fork terminals.

Wire Size (AWG)	Pin Length		Pkg. Qty.
28	0.28" (7mm)	FER-28B	100
26	0.2" (5mm)	FER-26B	100
24	0.2" (5mm)	FER-24B	100
22	0.39" (10mm)	FER-22B	100
20	0.39" (10mm)	FER-20B	100
18	0.39" (10mm)	FER-18B	100
16	0.39" (10mm)	FER-16B	100

Wire Size (AWG)	Pin Length		Pkg. Qty.
14	0.39" (10mm)	FER-14B	100
12	0.47" (12mm)	FER-12B	100
10	0.59" (15mm)	FER-10B	100
8	0.47" (12mm)	FER-8B	100
6	0.47" (12mm)	FER-6B	50
4	0.59" (15mm)	FER-4B	50
2	0.71" (18mm)	FER-2B	25

Wire Size (AWG)	Pin Length		Pkg. Qty.
1/0	0.71" (18mm)	FER-11/0B	25
2/0	0.98" (25mm)	FER-2/0B	10
3/0	0.98" (25mm)	FER-3/0B	10
4/0	1.26" (32mm)	FER-4/0B	10
250 MCM	1.26" (32mm)	FER-250B	10
350 MCM	1.26" (32mm)	FER-350B	10

Insulated Wire Ferrules



Create a better connection under set screws, pressure plates, and in terminal blocks by capturing all of the wire strands at the contact point. Ferrules also hold up to vibration, can be reconnected multiple times without damage, and are a stronger mechanical connection than ring or fork terminals. The nylon insulation prevents incidental contact.

Wire Size (AWG)	Pin Length	Color		Pkg. Qty.
Standard				
28	0.24" (6mm)	Brown	FER-28	100
26	0.24" (6mm)	Purple	FER-26	100
24	0.24" (6mm)	Pink	FER-24	100
22	0.31" (8mm)	White	FER-22	100
20	0.31" (8mm)	Light Blue	FER-20	100
18	0.31" (8mm)	Red	FER-18	100
16	0.31" (8mm)	Black	FER-16	100
14	0.31" (8mm)	Gray	FER-14	100
12	0.39" (10mm)	Orange	FER-12	100
10	0.47" (12mm)	Green	FER-10	100
8	0.47" (12mm)	Brown	FER-8	100
6	0.47" (12mm)	Blue	FER-6	50
4	0.63" (16mm)	Black	FER-4	50
2	0.63" (16mm)	Tan	FER-2	25
1/0	0.79" (20mm)	Olive	FER-11/0	10
2/0	0.83" (21mm)	Yellow	FER-2/0	10
3/0	0.98" (25mm)	Red	FER-3/0	10
4/0	1.06" (27mm)	Blue	FER-4/0	5
250 MCM	1.26" (32mm)	Yellow	FER-250MCM	5
Extra Long				
22	0.47" (12mm)	White	FER-22XL	100
20	0.47" (12mm)	Blue	FER-20XL	100
18	0.47" (12mm)	Yellow	FER-18XL	100
16	0.71" (18mm)	Black	FER-16XL	100
14	0.47" (12mm)	Gray	FER-14L	100
14	0.71" (18mm)	Gray	FER-14XL	100
12	0.71" (18mm)	Orange	FER-12XL	100
10	0.71" (18mm)	Green	FER-10XL	100

Two Wire Insulated Ferrules



Need to terminate two wires at the same point? These are the terminals for you.

Ferrules also hold up to vibration, can be reconnected multiple times without damage, and make stronger mechanical connections than ring or fork terminals.

The nylon insulation prevents incidental contact.

Wire Size (AWG)	Pin Length	Color		Pkg. Qty.
22	0.31" (8mm)	White	FER-22-2	100
20	0.31" (8mm)	Blue	FER-20-2-LTB	100
18	0.31" (8mm)	Red	FER-18-2	100
16	0.39" (10mm)	Black	FER-16-2	100
14	0.47" (12mm)	Blue	FER-14-2-BLUE	100
14	0.47" (12mm)	Gray	FER-14-2-GREY	100
12	0.47" (12mm)	Orange	FER-12-2-ORANGE	100
12	0.47" (12mm)	Gray	FER-12-2-GREY	100
10	0.47" (12mm)	Green	FER-10-2	100
8	0.47" (12mm)	Brown	FER-8-2	50
6	0.47" (12mm)	Blue	FER-6-2	50

Insulated Wire Ferrule Strips for High Volume Applications

For rapid installation, use these ferrule strips, along with our hand tool #FER TOOL STRAP (see next page). These nylon ferrules in strip form, along with the tool, create a semi automatic process. The tool strips, cuts, and crimps with each squeeze of the handle.



Ferrule Strip



Ferrule Tool #FER TOOL STRAP

Wire Size (AWG)	Pin Length	Color		Pkg. Qty.
22	0.31" (8mm)	White	FER-22-STP	50
20	0.31" (8mm)	Blue	FER-20-STP	50
18	0.31" (8mm)	Red	FER-18-STP	50
16	0.31" (8mm)	Black	FER-16-STP	50
14	0.31" (8mm)	Gray	FER-14-STP	50

Solid Pin Terminals



Non-Insulated

Avoid frayed wire ends. Crimp your wire into this terminal and use the solid pin instead of the wire to make your electrical connection. Use the **heavy duty** pin terminals in harsh environments, these terminals feature a heat-shrink connection that also has an internal sealant. Requires one crimp plus heat.

	Non-Insulated			Vinyl Insulated		Nylon Insulated	Heavy Duty Heat-Shrink	
Wire Size (AWG)		Pkg. Qty.	Color		Pkg. Qty.	Pkg. Qty.		Pkg. Qty.
22-18	AB-PIN	100	Red	-------	----	AN-PIN 50	ASN-PIN	25
16-14	BB-PIN	50	Blue	BP-PIN	50	BN-PIN 50	BSN-PIN	25
12-10	CB-PIN	50	Yellow	CP-PIN	50	CN-PIN 25	CSN-PIN	10

Blade Terminal



Avoid frayed wire ends. Crimp your wire into this non-insulated terminal and use the blade instead of the wire to make your electrical connection. Solid tab with flat top and bottom for slipping under set screws or in compression blocks. Stackable. Requires only one crimp onto the wire.

Wire Size (AWG)	Blade Length		Pkg. Qty.
22-16	0.728"	AB-BLD-087	50
16-14	0.360"	BB-BLD110	50

Wire Ferrule Tools

Crimps:
- **24-10 gauge** insulated and non-insulated, with a rotating crimp die
- DIN 46228 Pt #1 and #4 or EN-60947-1 type wire ferrules

Features:
- Rotary action head turns 90° to allow crimp to be made from front or side
- German precision engineered tool



Customer's Choice

Part # FER TOOL ROTO

Crimps:
- **28-6 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp
- seven crimp zones

Features:
- German precision engineered tool
- Ratcheting tool



Part # FER TOOL 28-6

Crimps:
- **22-10 gauge** insulated and non-insulated

Features:
- Quick-release
- Five crimp zones
- Economy ratcheting tool



Part # FER TOOL 22-12

Crimps:
- **20-12 gauge** insulated and non-insulated wire ferrules
- US or DIN type wire ferrules

Features:
- German precision engineered tool
- Ratcheting tool



Part # PA-1648

Crimps:
- **10-6 gauge** insulated and non-insulated

Features:
- Quick-release
- Three crimp zones
- Pressure adjustment wheel
- Economy ratcheting tool



Part # FER TOOL 10-6E

Crimps:
- **8-1 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp

Features:
- Quick-release
- Extra long handle for greater leverage
- Five crimp zones
- Ratcheting tool



Part # FER TOOL 8-1

Crimps:
- **4/0 gauge -250MCM** insulated and non-insulated wire ferrules with a trapezoid crimp

Features:
- Heavy-duty Ratcheting Tool



Part # FER-TOOL 250MCM

Crimps:
- **22-14 gauge** strip ferrules

Features:
- Semi automatic tool cuts, strips and crimps with each squeeze of the handle.
- Speeds application by 200-300% over standard crimping tools
- Load strip ferrules into this tool for high volume applications



Customer's Choice

Part # FER TOOL STRAP

Crimps:
- **28-6 gauge** insulated and non-insulated wire ferrules

Features:
- Side loading tool automatically adjusts to wire ferrule sizes
- Precision crimp over full length of the sleeve
- German patented crimp technology produces a high quality six sided crimp
- Ratcheting tool



Part # FERATCHET 28-6

Crimps:
- **22-12 gauge** insulated and non-insulated
- DIN 46228 Pt #1 and #4

Features:
- One crimp zone crimps all sizes
- German precision engineered tool
- Non-ratcheting tool



Part # FER TOOL20-12-E

Crimps:
- **10-6 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp in all three crimp zones.

Features:
- German precision engineered ratcheting tool



Part # FER TOOL 10-6

Crimps:
- **1-3/0 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp

Features:
- Quick-release
- Extra long handle for greater leverage
- Ratcheting tool



Part # FER TOOL 1-3/0

Crimps:
- **6-2 gauge** insulated and non-insulated wire ferrules

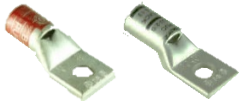
Features:
- Quick-release
- Three crimp zones
- Pressure adjustment wheel
- Ratcheting tool



Part # FER TOOL 6-2

Copper Compression Lugs, Sleeves & Split Bolts

Copper Compression Lugs



The extended barrel allows you to easily make a double crimp, for good wire contact. The sight hole allows you to ensure your wire is inserted properly, plus it's UL listed and can be used up to 600 volts. Sold individually. Many other sizes available through special order.

Wire Size (AWG)	Stud Size	Length	Width	Color	
10	#10	0.8''	0.3"	-------	IL-CRA-10
8	#10	1.2''	0.4"	Red	IL-CRA-8
8	1/4"	1.2''	0.4"	Red	IL-CRA-8-14
8	5/16"	1.3''	0.6"	Red	IL-CRA-8-56
8	3/8"	1.3''	0.6"	Red	IL-CRA-8-38
8	1/2"	1.5''	0.8"	Red	IL-CRA-8-12
6	#10	1.6''	0.4"	Blue	IL-CRA-6
6	1/4"	1.7"	0.4"	Blue	IL-CRB-6
6	5/16"	1.8''	0.5"	Blue	IL-CRA-6-516
6	3/8"	1.8''	0.6"	Blue	IL-CRA-6-38
4	#10	1.6''	0.5"	Gray	IL-CRA-4
4	1/4"	1.7''	0.5"	Gray	IL-CRB-4
4	5/16"	1.8''	0.6"	Gray	IL-CRA-4-516
4	3/8"	1.8''	0.6"	Gray	IL-CRA-4-38
2	1/4"	1.8''	0.6"	Brown	IL-CRA-2
2	5/16"	1.9''	0.6"	Brown	IL-CRB-2
2	3/8"	2''	0.6"	Brown	IL-CRC-2
2	1/2"	2.2''	0.8"	Brown	IL-CRA-2-12
1	1/4"	1.4''	0.7"	Green	IL-CRA-1-14
1	5/16"	1.6''	0.7"	Green	IL-CRA-1

Wire Size (AWG)	Stud Size	Length	Width	Color	
1	3/8"	2.1''	0.7"	Green	IL-CRA-1-38
1/0	1/4"	2''	0.8"	Pink	IL-CRA-0-14
1/0	5/16"	2.1''	0.8"	Pink	IL-CRA-0
1/0	3/8"	2.1''	0.8"	Pink	IL-CRB-0
1/0	1/2"	2.4"	0.8"	Pink	IL-CRB-0-12
2/0	3/8"	2.1''	0.8"	Black	IL-CRA-2/0
2/0	1/2"	2.4''	0.8"	Black	IL-CRA-2/0-12
3/0	3/8"	2''	0.9"	Orange	IL-CRA-3/0
3/0	1/2"	2.5''	0.9"	Orange	IL-CRB-3/0
4/0	1/4"	2.2''	1"	Purple	IL-CRA-4/0-14
4/0	3/8"	2.3''	1"	Purple	IL-CRA-4/0
4/0	1/2"	2.6''	1"	Purple	IL-CRB-4/0
250 MCM	1/4"	2.3''	0.4"	Yellow	IL-CRA-250-14
250 MCM	5/16"	2.3''	0.4"	Yellow	IL-CRA-250-56
250 MCM	3/8"	2.6''	0.4"	Yellow	IL-CRA-250-38
250 MCM	1/2"	2.7''	0.4"	Yellow	IL-CRA-250
350 MCM	1/2"	2.9''	1.3"	Red	IL-CRA-350
400 MCM	5/8"	3.3''	1.4"	Blue	IL-CRA-400
500 MCM	5/8"	3.6''	1.5"	Brown	IL-CRA-500
750 MCM	5/8"	4''	2"	Black	IL-CRA-750

Two-Hole Copper Compression Lugs



The double stud connections allow you to secure this lug in two places. The extended barrel allows you to easily make a double crimp, for good wire contact. The sight hole allows you to ensure your wire is inserted properly, plus it's UL listed and can be used up to 600 volts. Sold individually.

Wire Size (AWG)	Stud Size	Length	Width	Color	
1/0	5/16"	3.3''	0.8"	Pink	IL-CRA-1/0L2
2/0	1/2"	4.8''	0.8"	Black	IL-CRA-2/0L2
3/0	1/2"	4.9''	0.9"	Orange	IL-CRB-3/0L2
4/0	1/2"	5.1''	1"	Purple	IL-CRB-4/0L2

Wire Size (AWG)	Stud Size	Length	Width	Color	
250 MCM	1/2"	5.1''	1.1"	Yellow	IL-CRA-250L2
350 MCM	1/2"	5.6''	1.3"	Red	IL-CRA-350L2
500 MCM	1/2"	6''	1.5"	Brown	IL-CRA-500L2
750 MCM	1/2"	5.8''	2"	Black	IL-CRA-750L2

Copper Compression Sleeves



Compression sleeves are heavy duty butt splices. A longer barrel allows for a double crimp and better wire contact. The seamless design won't split in the crimping process. UL listed. Sold individually.

Wire Size (AWG)	Length	Color	
8	1.1''	Red	IL-CT-8
6	1.8''	Blue	IL-CT-6
4	1.8''	Gray	IL-CT-4
4	2.4''	Gray	IL-CTL-4
2	1.9''	Brown	IL-CT-2
2	2.6''	Brown	IL-CTL-2

Wire Size (AWG)	Length	Color	
1	1.9''	Green	IL-CT-1
1	2.9''	Green	IL-CTL-1
1/0	1.9''	Pink	IL-CT-1/0
1/0	2.9''	Pink	IL-CTL-1/0
2/0	2''	Black	IL-CT-2/0
2/0	3.1''	Black	IL-CTL-2/0

Wire Size (AWG)	Length	Color	
3/0	2.1''	Orange	IL-CT-3/0
3/0	3.1''	Orange	IL-CTL-3/0
4/0	2.1''	Purple	IL-CT-4/0
4/0	3.4''	Orange	IL-CTL-4/0
350 MCM	2.4''	Red	IL-CT-350

Copper Split Bolts



Use to connect multiple copper wires together without a crimping tool - simply tighten the hex nut. Accepts a wide range of wire sizes. UL listed. Sold individually.

Wire Range (AWG)	Length	Width	
16-8	0.8''	0.5"	IL-IK-8
10-8	1.1''	0.6"	IL-IK-6
6-4	1.1''	0.7"	IL-IK-4
6-3	1.3''	0.8"	IL-IK-3

Wire Range (AWG)	Length	Width	
6-2	1.3"	1.3"	IL-IK-2
4-1/0	1.6''	0.9"	IL-IK-1/0+
2-2/0	1.8''	1"	IL-IK-2/0
2-3/0	2''	1.1"	IL-IK-3/0

Wire Range (AWG)	Length	Width	
1/0-250 MCM	2.1''	1.3"	IL-IK-250
1/0-350 MCM	2.6''	1.6"	IL-IK-350

Neutral Bars, Power Distribution Blocks & Battery Terminal Grounding Straps

Copper Post Connections



Easily attach multiple wires to any surface with these post connectors. Accepts a wide range of wire sizes. No crimping tools required, simply screw down the set screw. UL listed. Sold individually.

Wire Range (AWG)	Stud Size	
14-8	#10	IL-CP-8
14-4	1/4"	IL-CP-4
14-1/0	5/16"	IL-CP-0
6-250 MCM	3/8"	IL-CP-250
4/0-500 MCM	1/2"	IL-CP-500

Aluminum Mechanical Lugs



Suitable for aluminum or copper wire. Easily attach multiple wires to any surface with these post connectors. Accepts a wide range of wire sizes. No crimping tools required, simply screw down the set screw. UL listed. Sold individually.

Wire Range (AWG)	Stud Size	Length	Width	Height	
14-4	1/4"	1.1"	0.50"	0.50"	IL-TA-6S
14-2	1/4"	1.2"	0.50"	0.60"	IL-TA-2
14-1/0	1/4"	1.5"	0.63"	0.80"	IL-TA-0
6-2/0	1/4"	1.5"	0.63"	0.80"	IL-TA-2/0
6-250MCM	5/16"	2"	1"	1.1"	IL-TA-250
6-350MCM	3/8"	2"	1.1"	1.3"	IL-TA-350
6-500MCM	3/8"	2.8"	1.3"	1.6"	IL-TA-500

Copper Neutral Bars



Grounds multiple wires in a very small space and accepts a wide range of wire sizes. No crimping tool is required. The copper neutral bars are made from high strength copper. Screws are included unless noted. UL listed. Sold individually.

Conductor Range Main/Primary	Conductor Range Tap/Secondary	Number of Taps	Mount Hole Position	Length	
14 to 4	14 to 6	4	1 and 6	2.75"	IL-D-167-4
14 to 4	14 to 6	6	2 and 7	3.50"	IL-D-167-6
14 to 4	14 to 6	8	4 and 9	4.50"	IL-D-167-8
14 to 4	14 to 6	10	4 and 9	5.13"	IL-D-167-10
14 to 4	14 to 6	12	5 and 10	6"	IL-D-167-12
14 to 4	14 to 6	14	7 and 12	6.75"	IL-D-167-14
14 to 4	14 to 6	174	Ground Screws: 1/4"-28	7/16" long	IL-E-153

Power Distribution Blocks

Power distribution blocks are suitable for copper or aluminum wire. They have great flexibility for using the block as an inline splice or to reduce the wire size. Made of high strength aluminum and have an insulating base. Temperature rating of 194°F and 600 volts maximum.

Use the modular design of the **IL-PDC-14-2/0-1** to combine any number of blocks for your job. Sold individually.



In (Primary)

Out (Secondary)

IL-PDB-16-2/0-1



IL-PDC-14-2/0-1

Poles Per Block	In (Primary) Wire Range	In (Primary) Openings Per Pole	Out (Secondary) Wire Range	Out (Secondary) Openings Per Pole	
1	2/0 to 12	1	4 to 14	6	IL-PDB-16-2/0-1
3	350 to 6	1	2/0 to 14	6	IL-PDB-16-350-3
3	4/0 to 6	2	4 to 14	12	ILPDB-212-4/0-3
1	2/0 to 14	1	4 to 14	4	IL-PDC-14-2/0-1

Grounding Straps

The lug to lug grounding straps are finely stranded for maximum conductivity. They are tin coated copper, flexible, and corrosion resistant.

Wire Size (AWG)	Length	Stud Size	
4	9"	1/2"	GND-STRP-4-9
4	13"	1/2"	GND-STRP-4-13
4	18"	3/8"	GND-STRP-4-18
1/0	12"	1/2"	GND-STRP-1/0-12
1/0	18"	1/2"	GND-STRP-1/0-18



Can't Find the Ilsco Product That You Need?

Simply provide us with their part number and we'll get it for you.











Copper Lugs & Battery Terminal Kit

Copper Lugs

The one-piece solid tongue of these copper lugs uniquely provides seamless transfer of electricity, a far superior product to the "sandwiched" tongue lugs commonly found in the market. Copper lugs are clearly marked for wire size and offer a flared barrel to ease insertion of finely stranded wire and welding cable. UL listed and CSA certified.

Corrosion resistant lugs have tin plating to stand up to harsh environments.

Heavy-duty copper lugs have 80% greater wall thicknesses and tin plating for corrosion resistance, these copper lugs will stand the test of time.







Wire Size (AWG)	For Stud Size	Straight Length	Straight Standard	Straight Corrosion Resistant	Straight Pkg. Qty.	90° Angle Standard	90° Angle Pkg. Qty.	90° Angle Corrosion Resistant	90° Angle Pkg. Qty.	Straight Heavy-Duty Length	Straight Heavy-Duty Standard	Straight Heavy-Duty Pkg. Qty.
8	#10	1.31"	CL8-10	CL8-10T	10	CL8-10-90	10	CL8-10T-90	10	1.22"	HL-8-10	10
8	1/4"	1.17"	CL8-14	CL8-14T	10	CL8-14-90	10	CL8-14T-90	10	1.22"	HL-8-14	10
8	5/16"	1.31"	CL8-56	CL8-56T	10	CL8-56-90	10	CL8-56T-90	10	1.38"	HL-8-56	10
8	3/8"	1.31"	CL8-38	CL8-38T	10	CL8-38-90	10	CL8-38T-90	10	1.38"	HL-8-38	10
8	1/2"	1.31"	CL8-12	CL8-12T	10	CL8-12-90	10	CL8-12T-90	10	1.54"	HL-8-12	10
6	#10	1.27"	CL6-10	CL6-10T	10	CL6-10-90	10	CL6-10T-90	5	1.26"	HL-6-10	10
6	1/4"	1.27"	CL6-14	CL6-14T	10	CL6-14-90	10	CL6-14T-90	5	1.26"	HL-6-14	10
6	5/16"	1.41"	CL6-56	CL6-56T	10	CL6-56-90	10	CL6-56T-90	5	1.42"	HL-6-56	10
6	3/8"	1.41"	CL6-38	CL6-38T	10	CL6-38-90	10	CL6-38T-90	5	1.42"	HL-6-38	10
6	1/2"	1.55"	CL6-12	CL6-12T	10	CL6-12-90	10	CL6-12T-90	5	1.54"	HL-6-12	10
4	#10	1.5"	CL4-10	CL4-10T	10	CL4-10-90	5	CL4-10T-90	5	1.50"	HL-4-10	10
4	1/4"	1.5"	CL4-14	CL4-14T	10	CL4-14-90	5	CL4-14T-90	5	1.50"	HL-4-14	10
4	5/16"	1.5"	CL4-56	CL4-56T	10	CL4-56-90	5	CL4-56T-90	5	1.50"	HL-4-56	10
4	3/8"	1.53"	CL4-38	CL4-38T	10	CL4-38-90	5	CL4-38T-90	5	1.50"	HL-4-38	10
4	1/2"	1.68"	CL4-12	CL4-12T	10	CL4-12-90	5	CL4-12T-90	5	1.63"	HL-4-12	10
2	1/4"	1.62"	CL2-14	CL2-14T	10	CL2-14-90	5	CL2-14T-90	5	1.85"	HL-2-14	5
2	5/16"	1.62"	CL2-56	CL2-56T	10	CL2-56-90	5	CL2-56T-90	5	1.85"	HL-2-56	5
2	3/8"	1.62"	CL2-38	CL2-38T	10	CL2-38-90	5	CL2-38T-90	5	2.01"	HL-2-38	5
2	1/2"	1.75"	CL2-12	CL2-12T	10	CL2-12-90	5	CL2-12T-90	5	2.21"	HL-2-12	5
1	1/4"	1.72"	CL1-14	CL1-14T	10	CL1-14-90	5	CL1-14T-90	5	1.85"	HL-1-14	5
1	5/16"	1.72"	CL1-56	CL1-56T	10	CL1-56-90	5	CL1-56T-90	5	1.85"	HL-1-56	5
1	3/8"	1.72"	CL1-38	CL1-38T	10	CL1-38-90	5	CL1-38T-90	5	2.01"	HL-1-38	5
1	1/2"	1.83"	CL1-12	CL1-12T	10	CL1-12-90	5	CL1-12T-90	5	2.21"	HL-1-12	5
1/0	1/4"	1.83"	CL1/0-14	CL1/0-14T	10	CL1/0-14-90	5	CL1/0-14T-90	5	2.04"	HL-1/0-14	5
1/0	5/16"	1.83"	CL1/0-56	CL1/0-56T	10	CL1/0-56-90	5	CL1/0-56T-90	5	2.04"	HL-1/0-56	5
1/0	3/8"	1.83"	CL1/0-38	CL1/0-38T	10	CL1/0-38-90	5	CL1/0-38T-90	5	2.04"	HL-1/0-38	5
1/0	1/2"	1.9"	CL1/0-12	CL1/0-12T	10	CL1/0-12-90	5	CL1/0-12T-90	5	2.04"	HL-1/0-12	5
2/0	1/4"	2.06"	CL2/0-14	CL2/0-14T	10	CL2/0-14-90	5	CL2/0-14T-90	5	2.40"	HL-2/0-14	5
2/0	5/16"	2.06"	CL2/0-56	CL2/0-56T	10	CL2/0-56-90	5	CL2/0-56T-90	5	2.40"	HL-2/0-56	5
2/0	3/8"	2.06"	CL2/0-38	CL2/0-38T	10	CL2/0-38-90	5	CL2/0-38T-90	5	2.40"	HL-2/0-38	5
2/0	1/2"	2.06"	CL2/0-12	CL2/0-12T	5	CL2/0-12-90	5	CL2/0-12T-90	5	2.40"	HL-2/0-12	5
3/0	1/4"	2.16"	CL3/0-14	CL3/0-14T	5	CL3/0-14-90	5	CL3/0-14T-90	5	2.46"	HL-3/0-14	5
3/0	5/16"	2.16"	CL3/0-56	CL3/0-56T	5	CL3/0-56-90	5	CL3/0-56T-90	5	2.46"	HL-3/0-56	5
3/0	3/8"	2.16"	CL3/0-38	CL3/0-38T	5	CL3/0-38-90	5	CL3/0-38T-90	5	2.46"	HL-3/0-38	5
3/0	1/2"	2.16"	CL3/0-12	CL3/0-12T	5	CL3/0-12-90	5	CL3/0-12T-90	5	2.46"	HL-3/0-12	5
4/0	1/4"	2.39"	CL4/0-14	CL4/0-14T	5	CL4/0-14-90	5	CL4/0-14T-90	5	2.50"	HL-4/0-14	1
4/0	5/16"	2.39"	CL4/0-56	CL4/0-56T	5	CL4/0-56-90	5	CL4/0-56T-90	5	2.50"	HL-4/0-56	1
4/0	3/8"	2.39"	CL4/0-38	CL4/0-38T	5	CL4/0-38-90	5	CL4/0-38T-90	5	2.50"	HL-4/0-38	1
4/0	1/2"	2.39"	CL4/0-12	CL4/0-12T	5	CL4/0-12-90	5	CL4/0-12T-90	5	2.50"	HL-4/0-12	1

Battery Terminal Kit

All the battery parts needed for diesels to pick-up trucks - no crimper necessary.

Comes in a large metal box, 18"w x 12"d x 3"h.



Part #
BATT TERM KIT

Kit Contains	Description	Qty.
BTC-2/0P	2/0 Ga. Positive Battery Terminals	5
BTC-2/0N	2/0 Ga. Negative Battery Terminals	5
BTC-4P	4 Ga. Positive Battery Terminals	3
BTC-4N	4 Ga. Negative Battery Terminals	2
CL2/0-38	2/0 Ga. 3/8" Stud Copper Lugs	10
CL2/0-12	2/0 Ga. 1/2" Stud Copper Lugs	10
CL4-38	4 Ga. 3/8" Stud Copper Lugs	10

Kit Contains	Description	Qty.
BB	Replacement Battery Term. Bolts and Nuts	25
X700-7R	3/4" Red HD Adhesive-Lined Shrink Tube	1
X700-7B	3/4" Black HD Adhesive-Lined Shrink Tube	1
BT-SLUG-2/0	2/0 Ga. Orange Solder Slugs	10
BT-SLUG-4	4 Ga. Silver Solder Slugs	10
TL-97944	2 oz. Tube, Corr. Preventative Compound	1

Crimp or Solder Top Post Battery Terminals

The tin plating on these copper battery terminals provides corrosion resistance, making them last longer. They have 100% conductivity compared to standard copper battery terminals which only have 32% conductivity. Feature wire size, polarity markings, and color coding for crimping. Include nut and bolt. Can be crimped and soldered.

Use **flag** battery terminals to connect several batteries together. Use **left** and **right elbow** battery terminals to fit in confined spaces.

Sold individually.

Straight 

Flag 

Left Elbow 

Right Elbow 

Polarity	(A)**Straight**	(B)**Flag**	(C)**Left Elbow**	(D)**Right Elbow**
6 Ga.				
Negative	BTC-6N	-------	BTCF-6N-L	BTCF-6N-R
Positive	BTC-6P	-------	BTCF-6P-L	BTCF-6P-R
4 Ga.				
Negative	BTC-4N	-------	BTCF-4N-L	BTCF-4N-R
Positive	BTC-4P	-------	BTCF-4P-L	BTCF-4P-R
2 Ga.				
Negative	-------	BTCF-2N	BTCF-2N-L	BTCF-2N-R
Positive	-------	BTCF-2P	BTCF-2P-L	BTCF-2P-R
1 Ga.				
Negative	BTC-1N	BTCF-1N	BTCF-1N-L	BTCF-1N-R
Positive	BTC-1P	BTCF-1P	BTCF-1P-L	BTCF-1P-R

Polarity	(A)**Straight**	(B)**Flag**	(C)**Left Elbow**	(D)**Right Elbow**
1/0 Ga.				
Negative	BTC-1/0N	BTCF-1/0N	BTCF-1/0N-L	BTCF-1/0N-R
Positive	BTC-1/0P	BTCF-1/0P	BTCF-1/0P-L	BTCF-1/0P-R
2/0 Ga.				
Negative	BTC-2/0N	BTCF-2/0N	BTCF-2/0N-L	BTCF-2/0N-R
Positive	BTC-2/0P	BTCF-2/0P	BTCF-2/0P-L	BTCF-2/0P-R
3/0 Ga.				
Negative	BTC-3/0N	BTCF-3/0N	BTCF-3/0N-L	BTCF-3/0N-R
Positive	BTC-3/0P	BTCF-3/0P	BTCF-3/0P-L	BTCF-3/0P-R
4/0 Ga.				
Negative	BTC-4/0N	BTCF-4/0N	BTCF-4/0N-L	BTCF-4/0N-R
Positive	BTC-4/0P	BTCF-4/0P	BTCF-4/0P-L	BTCF-4/0P-R

Military Style and Marine Battery Terminals

If **military** battery terminals are good enough for the military, they can stand up to the toughest of applications. Features an extra long 3/8" diameter bolt that's ideal for mounting lugs. Also has a 5/16" diameter short bolt. Clearly marked positive and negative.

Marine battery terminals withstand harsh seas. They allow you to easily connect and disconnect lugs from your battery with the spin of a wing nut. Positive has a 3/8" wing nut and the negative has a 5/16" wing nut.

Standard terminals are made of lead.

Wire Size (AWG)	Polarity	**Standard**
Military Style (Sold individually)		
8-4/0	Negative	BTM-N
8-4/0	Positive	BTM-P



Wire Size (AWG)	Polarity	**Standard**
Marine (Sold in packages of 5)		
8-4/0	Negative	WNBT-56N
8-4/0	Positive	WNBT-38P



Covers for Copper Lugs and Battery Terminals

Flexible vinyl covers protect copper lugs and battery terminals from short circuiting and contaminants. Color coded for easy identification of positive and negative terminals. Max temperature 194°F. Sold individually. Many other styles of boots are available through special order.

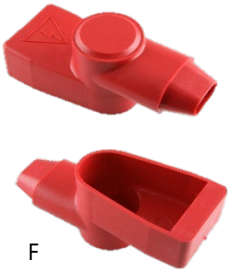

A


B


C


D


E


F

Wire Size (AWG)	Black	Red
(A)Copper Lug Covers		
18-10	18/10B-COVER	18/10R-COVER
8-2	8/2B-COVER	8/2R-COVER
8-2	CL8-2B-COV	CL8-2R-COV
6-1	CL6-4B-COV	CL6-4R-COV
2-1/0	CL2-1B-COV	CL2-1R-COV
2/0	CL2/0B-COV	CL2/0R-COV
3/0-4/0	CL3/0-4/0-B-COV	CL3/0-4/0-R-COV

Wire Size (AWG)	Black	Red
(B)Flag Battery Terminal Covers		
4/0	BTCFB-COV	BTCFR-COV
(C)Copper Battery Terminal Covers		
8-6	BT-86B-COV	BT-86R-COV
4-1	BT-41B-COV	BT-41R-COV
1/0	BT-1/0B-COV	BT-1/0R-COV
2/0	BT-2/0B-COV	BT-2/0R-COV
3/0-4/0	BT-4/0B-COV	BT-4/0R-COV

Wire Size (AWG)	Black	Red
(D)Elbow Battery Terminal Covers		
3/0 Left	BTCFB-L-COV	BTCFR-L-COV
3/0 Right	BTCFB-R-COV	BTCFR-R-COV
(E)Military Battery Terminal Covers		
8-4/0	BTM-OVALB-COV	BTM-OVALR-COV
(F)Marine Battery Terminal Covers		
8-4/0	WNBTB-COV	WNBTR-COV

Battery Terminals & Battery Connectors

No-Crimp Battery Terminals

No crimping tool is needed to attach your cable to these battery terminals - simply tighten the bolts. They also offer a wide wire size range to fit more applications. Sold individually.

Standard terminals are made of lead.

One-way terminals can be used as positive and negative terminals.

Three-way terminals allow you to insert your cable from all three directions for added flexibility of installation.

A  B  C 

Wire Size Range (AWG)	Polarity	**Standard**
(A)One-Way, Top Post		
6-1	Universal	BTL
2-4/0	Universal	BTL-2/0
(B)Three-Way, Top Post		
2-4/0	Positive	BTL-3P
2-4/0	Negative	BTL-3N
(C)Side-Mount		
6-1	Universal	BTL-SM

Adapters and Replacement Fasteners for Battery Terminals

A  B  C  D 

E  F  G 

Description	Thread Size		Pkg. Qty.
(A)Battery Terminal Bolt and Nut, 1" Thread Length	5/16"-18	BB-KIT	25
(B)Brass Standard Top Post Adapter, Replaces Standard Battery Bolt **Nut** for Accessories	5/16"-18	BHD-L	1
(C)Side Mount Standard Top Post Adapter (Positive)	3/8"-16	BTAM-POS	1
(C)Side Mount Standard Top Post Adapter (Negative)	3/8"-16	BTAM-NEG	1
(D)Side Mount Replacement Bolt with Accessory Bolt	3/8"-16 & 3/8"-24	BHD	1
(E)Side Mount Long Replacement Bolt with Accessory Bolt	3/8"-16	BHD-XL	1
(F)Side Mount Battery Terminal Bolt	3/8"-16	SMBB	10
(G)Extra-Long Side Mount Battery Terminal Bolt	3/8"-16	SMBB-L	10

Solder Slugs

Soldering allows you to make a connection without needing an expensive crimp tool. Select the slug that matches your wire size. Drop the slug in your battery terminal or copper lug, heat, then insert your stripped wire.



Wire Size (AWG)	Slug Color		Qty.
6	Gray	BT-SLUG-6	10
4	Silver	BT-SLUG-4	10
2	Green	BT-SLUG-2	10
1	Red	BT-SLUG-1	10
1/0	Gray	BT-SLUG-1/0	10
2/0	Orange	BT-SLUG-2/0	10
3/0	Purple	BT-SLUG-3/0	10
4/0	Yellow	BT-SLUG-4/0	10

Seated Threaded Stud Type Battery Terminals

Use with threaded (stud type) battery terminals. Made of tin-plated copper. Features wire size and polarity markings. Can be crimped and soldered.

Use **two-sided** terminals to connect several batteries together. Sold individually.

A  B  C 

Wire Size (AWG)	(A)**Standard**	(B)**Two-Sided**
4 Ga.	BTS-4	-------
2-1 Ga.	BTS-2	-------
1/0 Ga.	BTS-1/0	BTD-1/0
2/0 Ga.	BTS-2/0	BTD-2/0
3/0 Ga.	BTS-3/0	BTD-3/0
4/0 Ga.	BTS-4/0	BTD-4/0

(C)Stainless Steel Nut for Seated Threaded Stud Type Batteries, 3/8"-16, Part #SSN, Pkg. of 25

2-Pole Battery Connectors

 Housing

 Contact

 Dust Cover

The housings are interchangeable. Two housings fit together, like a handshake. Two contacts are needed for each housing. Use the dust covers to cover the open connection when not in use.

Wire Size (AWG)	Color	Description	
50 Amp Series			
6	Gray	1 Housing and 2 Contacts	AN-6319
6	Black	1 Dust Cover	AN-134G1
175 Amp Series			
4	Gray	1 Housing and 2 Contacts	AN-6325G6
4		1 Contact only	AN-948
2	Gray	1 Housing and 2 Contacts	AN-6325G5
1/0	Gray	1 Housing and 2 Contacts	AN-6325G1
1/0	Red	1 Housing and 2 Contacts	AN-6329G1
-------	Gray	1 Housing	AN-940
-------	Blue	1 Housing	AN-941
-------	Yellow	1 Housing	AN-943
-------	Red	1 Housing	AN-949
1/0		1 Contact only	AN-944

Wire Size (AWG)	Color	Description	
175 Amp Series	(Cont.)		
-------	Black	1 Dust Cover	AN-134G2
350 Amp Series			
2/0	Gray	1 Housing and 2 Contacts	AN-6320G1
3/0	Red	1 Housing and 2 Contacts	AN-6322G5
-------	Gray	1 Housing	AN-906
-------	Blue	1 Housing	AN-912
-------	Red	1 Housing	AN-913
-------	Yellow	1 Housing	AN-914
-------	Green	1 Housing	AN-931
2/0	-------	1 Contact only	AN-907
3/0	-------	1 Contact only	AN-916
4/0		1 Contact only	AN-908
-------	Black	1 Dust Cover	AN-134G3

Through-Wall Powerbolts

Powerbolts are a safe way to pass electrical current through a barrier. Handles 0-3/8" wall thickness and is 3" long. Choose red or black nylon base and weatherproof rubber cover. 440 amps continuous at 12 VDC.





Cover (Included)

Panel Thickness	Red	Black
3/8"-16 Post		
0"-3/8"	PBCC-3/8RW	PBCC-3/8BW

Quick Disconnect Power Feed

Fast connections to power multiple devices. Simply plug 1/4" female quick disconnects to male common feed nickel plated brass tabs. 20 amps max per contact tab, 55 amps max per tier, and 48 VDC max. Red insulator included.

QDPF-30



Number of Feeds	Amps	Part Number
10	55	QDPF-10
20	110	QDPF-20
30	120	QDPF-30

Jumpstart Connector

Create a convenient external point to jumpstart your vehicle or equipment. Simply mount the bracket to any flat surface for ease of access. 350 amps max at 12VDC. They are 5"X3"X4" and include red and black rubber boots.



Part # JUMPSTART

Battery Jumper Terminals and Studs

Make easily accessible battery connections, on the inside and outside of the vehicle. Solid brass posts that can be used separately or in pairs. Contact posts 13/16" diameter and 1 1/8" long. Accepts 6-48 vdc.





Polarity	Color	Jumper with Cap	Cap Only
Positive	Red	CH-46210-02	CH-97846-A
Negative	Black	CH-46210-03	CH-97846-B

Powerposts

A compact design for small areas, the 8 point powerpost is used to get power to several different devices. It has a 3/8" stainless steel input power post and 8 output positions with #8-32 stainless steel screws. The base is glass filled nylon.

Color	
Red	POWERPOST8-38R
Black	POWERPOST8-38B



Smart Battery Isolator

Smart battery isolators are hybrid electronic/electromechanical relays that prevent the auxiliary battery from draining the starting battery.



Amps	Volts	Terminal Studs	
85	9-16	5/16"-24"	CH-48525
200	9-16	5/16"-24"	CH-48530

Battery Isolator

Battery isolators are used on vehicles with two batteries. They isolate the batteries to prevent one from draining into the other. Also both batteries can be charged at the same time from one source.



CH-48092



CH-48122



CH-48092

Amps	Stud sizes	Mounting Holes	Size	
90	(3) 1/4", (1) #10	(4) 9/32"	6 1/2" L x 3 1/4" W x 2 13/16" H	CH-48092
140	(3) 5/16", (1) #10	(4) 9/32"	6" L x 4 3/16" W x 3 11/32" H	CH-48122
200	(3) 5/16", (1) #10	(4) 9/32"	8 1/2" L x 4 3/16" W x 3 13/32" H	CH-48162

Truck Multi-Terminal Blocks

Terminal block contacts are 10-32 threads and a 1/4" mounting hole.



Number of Terminals	Overall Length	OEM #		Number of Terminals	Overall Length	OEM #	
3	3 3/4"	B20303	TB-3	6	6"	B20306	TB-6
4	4 1/2"	B20304	TB-4	7	5 1/4"	B20307	TB-7
5	5 1/4"	B20305	TB-5	8	7 1/2"	B20308	TB-8

Truck Terminal Blocks

Description	Color	OEM #	
Insulated Mounting Bracket, 250 amps, 3/8-16 Thread Stud with Nut	Black	BE20301	TB-1-38
Insulated Mounting Bracket, 250 amps, 3/8-16 Thread Stud with Nut	Red	-------	JB3816-3
Insulated Mounting Bracket, 250 amps, 2.6" Overall Height, 3/8-16 Thread Stud with Nut	Black	BE20300	TB-1-38-THRU



TB-1-38
Surface Mount



TB-1-38-THRU
Thru Wall

Packard Weather Pack Connectors

Packard Weather Pack Series


Pin


Socket


Seals

Use these round pin and socket terminals, housings, and seals to make connections that can handle harsh environments. Each connection requires a male and female terminal, a seal for each terminal, and a pin and socket housing.

Select **terminals** that match your wire size. All terminals work with all housings, regardless of wire size. Terminals require two crimps (terminal to wire strands, terminal to seal and wire insulation). A proper crimping tool is required. For heavier usage, use a tool that performs both crimps at the same time, such as #12014254 for 22-14 gauge. For 12 gauge use the standard two crimp tool #12085270. For less frequent crimping, we recommend our Pack Tool. For production, use 528-KIT for 22-18 gauge and the 476-KIT for 16-12 gauge. Terminal removal tool #T-3.

Select a **seal** that matches your wire size.

Now select a **housing** that offers the number of connections you would like to make.

Use the **cavity plugs** when you have an extra circuit in your housing that is not in use. It prevents corrosion from entering the electrical connection.

Terminals

	Pin			Socket		
Wire Size (AWG)	Mfg. #		Pkg. Qty.	Mfg. #		Pkg. Qty.
22	12089307	WPM-22	25	12020801	WPF-22	25
20-18	12089040	WPM-19	25	12089188	WPF-19	25
16-14	12124582	WPM-15	25	12124580	WPF-15	25
12	12124587	WPM-12	25	12124581	WPF-12	25

Seals

Wire Size (AWG)	Color	Mfg. #		Pkg. Qty.
22-20	Purple	12089679	15324985	50
22	Red	12015899	15324983	50
20-14	Green	12015323	15324982	50
20-16	Tan	12041351	15324984	50
16-14	Gray	12010293	15324980	50
12-10	Blue	12015193	15324981	50
Plugs				
22-12	Green	12010300	WPCV-PLG	50

Housings


WPT-2 Socket


WPT-5 Socket


WPS-4 Pin


WPS-6 Pin


WPS-22 Pin (Through fire wall)

	Pin			Socket		
Circuits	Mfg. #		Pkg. Qty.	Mfg. #		Pkg. Qty.
1-Way	12010996	WPS-1	10	12015791	WPT-1	10
2-Way	12010973	WPS-2	10	12015792	WPT-2	10
3-Way	12010717	WPS-3	10	12015793	WPT-3	10
4-Way	12010974	WPS-4	5	12015797	WPT-4	5
4-Way	12015024	WPS-4SQ	5	12015798	WPT-4SQ	5
5-Way	12065158	WPS-5	1	12034342	WPT-5	1
6-Way	12010975	WPS-6	5	12015799	WPT-6	5
22-Way	15492521	WPS-22*	1	15492531	WPT-22*	1

*Use Wire Organizer (TPA) #12010852, Part #WP-22 LOCK, Pkg. Qty. 4.

Packard Weather Pack Kit


Part # WP-KIT

Unsure of the Weather Pack item that you need or want to create your own connection? This kit contains the most common terminals, seals, and housings so you can simply match up what you have with what's in the kit. This kit contains 13 different Weather Pack terminals, seals, and housings, over 200 pieces, all contained in a large metal box, 18"w x 12"d x 3"h.

Kit Contains	Description	Qty.
Housings		
WPS-1	1-Way Circuit, Pin	10
WPT-1	1-Way Circuit, Socket	10
WPS-2	2-Way Circuit, Pin	10
WPT-2	2-Way Circuit, Socket	10
WPS-3	3-Way Circuit, Pin	10
WPT-3	3-Way Circuit, Socket	10
WPS-4	4-Way Circuit, Pin	10
WPT-4	4-Way Circuit, Socket	10

(Cont.)	Description	Qty.
Terminals		
WPF-19	20-18 Ga., Socket	25
WPM-19	20-18 Ga., Pin	25
WPF-15	16-14 Ga., Socket	25
WPM-15	16-14 Ga., Pin	25
Seals		
15324982	20-14 Ga., Green Seal	25
Terminal Removal Tool		
T-3		1

Packard 56 & 59 Series


Male Terminal


Female Terminal


Male Housing


Female Housing

Terminals require two crimps (terminal to wire strands, terminal to wire insulation). A proper crimping tool is required. For heavier usage, use a tool that performs both crimps at the same time. We recommend our #8913440, ratcheting tool, for 20-14 gauge or our #6285847 economical tool, for 20-10 gauge. Use removal tool #12094430.

56 Series Terminals

Wire Size (AWG)	Mfg. #	Male	Pkg. Qty.	Mfg. #	Female	Pkg. Qty.
20-18	2965481	56M-19	25	2962508	56F-19	25
18	-------	-------	---	2965510	2965510	25
16-14	2971962	56M-15	25	2962447	56F-15	25
16-14	-------	-------	25	2965867	2965867	25
12-10	8917283	56M-11	25	-------	-------	----
12	2971859	2971859	25	2989877	2989877	25
12	-------	-------	----	2965143	56F-12	25

59 Series Terminals

Wire Size (AWG)	Mfg. #	Male	Pkg. Qty.	Mfg. #	Female	Pkg. Qty.
16-14	-------	-------	----	2973216	59F-15	25

56 Series Housings

Circuits	Mfg. #	Male	Pkg. Qty.	Mfg. #	Female	Pkg. Qty.
1-Way	2984528	56MLS-1	10	2977253	56FLS-1	10
2-Way	2984883	2984883	10	-------	-------	----
3-Way	2984678	2984678	10	2984378	2984378	10
4-Way	6294544	6294544	10	2977048	2977048	10
5-Way	3138080	3138080	10	2973422	2973422	10
6-Way	2977042	2977042	10	2977044	2977044	10

Packard Corrugated Loom Clips

Type	Inside Conduit ID	Mfg. #	Pkg. Qty.
Outlet Fitting	0.500	8905793	25
Conduit Clip	0.413	8911378	25
Rosebud Clip	0.350	8911169	25

Packard Tools

Weather Pack and 56-58 Series terminals often require different crimping tools. The more you know about what will be crimped, the easier it is to find a tool. The ratchet style design allows you to make easier crimps with less effort.

Use a **quick single motion** tool that makes all the crimps in one motion for higher volumes.

The **standard two crimp** tools crimp in two separate motions. One motion to crimp the terminal and one motion to crimp the seal.

Terminal Release Tools

Releases **Weather Pack**:
• 24-12 gauge



Part # T-3

Releases **Weather Pack**:
• 24-12 gauge
Features:
• Heavy-duty tool



Part # T-3HD

Releases **Metri-Pack**:
• 150, 280, and 630 series,
• GT 150 and GT280,
series, 22-10 gauge
Features: 0.035" tip width



Part # 12094429

Releases **Metri-Pack**:
• 150, 280, and 630 series,
• GT 150 and GT280,
series, 22-10 gauge
Features: Heavy Duty Tool



Part # 12094429HD

Releases **Weather Pack**:
• 56, 58, and 59 series,
20-10 gauge
Releases **Metri-Pack**:
• 480, 630, and 800,
series, 20-10 gauge
Features: 0.090" tip width



Part # 12094430

Releases **Packard**:
• 56, 58, and 59 series,
20-10 gauge
Releases **Metri-Pack**:
• 480, 630, and 800,
series, 20-10 gauge
Features: Heavy Duty Tool



Part # 12094430HD

Weather Pack Crimping Tools

Crimps **Weather Pack**:
• 20-14 gauge
Crimps **Metri-Pack**:
• 280 series, sealed,
20-14 gauge (must
remove terminal
locator on tool)
Features:
• OEM ratcheting tool
• Quick single motion



Part # 12014254

Crimps **Packard**:
• 56, 58, and 59 series,
20-14 gauge
• 56, 58, and 59 series,
12-10 gauge (core wings only)
• 56 series, 20-10 gauge, splice clips
• Open barrel rings, unsealed,
20-14 gauge, up to 0.032" thick
• Wedge base lamp sockets, 20-14 gauge
Crimps **Pack-Con**:
• Series I & III, unsealed, 20-14 gauge
• Series II, female, unsealed, 12-10 gauge
Crimps **Metri-Pack**:
• 480 series unsealed, 16-14 gauge
• 480 pull to seat series, unsealed, 16-14 gauge
• 630 series, unsealed, 16-14 gauge
• 630 pull to seat series, 16-14 gauge, unsealed
• 630 series, unsealed, 12-10 gauge (core wings only)
Features:
• Standard two crimp
• OEM non-ratcheting tool



Part # 6285847

Crimps **Weather Pack**:
• 22-14 gauge
Crimps **Metri-Pack**:
• 150 series,
22-14 gauge
• 280 series,
22-14 gauge
Features:
• Standard two crimp
• Non-ratcheting tool



Part # PACK TOOL

Crimps **Weather Pack**:
• 12 gauge
Crimps **Metri-Pack**:
• 280 series, sealed
12-10 gauge
Crimps **Packard**:
• Open barrel rings,
12-10 gauge
Features
• Standard two crimp
• Ratcheting tool



Part # 15155975

Crimps **Packard**:
• 56, 58 and 59
series, 20-14 Gauge
• Open barrel rings, unsealed,
20-14 gauge, up to 0.032" thick
• Wedge base lamp sockets, 20-14 gauge
Crimps **Pack-Con**:
• Series I & III, unsealed
20-14 Gauge
Features:
• Quick single motion
• OEM ratcheting tool



Part # 8913440

Crimps **Packard**:
• 56, 58, and 59 series,
12-10 gauge
• Open barrel rings,
14-10 gauge
Crimps **Metri-Pack**:
• 280, 480, and 63 series,
unsealed, 16-12 gauge
Crimps **Heat Shrink**:
• 22-10 gauge heat shrink
Features
• Standard two crimp
• OEM ratcheting tool



Part # 12085115

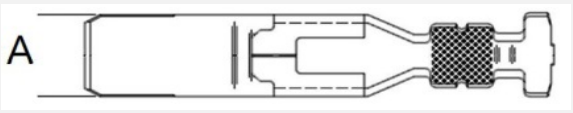
Crimps **Weather Pack**:
• 12 gauge
Crimps **Metri-Pack**:
• 280 series, sealed,
12 gauge
• 480 series, sealed, 18-14 gauge
• 480 series, unsealed, 16-14 gauge
• 480 pull to seat series, unsealed, 18-14 gauge
• 150, 480, and 630 series (crimps seals only)
• 630 series, sealed 18-14 gauge
Features:
• OEM standard two crimp



Part # 12085270

Packard Metri-Pack

About Packard Metri-Pack Terminals, Seals, and Housings



Metri-Pack Series	Male Tab Width (A)
150	1.5 mm
280	2.8 mm
480	4.8 mm
630	6.3 mm
800	8.0 mm

Metri-Pack terminals are different from Weather Pack terminals in that the male terminals have flat tabs, similar to quick-disconnects, rather than Weather Pack's round pins.

The **Metri-Pack series** can easily be determined by measuring the width of the male flat tab (see table). Example: If the male tab measures 1.5 mm, that is the 150 Series.

Sealed vs **Unsealed Terminals** - Sealed Metri-Pack terminals can be identified by the seal attached at the wire end of the terminal. Sealed terminals require a **seal** for each terminal. Select a seal that matches your wire size and series. Unsealed terminals require unsealed housings.

Use **cavity plugs** when you have an extra circuit in your sealed housing that is not in use.

A proper **crimping tool** is required. Terminals require two crimps (terminal to wire strands, terminal to wire insulation).

For **pull-to-seat** terminals, the wire is inserted through the back of the housing, out the front, wire is stripped and double crimped onto the terminal. The terminal is pulled back through until it seats in the housing, making a secure connection.

Metri-Pack Kit



Unsure of the Metri-Pack item you need? This kit contains the most common terminals and seals so you can simply match up what you have with what's in the kit. No need to buy a new harness, just replace the corroded terminal. This kit contains 12 different Metri-Pack terminals and seals, 350 pieces, including 150, 280 and 480 Series. It is all contained in a small plastic box, 11"w x 6 3/4"d x 1 3/4"h. Use **#PACK TOOL** (not included) to crimp terminals.

Part #METRIPAK KIT

Kit Contains	Description	Qty.
150 Series		
12048074	18-16 Ga., Sealed, Female Terminals	25
12045773	18-16 Ga., Sealed, Male Terminals	25
12103881	18-16 Ga., Unsealed, Female Terminals	25
12047581	18-16 Ga., Unsealed, Male Terminals	25
12047767	18-16 Ga., Unsealed, Female Terminals	25
280 Series		
12129493	14-12 Ga., Sealed, Female Terminals	25
12129497	14-12 Ga., Sealed Male Terminals	25

(Cont.)	Description	Qty.
280 Series		
12066214	16-14 Ga., Unsealed, Female Terminals	25
12020116	16-14 Ga., Unsealed, Male Terminals	25
480 Series		
12124304	16-14 Ga., Unsealed, Female Terminals	25

Seals			
Part #	Series	Description	Qty.
15324973	150	18-16 Ga., Red Seals	50
15324982	280	20-14 Ga., Green Seals	50

Metri-Pack 150 Series, Sealed Kit



This kit contains Metri-Pack 150 series housings, terminals, seals, (CPA) housing locks, (TPA) wire organizers, and a removal tool. There are 697 pieces in a large metal box, 18"w x 12"d x 3"h. Use **#12155975** (not included) to crimp terminals.

Part #MP 150 SLD KIT

Kit Contains	Description	Qty.
Housings		
12052641	2-Way Female Housings	10
12162000	2-Way Male Housings	10
12110293	3-Way Female Housings	6
12129615	3-Way Male Housings	6
12162144	4-Way Female Housings	6
12162102	4-Way Male Housings	6
12052848	6-Way Female Housings	6
12124107	6-Way Male Housings	6
12047937	8-Way Female Housings	4
12047931	8-Way Male Housings	4

(Cont.)	Description	Qty.
Terminals		
12084200	22-20 Ga., Female Terminals	50
12077628	22-20 Ga., Male Terminals	50
12048074	18-16 Ga., Female Terminals	50
12045773	18-16 Ga., Male Terminals	50
Seals		
15324974	22 Ga., Blue Seals	100
15324973	20-16 Ga., Dk. Red Seals	50
15324976	20 Ga., White Seals	100
Cavity Plugs		
12059168	Cavity Plugs, Dk. Red	30

(Cont.)	Description	Qty.
(CPA) Housing Locks		
12020833	(CPA) Housing Locks	10
(TPA) Wire Organizers		
12052634	2-Way (TPA) Wire Organizers	20
12052845	3-Way (TPA) Wire Organizers	12
12047948	4-Way (TPA) Wire Organizers	12
12052850	6-Way (TPA) Wire Organizers	12
12066304	8-Way (TPA) Wire Organizers	8
12047936	8-Way (TPA) Wire Organizers	8
Removal Tool		
12094429	Removal Tool	1

Metri-Pack 280 Series, Sealed Kit



This kit contains Metri-Pack 280 series housings, terminals, seals, (CPA) housing locks, (TPA) wire organizers, and a removal tool. There are 1011 pieces in a large metal box, 18"w x 12"d x 3"h. To crimp terminals 20-14 gauge use **#12155975** (not included) and for 12 gauge use **#12085270** (not included).

Part #MP 280 SLD KIT

Kit Contains	Description	Qty.
Housings		
12065172	1-Way Female Housings	5
12065171	1-Way Male Housings	5
15300027	2-Way Female Housings	5
15300002	2-Way Male Housings	5
12040977	3-Way Female Housings	4
15300003	3-Way Male Housings	4
12129565	4-Way Female Housings	3
12129600	4-Way Male Housings	3
12084891	5-Way Female Housings	3
12186400	5-Way Male Housings	3
Terminals		
12084201	22-20 Ga., Female Terminals	50
12124977	22-20 Ga., Male Terminals	50

(Cont.)	Description	Qty.
12077411	18-16 Ga., Female Terminals	50
12048159	18-16 Ga., Male Terminals	50
12129493	14-12 Ga., Female Terminals	50
12129497	14-12 Ga., Male Terminals	50
12077413	12 Ga., Female Terminals	50
12048254	12 Ga., Male Terminals	50
Seals		
15324983	22 Ga., Dk. Red Seals	100
15324985	22-20 Ga., Purple Seals	100
15324982	18-16 Ga., Green Seals	100
15324980	14 Ga., Gray Seals	100
15324981	12 Ga., Blue Seals	100
Cavity Plugs		
12010300	Cavity Plugs, Green	20

(Cont.)	Description	Qty.
(CPA) Housing Locks		
12020833	(CPA) Housing Locks	10
(TPA) Wire Organizers		
12065249	1-Way (TPA) Wire Organizer	10
15300014	2-Way (TPA) Wire Organizer	10
12034145	3-Way (TPA) Wire Organizer	4
15300016	4-Way (TPA) Wire Organizer	3
15324857	5-Way (TPA) Wire Organizer	3
15300015	3-Way (TPA) Wire Organizer	4
15324063	4-Way (TPA) Wire Organizer	3
12084673	5-Way (TPA) Wire Organizer	3
Removal Tool		
12094429	Removal Tool	1

Metri-Pack 480 Series, Sealed Kit



This kit contains Metri-Pack 480 series housings, terminals, seals, (CPA) housing locks, (TPA) wire organizers, and plugs. There are 261 pieces in a small metal box, 13 3/8"w x 9 1/4"d x 2"h. Use **#12085270** (not included) to crimp 18-14 gauge terminals and **#12071687** (not included) for 12-10 gauge terminals. Use release tools #12094430 (not included).

Part #MP 480 SLD KIT

Kit Contains	Description	Qty.
Housings		
12052613	2-Way Female Housings	4
12065863	2-Way Male Housings	4
Terminals		
12048451	16-14 Ga., Female Terminals	25
12065196	16-14 Ga., Male Terminals	25
12052139	12-10 Ga., Female Terminals	25

(Cont.)	Description	Qty.
Terminals	(cont.)	
12065197	12 Ga., Male Terminals	25
12052172	10 Ga., Male Terminals	25
Seals		
12048441	20-14 Ga., White	25
15324989	14-12 Ga., Red	25
12048443	12-10 Ga., Purple	25
12034170	10 Ga., Orange	25

(Cont.)	Description	Qty.
Cavity Plugs		
35232480	Cavity Plugs, Gray	15
(CPA) Housing Locks		
12020833	(CPA) Housing Locks	4
(TPA) Wire Organizers		
12059897	2-Way (TPA) Wire Organizer	8
Removal Tool		
12094430	Removal Tool	1

Metri-Pack GT 150 Series, Sealed Kit



This kit contains Metri-Pack GT 150 series housings, terminals, seals, cavity plugs and (CPA) housing locks.. There are 362 pieces in a small metal box, 13 3/8"w x 9 1/4"d x 2"h. Use **#15359995** (not included) to crimp terminals. Use #12094429 (not included), and #12094430 (not included) to release terminals from the housings.

Part #MP150GT SLD KIT

Kit Contains	Description	Qty.
Housings		
13510085	2-Way Female Housings	4
13510099	2-Way Male Housings	4
13519047	3-Way Female Housings	4
15326813	3-Way Male Housings	4
15487756	4-Way Female Housings	4
15487755	4-Way Male Housings	4

(Cont.)	Description	Qty.
Housings	(cont.)	
13519051	5-Way Female Housings	4
13519053	5-Way Male Housings	4
Terminals		
12191818	22-20 Ga., Female Terminals	50
15326268	22-20 Ga., Male Terminals	50
12191819	18-16 Ga., Female Terminals	50
15326269	18-16 Ga., Male Terminals	50

(Cont.)	Description	Qty.
Seals		
15366021	22-20 Ga., White Seals	50
15366060	18-16 Ga., Blue Seals	50
Cavity Plugs		
15305171	Cavity Plugs, Green	20
(CPA) Housing Locks		
15317832	(CPA) Housing Locks	10

Metri-Pack GT 280 Series, Sealed Kit



This kit contains Metri-Pack GT 280 series housings, terminals, seals, (CPA) housing locks, and plugs. There are 362 pieces in a small metal box, 13 3/8"w x 9 1/4"d x 2"h. Use **#15359995** (not included) to crimp terminals. Use release tools #12094429 and #12094430 (not included) to release terminals from the housings.

Part #MP280GT SLD KIT

Kit Contains	Description	Qty.
Housings		
13518845	2-Way Female Housings	4
15326678	2-Way Male Housings	4
15326614	3-Way Female Housings	4
15326623	3-Way Male Housings	4
13521459	4-Way Female Housings	4
15326633	4-Way Male Housings	4

(Cont.)	Description	Qty.
Housings	(cont.)	
13521463	5-Way Female Housings	4
15326647	5-Way Male Housings	4
Terminals		
15304718	22-20 Ga., Female Terminals	50
15304730	22-20 Ga., Male Terminals	50
15304719	18-16 Ga., Female Terminals	50
15304731	18-16 Ga., Male Terminals	50

(Cont.)	Description	Qty.
Seals		
15366065	22-20 Ga., Orange Seals	50
15366066	18-16 Ga., Blue Seals	50
Cavity Plugs		
15305170	Cavity Plugs, Green	20
(CPA) Housing Locks		
15317832	(CPA) Housing Locks	10

Packard Metri-Pack 150 Series, Sealed

Metri-Pack 150 Series, Sealed



Male tab width = 1.5 mm. 14 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require seals and a proper crimping tool, listed below.

Kit part **#MP 150 SLD KIT** available on page #32.

Terminals and Seals



Female



Male



Seal



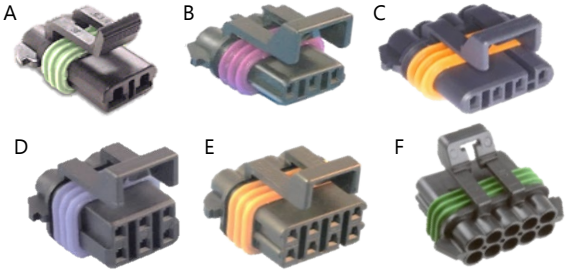
Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female & Male Terminal Seals	Color	Pkg. Qty.
22	-------	-----	--------	-----	15324974/12048087	Blue	50
22	-------	-----	--------	-----	12084193	Tan	50
22-20	12084200	25	12077628	25	15324976	White	50
18-16	12048074	25	12045773	25	15324973/12048086	Dark Red	50

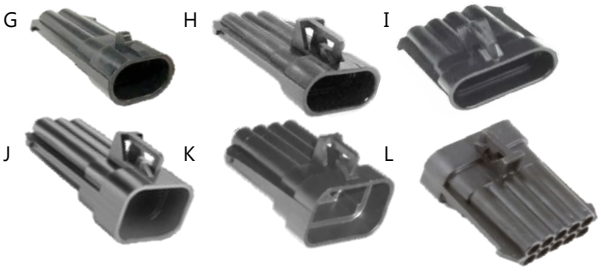
Cavity Plugs to Fill Unused Circuits, Dark Red (Pkg. of 25) Part #12059168

Housings

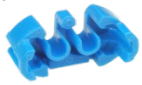
Female



Male



Wire Organizer (TPA)



#12052634

Housing Lock (CPA)



#12020833

No. of Cavities		Female Housings	Pkg. Qty.		Male Housings	Pkg. Qty.	Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
2	(A)	12052641	5	(G)	12162000	5	12052634	10	-------	-----
3	(B)	12110293	5	(H)	12129615	5	12052845	10	12020833	5
4	(C)	12162144	5	(I)	12162102	5	12047948	10	12020833	5
6	(D)	12052848	5	(J)	12124107	5	12052850	10	12020833	5
8	(E)	12047937	5	(K)	12047931*	5	12066304	10	12020833	5
10	(F)	12065425**	5	(L)	12045808	5	12124264	10	12020833	5

*Use wire organizer (TPA) #12047936.

**Also available in gray Part #12065426

Metri-Pack 150 Series, Sealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Metri-Pack 150 Series, Sealed, 20-14 Gauge Metri-Pack 280 Series, Sealed, 20-14 Gauge	OEM Ratchet	Standard Two Crimp	12155975
	Metri-Pack 150 Series, 22-14 Gauge Metri-Pack 280 Series, 22-14 Gauge Weather Pack, 22-14 Gauge	Non-Ratchet	Standard Two Crimp	PACK TOOL

Metri-Pack 150 Series, Unsealed

Male tab width = 1.5 mm. 14 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require a proper crimping tool, listed below.



Terminals



Female

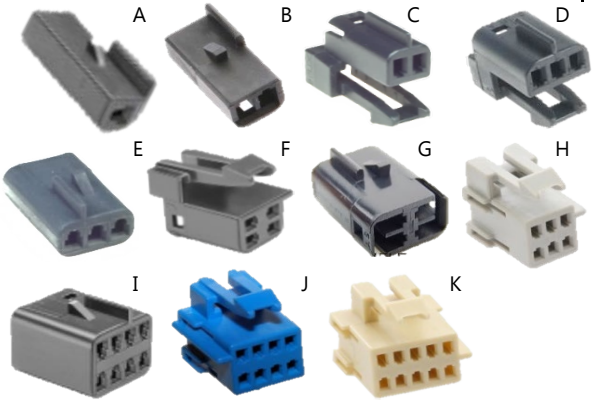


Male

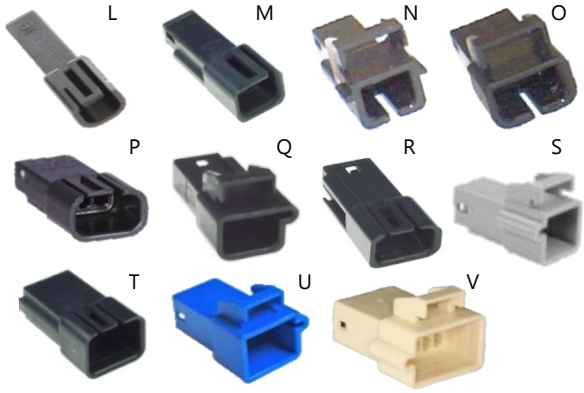
Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.
22-20	12064971	25	12059894	25
18-16	12047767	25	12047581	25

Housings

Female



Male



Wire Organizer (TPA) #12047665



Housing Lock (CPA) #12052834



No. of Cavities	Female Housings	Pkg. Qty.	Female Wire Organizers (TPA)	Pkg. Qty.	Male Housings	Pkg. Qty.	Male Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
1	(A) 12047682	25	-------	-----	(L) 12047683	25	-------	-----	-------	-----
2	(B) 12047662	10	12047664	10	(M) 12047663	10	12047665	10	-------	-----
2	(C) 12052832	10	12047664	10	(N) 12052833	10	12047665	10	12052834	5
3	(D) 12064758	10	12047783	10	(O) 12064759	10	12047784	10	12052834	5
3	(E) 12047781	10	12047783	10	(P) 12047782	10	12047784	10	-------	-----
4	(F) 12064760	10	12047664*	10	(Q) 12064761	10	12047787	10	12052834	5
4	(G) 12047785	10	12047664*	10	(R) 12047786	10	12047787	10	-------	-----
6	(H) 12064762	10	12064764*	10	(S) 12064763	10	12064765	10	12052834	5
8	(I) 12047886	10	12045689*	20	(T) 12045688	10	12045690	10	-------	-----
8	(J) 12064766	10	12064768*	20	(U) 12064767	10	12045690	10	12052834	5
10	(K) 12064769	5	12064771*	10	(V) 12064770	5	12064772	5	12052834	5

*Uses two wire organizers (TPA)

Metri-Pack 150 Series, Unsealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	

Delphi Recommended Tool

Metri-Pack 150 Series, Unsealed, 22-16 Gauge Metri-Pack 150 Pull to Seat Series, Unsealed, 22-16 Gauge Metri-Pack 150.1 Pull to Seat Series, Unsealed, 22-16 Gauge Metri-Pack 150.2 Pull to Seat Series, Unsealed, 22-16 Gauge	OEM Ratchet	Quick Single Motion	12039500	
Metri-Pack 150 Series, 22-14 Gauge Metri-Pack 280 Series, 22-14 Gauge Weather Pack, 22-14 Gauge	Non-Ratchet	Standard Two Crimp	PACK TOOL	

Packard Metri-Pack 280 Series, Sealed

Metri-Pack 280 Series, Sealed



Male tab width = 2.8 mm. 30 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require seals and a proper crimping tool, listed below.

Kit part **#MP 280 SLD KIT** available on page #33.

Terminals and Seals

 Female

 Male

 Seal

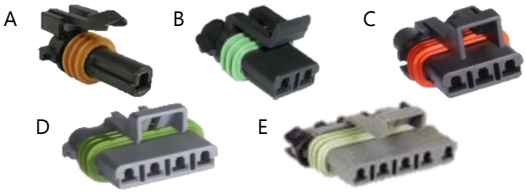
 Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female & Male Terminal Seals	Color	Pkg. Qty.
22	-------	-----	-------	-----	15324983/12015899	Dark Red	50
22-20	12084201	25	12124977	25	15324985/12089679	Purple	50
18-16	12077411	25	12048159	25	15324982/12015323	Green	50
14-12	12129493	25	12129497	25	15324980	Gray	50
12	12077413	10	12048254	10	15324981	Blue	50

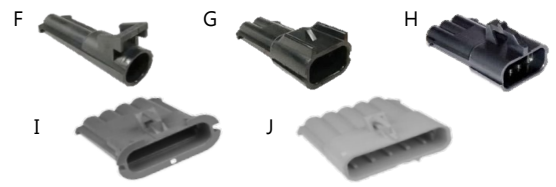
Cavity Plugs to Fill Unused Circuits, Green (Pkg. of 25) Part #12010300

Housings

Female



Male



Wire Organizer (TPA) #12065249



Housing Lock (CPA) #12020833



No. of Cavities	Female Housings	Pkg. Qty.	Female Wire Organizers (TPA)	Pkg. Qty.	Male Housings	Pkg. Qty.	Male Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
1	(A) 12065172	5	12065249	10	(F) 12065171	5	12065249	10	12052834	5
2	(B) 15300027	5	15300014	10	(G) 15300002	5	15300014	10	-------	-----
3	(C) 12040977	5	12034145	5	(H) 15300003	5	15300015	5	12020833	5
4	(D) 12129565	5	15300016	5	(I) 12129600	5	15324063	5	12020833	5
5	(E) 12084891	5	15324857	5	(J) 12186400	5	12084673	5	12020833	5

Metri-Pack 280 Series, Sealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Metri-Pack 150 Series, Sealed, 20-14 Gauge Metri-Pack 280 Series, Sealed, 20-14 Gauge	OEM Ratchet	Standard Two Crimp	12155975
	Weather Pack, 12 Gauge Metri-Pack 280 Series, Sealed, 12-10 Gauge Packard Open Barrel Rings, 12-10 Gauge	Ratchet	Standard Two Crimp	15155975
	Weather Pack Series, 20-14 Gauge Metri-Pack 280 Series, Sealed, 20-14 Gauge (must remove terminal locator on tool)	OEM Ratchet	Quick Single Motion	12014254
	Weather Pack Series, 12 Gauge Metri-Pack 280 Series, Sealed, 12 Gauge Metri-Pack 480 Series, Sealed, 18-14 Ga. and Unsealed, 16-14 Ga. Metri-Pack 480 Pull to Seat Series, Unsealed, 18-14 Gauge Metri-Pack 150, 480, and 630 Series (Crimps Seals Only) Metri-Pack 630 Series, Sealed 18-14 Gauge	OEM Ratchet	Standard Two Crimp	12085270
	Metri-Pack 150 Series, 22-14 Gauge Metri-Pack 280 Series, 22-14 Gauge Weather Pack, 22-14 Gauge	Non-Ratchet	Standard Two Crimp	PACK TOOL

Metri-Pack 280 Series, Unsealed



Male tab width = 2.8 mm. 30 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require a proper crimping tool, listed below.

Terminals



Female



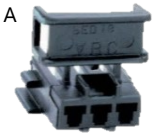
Male

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.
22-20	12052217	25	12066271	25
18-16	12034046	25	12034047	25
16-14	12066214	25	12020116	25
14-12	12129494	25	12129498	25
12-10	12015858	25	12084586	25

Housings

Female

A



B

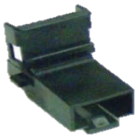


C



Male

D



E



F



Wire Organizer (TPA) #12064753



Housing Lock (CPA) #12052834



	Female					Male				
No. of Cavities	Housings	Pkg. Qty.	Wire Organizers (TPA)	Pkg. Qty.		Housings	Pkg. Qty.	Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
3	(A) 12020397	10	-------	-----	(D)	12020398	10	-------	-----	12052834	5
6	(B) 12064752*	10	12064753	10	(E)	12064754*	10	12064755	10	12052834	5
8	(C) 12064998*	10	12064999	10	(F)	12066195	10	12065141	10	12052834	5

*Two wire organizers (TPA) are required for this connector.

Metri-Pack 280 Series, Unsealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	
Delphi Recommended Tool Metri-Pack 280 Series, Unsealed, 20-14 Gauge Metri-Pack 280 ACT Pull to Seat Series, Unsealed, 20-14 Gauge Metri-Pack 480 Series, Unsealed, 20-18 Gauge Metri-Pack 480 and 630 Pull to Seat Series, Unsealed, 20-18 Gauge Metri-Pack 630 Series, Unsealed, 20-18 Gauge Pack-Con Series II, Unsealed, Female, 20-14 Gauge	OEM Ratchet	Standard Two Crimp	12085271	
Delphi Recommended Tool Metri-Pack 280 and 480 Series, Unsealed, 12-10 Gauge Metri-Pack 280 ACT Series, Unsealed, 12-10 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 630 Series , Unsealed, 12-10 Gauge Metri-Pack 630 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 800 Series, Unsealed, Female, 14-10 Gauge Pack-Con Series I & III, Unsealed, 12-10 Gauge	OEM Ratchet	Quick Single Motion	12070947	
Metri-Pack 280, 480, and 630 Series, Unsealed, 16-12 Gauge Packard 56, 58, and 59 Series, 12-10 Gauge Packard Open Barrel Rings, 14-10 Gauge Heat Shrink, 22-10 Gauge	OEM Ratchet	Standard Two Crimp	12085115	
Metri-Pack 150 Series, 22-14 Gauge Metri-Pack 280 Series, 22-14 Gauge Weather Pack, 22-14 Gauge	Non-Ratchet	Standard Two Crimp	PACK TOOL	

Packard Metri-Pack 480 Series, Sealed

Metri-Pack 480 Series, Sealed



Male tab width = 4.8 mm. 42 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require seals and a proper crimping tool, listed below.

Kit part **#MP 480 SLD KIT** available on page #33.

Terminals and Seals


Female


Male


Seal


Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female & Male Terminal Seals	Color	Pkg. Qty.
22-20	-------	-----	-------	-----	12052930	Yellow	50
20-18	-------	-----	-------	-----	12048441	White	50
16-14	12048451	10	12065196	10	12048441	White	50
12	12052139	10	12065197	10	15324989	Red	25
10	12052139	10	12052172	10	12048444	Orange	25

Cavity Plugs to Fill Unused Circuits, Gray (Pkg. of 25) Part #35232480

Housings

A 
Female

B 
Male

C 
Wire Organizer (TPA)

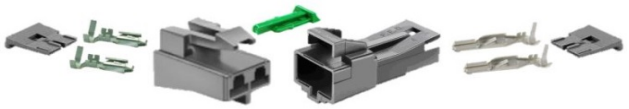
D 
Housing Lock (CPA)

No. of Cavities	Female Housings	Pkg. Qty.	Female Wire Organizers (TPA)	Pkg. Qty.	Male Housings	Pkg. Qty.	Male Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
2	(A) 12052613	5	(C) 12059897	10	(B) 12065863	5	(C) 12059897	10	(D) 12020833	5

Metri-Pack 480 Series, Sealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Weather Pack Series, 12 Gauge Metri-Pack 280 Series, Sealed, 12 Gauge Metri-Pack 480 Series, Sealed, 18-14 Gauge Metri-Pack 480 Series, Unsealed, 16-14 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 18-14 Gauge Metri-Pack 150, 480, and 630 Series (Crimps Seals Only) Metri-Pack 630 Series, Sealed 18-14 Gauge	OEM Ratchet	Standard Two Crimp	12085270
	Metri-Pack 480 Series, 12-10 Gauge (Crimps Sealed Only) Metri-Pack 630 Series, 12-10 Gauge (Crimps Sealed Only)	OEM Non-Ratchet	Standard Two Crimp	12071687

Metri-Pack 480 Series, Unsealed



Male tab width = 4.8 mm. 42 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require a proper crimping tool, listed below.

Terminals

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.
22-20	12052219	25	-------	-----
18	12015860	25	12020119	25
16-14	12124304	25	12020120	25
12	12052221	25	12052827	25
10	12084595	25	12033820	10

Housings

Female

A



B



Male

C



D



Wire Organizer (TPA)#12059860



Housing Lock (CPA)#12052834



No. of Cavities		Female Housings	Pkg. Qty.	Female Wire Organizers (TPA)	Pkg. Qty.		Male Housings	Pkg. Qty.	Male Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
1	(A)	12015952	10	-------	-----	(C)	12015987	10	-------	-----	-------	-----
2	(B)	12064749	10	12059860	10	(D)	12064750	10	12064751	10	12052834	5

Metri-Pack 480 Series, Unsealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	

Delphi Recommended Tool

Metri-Pack 480 Series, Unsealed, 16-14 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 16-14 Gauge Metri-Pack 630 Series, Unsealed, 16-14 Gauge Metri-Pack 630 Pull to Seat Series, 16-14 Gauge, Unsealed Metri-Pack 630 Series, Unsealed, 12-10 Gauge (Core Wings Only) Pack-Con Series I & III, Unsealed, 20-14 Gauge Pack-Con Series II, Female, Unsealed, 12-10 Gauge Packard 56, 58, and 59 Series, 20-14 Gauge Packard 56, 58, and 59 Series, 12-10 Gauge (Core Wings Only) Packard 56 Series, 20-10 Gauge, Splice Clips Packard Open Barrel Rings, Unsealed, 20-14 Gauge, Up to 0.032" Thick Packard Wedge Base Lamp Sockets, 20-14 Gauge	OEM Non-Ratchet	Standard Two Crimp	6285847	

Delphi Recommended Tool

Metri-Pack 280 and 480 Series, Unsealed, 12-10 Gauge Metri-Pack 280 ACT Series, Unsealed, 12-10 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 630 Series , Unsealed, 12-10 Gauge Metri-Pack 630 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 800 Series, Unsealed, Female, 14-10 Gauge Pack-Con Series I & III, Unsealed, 12-10 Gauge	OEM Ratchet	Quick Single Motion	12070947	
Weather Pack Series, 12 Gauge Metri-Pack 280 Series, Sealed, 12 Gauge Metri-Pack 480 Series, Sealed, 18-14 Gauge Metri-Pack 480 Series, Unsealed, 16-14 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 18-14 Gauge Metri-Pack 150, 480, and 630 Series (Crimps Seals Only) Metri-Pack 630 Series, Sealed 18-14 Gauge	OEM Ratchet	Standard Two Crimp	12085270	
Metri-Pack 280 Series, Unsealed, 20-14 Gauge Metri-Pack 280 ACT Pull to Seat Series, Unsealed, 20-14 Gauge Metri-Pack 480 Series, Unsealed, 20-18 Gauge Metri-Pack 480 and 630 Pull to Seat Series, Unsealed, 20-18 Gauge Metri-Pack 630 Series, Unsealed, 20-18 Gauge Pack-Con Series II, Unsealed, Female, 20-14 Gauge	OEM Ratchet	Standard Two Crimp	12085271	

Packard Metri-Pack 630 Series, Sealed

Metri-Pack 630 Series, Sealed, 2-Way Housings



Male tab width = 6.3 mm. 46 amps max. per circuit.
For durable, long-term connections each housing uses a wire organizer (TPA).
Female housing is pull-to-seat (seal is inside). Male housing requires an entry seal.
Terminals require a proper crimping tool, listed below.

Terminals

 Female

 Male

 Cavity Plug

Wire Size (AWG)	Pull-to-Seat Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.
20-18	12020156	10	12020125	10
16-14	12066614	10	12020126	10
12	12033997	10	12052826	10
12-10	-------	-----	12066493	10

Cavity Plugs to Fill Unused Circuits, Green (Pkg. of 25) Part #12059255

Housings

A  Female

B  Male

C  Male Housing Entry Seal

D  Male Wire Organizers (TPA)

No. of Cavities		Pull-to-Seat Female Housings	Pkg. Qty.		Male Housings	Pkg. Qty.		Male Housing Entry Seal	Pkg. Qty.		Male Wire Organizers (TPA)	Pkg. Qty.
2	(A)	12033769	5	(B)	12034269	5	(C)	12034364	5	(D)	12034363	5

Metri-Pack 630 Series, Sealed, 3-Way Housings

Male tab width = 6.3 mm. 46 amps max. per circuit.
For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted.
Terminals require seals and a proper crimping tool, listed below.

Terminals and Seals

 Female

 Male

 Seal

 Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female and Male Terminal Seals	Color	Pkg. Qty.
20-18	12052457	10	12064734	10	-------	-------	-----
16-14	12052455	10	12064735	10	12052388	Dk. Red	25
12	12052456	10	12064737	10	15324996/12052668	Blue	25
10	12052456	10	12064736	10	12052386	Green	25

Cavity Plugs to Fill Unused Circuits, Green (Pkg. of 25) Part #12059255

Housings

A  Female

B  Male

C  Wire Organizer (TPA)

D  Housing Lock (CPA)

		Female				Male					
No. of Cavities		Housings	Pkg. Qty.		Wire Organizers (TPA)	Pkg. Qty.		Housings	Pkg. Qty.		Wire Organizers (TPA)	Pkg. Qty.		Housing Locks (CPA)	Pkg. Qty.
3	(A)	12124685	5	(C)	12045699	10	(B)	12124686	5	(C)	12045699	10	(D)	12020833	5

Metri-Pack 630 Series, Sealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Metri-Pack 480 Series, 12-10 Gauge (Crimps Sealed Only) Metri-Pack 630 Series, 12-10 Gauge (Crimps Sealed Only)	OEM Non-Ratchet	Standard Two Crimp	12071687
	**Delphi Recommended Tool** Weather Pack Series, 12 Gauge Metri-Pack 280 Series, Sealed, 12 Gauge Metri-Pack 480 Series, Sealed, 18-14 Gauge Metri-Pack 480 Series, Unsealed, 16-14 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 18-14 Gauge Metri-Pack 150, 480, and 630 Series (Crimps Seals Only) Metri-Pack 630 Series, Sealed 18-14 Gauge	OEM Ratchet	Standard Two Crimp	12085270

Metri-Pack 630 Series, Unsealed



Male tab width = 6.3 mm. 46 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require a proper crimping tool, listed below.

Terminals



Female



Male

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.
22-20	12052222	10	-------	-----
20-18	12015869	10	12020125	10
16-14	12015870	10	12020126	10
12	12052224	10	12052826	10
10	12084590	10	12066493	10

Housings

Female

A



B



Male

C



D



Wire Organizer (TPA) #12129940



Housing Lock (CPA) #12052834



No. of Cavities		Female Housings	Female Pkg. Qty.	Female Wire Organizers (TPA)	Female Pkg. Qty.		Male Housings	Male Pkg. Qty.	Male Wire Organizers (TPA)	Male Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
2	(A)	12129939	10	12129940	10	(C)	12129938	10	12129940	10	12052834	5
4	(B)	12015664	10	-------	-----	(D)	12052623	10	-------	-----	-------	-----

Metri-Pack 630 Series, Unsealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	
Delphi Recommended Tool Metri-Pack 280 Series, Unsealed, 20-14 Gauge Metri-Pack 280 ACT Pull to Seat Series, Unsealed, 20-14 Gauge Metri-Pack 480 Series, Unsealed, 20-18 Gauge Metri-Pack 480 and 630 Pull to Seat Series, Unsealed, 20-18 Gauge Metri-Pack 630 Series, Unsealed, 20-18 Gauge Pack-Con Series II, Unsealed, Female, 20-14 Gauge	OEM Ratchet	Standard Two Crimp	12085271	
Delphi Recommended Tool Metri-Pack 480 Series, Unsealed, 16-14 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 16-14 Gauge Metri-Pack 630 Series, Unsealed, 16-14 Gauge Metri-Pack 630 Pull to Seat Series, 16-14 Gauge, Unsealed Metri-Pack 630 Series, Unsealed, 12-10 Gauge (Core Wings Only) Pack-Con Series I & III, Unsealed, 20-14 Gauge Pack-Con Series II, Female, Unsealed, 12-10 Gauge Packard 56, 58, and 59 Series, 20-14 Gauge Packard 56, 58, and 59 Series, 12-10 Gauge (Core Wings Only) Packard 56 Series, 20-10 Gauge, Splice Clips Packard Open Barrel Rings, Unsealed, 20-14 Gauge, Up to 0.032" Thick Packard Wedge Base Lamp Sockets, 20-14 Gauge	OEM Non-Ratchet	Standard Two Crimp	6285847	
Delphi Recommended Tool Metri-Pack 280 and 480 Series, Unsealed, 12-10 Gauge Metri-Pack 280 ACT Series, Unsealed, 12-10 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 630 Series , Unsealed, 12-10 Gauge Metri-Pack 630 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 800 Series, Unsealed, Female, 14-10 Gauge Pack-Con Series I & III, Unsealed, 12-10 Gauge	OEM Ratchet	Quick Single Motion	12070947	

Packard Metri-Pack 800 Series, Unsealed

Metri-Pack 800 Series, Unsealed



Male tab width = 8.0 mm. 60 amps max. per circuit.

For durable, long-term connections each housing uses a wire organizer (TPA) and mating pairs of housings use housing locks (CPA), unless noted. Terminals require a proper crimping tool, listed below.

Terminals



Female



Male

Female Wire Size (AWG)	Female Terminals	Pkg. Qty.	10 AWG Male Terminals	Pkg. Qty.
10	12110127	5	12110700	5
Two 10 Gauge Wires	12092445	5	12110700	5
Two 12 Gauge Wires	12092444	5	12110700	5
14-12	12065916	5	12110700	5

Housings

Female: A, B, C — Male: D, E



Wire Organizer (TPA) #12092401



Housing Lock (CPA) #12052834



	Female					Male					
No. of Cavities		Housings	Pkg. Qty.	Wire Organizers (TPA)	Pkg. Qty.		Housings	Pkg. Qty.	Wire Organizers (TPA)	Pkg. Qty.	Housing Locks (CPA)	Pkg. Qty.
1	(A)	12160893	10	12160895	10	(D)	12160894	10	12160895	10	12052834	5
3/6*	(B)	12092399	10	12092401	20	(E)	12110698♦	1	12092401	20	12052834	5
3/6*	(C)	12092400	10	12092401	20	(E)	12110698♦	1	12092401	20	12052834	5

* Two 3-way female housings fit one 6-way male housing.

♦ Requires two male wire organizers (TPA) and two housing locks (CPA).

Metri-Pack 800 Series, Unsealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Metri-Pack 280 and 480 Series, Unsealed, 12-10 Gauge Metri-Pack 280 ACT Series, Unsealed, 12-10 Gauge Metri-Pack 480 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 630 Series , Unsealed, 12-10 Gauge Metri-Pack 630 Pull to Seat Series, Unsealed, 12-10 Gauge Metri-Pack 800 Series, Unsealed, Female, 14-10 Gauge Pack-Con Series I & III, Unsealed, 12-10 Gauge	OEM Ratchet	Quick Single Motion	12070947

Metri-Pack GT 150 Series, Sealed

Male tab width = 1.5 mm. 15 amps max. per circuit.

This series is used on late model cars and trucks.

For durable, long-term connections mating pairs of housings use housing locks (CPA), unless noted. Terminals require seals and a proper crimping tool, listed below.

Kit part **#MP150GT SLD KIT** available on page #33.



Terminals and Seals


Female


Male


Seal

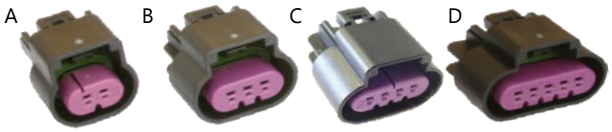

Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female & Male Terminal Seals	Color	Pkg. Qty.
22-20	12191818	25	15326268	25	15366021	White	100
18-16	12191819	25	15326269	25	15366060	Blue	50

Cavity Plugs to Fill Unused Circuits, Green (Pkg. of 25) Part #15305171

Housings

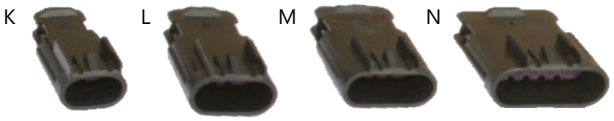
Female







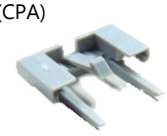
Male







Housing Lock (CPA)


#15317832

No. of Cavities	Female Housings	Pkg. Qty.	Male Housings	Pkg. Qty.	Housing Lock (CPA)	Pkg. Qty.
2	(A) 13510085	5	(K) 13510099	5	15317832	10
3	(B) 13519047	5	(L) 15326813	5	15317832	10
4	(C) 15487756	5	(M) 15487755	5	15317832	10
5	(D) 13519051	5	(N) 13519053	5	15317832	10
6	(E) 15397577	5	(O) 15397579	5	15317832	10
8	(F) 15326835	1	(P) 15326840	1	15317832	10
10	(G) 15326842	1	(Q) 15326847	1	15317832	10
12	(H) 13530777	1	(R) 15326854	1	15317832	10
14	(I) 15326856	1	(S) 15326861	1	15317832	10
16	(J) 15326863	1	(T) 15326868	1	15317832	10

Metri-Pack GT 150 Series, Sealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	
Delphi Recommended Tool Metri-Pack GT 150 Series, Sealed, 22-16 Gauge Metri-Pack GT 280 Series, 22-16 Gauge (Must remove locator on tool)	OEM Ratchet	Quick Single Motion	15359995	

Packard Metri-Pack GT 280 Series, Sealed

Metri-Pack GT 280 Series, Sealed Connectors



Male tab width = 2.8 mm. 25 amps max. per circuit.

For durable, long-term connections mating pairs of housings use housing locks (CPA), unless noted. Terminals require seals and a proper crimping tool, listed below.

Kit part **#MP280GT SLD KIT** available on page #33.

Terminals and Seals



Female



Male



Seal



Cavity Plug

Wire Size (AWG)	Female Terminals	Pkg. Qty.	Male Terminals	Pkg. Qty.	Female & Male Seal Part #	Color	Pkg. Qty.
22-20	15304718	25	15304730	25	15366065	Orange	50
18-16	15304719	25	15304731	25	15366066	Yellow	50
14-12	15304717	25	15304732	25	15366067	Tan	50
10	15326004	25	-------	-----	12191235	Purple	50

Cavity Plugs to Fill Unused Circuits, White (Pkg. of 25) Part #15305170

Housings

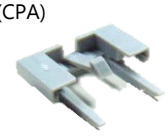
Female



Male



Housing Lock (CPA)



#15317832





No. of Cavities	Female Housings	Pkg. Qty.	Male Housings	Pkg. Qty.	Housing Lock (CPA)	Pkg. Qty.
2	(A) 13518845	10	(J) 15326678	10	15317832	10
3	(B) 15326614	10	(K) 15326623	10	15317832	10
4	(C) 13521459	10	(L) 15326633	10	15317832	10
5	(D) 13521463	1	(M) 15326647	5	15317832	10
6	(E) 13521467	5	(N) 15326640	5	15317832	10
8	(F) 15326654	1	(O) 15326655	1	15317832	10
10	(G) 15326660	1	(P) 15326661	1	15317832	10
12	(H) 15326910	1	(Q) 15326915	1	15317832	10
16	(I) 15326666	1	(R) 15326667	1	15317832	10

Metri-Pack GT 280 Series, Sealed Tools

	Works With	Style	Crimp Method	Part Number
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429
	Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430
	Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58 and 59, Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD
	**Delphi Recommended Tool** Metri-Pack GT 150 Series, Sealed, 22-16 Gauge Metri-Pack GT 280 Series, 22-16 Gauge (Must remove locator on tool)	OEM Ratchet	Quick Single Motion	15359995

Metri-Pack Pull-to-Seat Housings and Terminals for Devices

Metri-Pack pull-to-seat device connections are female housings and terminals which connect directly to specific devices. Pull-to-seat housings have built in seals. 14 amps max. per circuit.

To assemble pull-to-seat, the wire is inserted through the back of the housing, then out through the front. The wire is stripped and double crimped onto the terminal. The terminal is pulled back through until it seats in the housing, making a secure connection.

Female Pull-to-Seat Terminals for 150 Series Pull-to-Seat Housings

Wire Size (AWG)	Female Terminals	Pkg. Qty.
22-20	12089290	25
18-16	12103881	25
Cavity Plugs to Fill Unused Circuits, Gray (Pkg. of 25)	Part #12065266	


Female


Cavity Plug

Female 150 Series Housings, Pull-to-Seat

Number of Cavities	Typical Applications	Female Housings	Pkg. Qty.
3	A/C Compressor	12065287	5



Female Pull-to-Seat Terminals for 150.2 Series Pull-to-Seat Housings

Wire Size (AWG)	Female Terminals	Pkg. Qty.
22-20	12124076	10
20-18	12124075	10
Cavity Plugs to Fill Unused Circuits, Gray (Pkg. of 25)	Part #12065266	


Female


Cavity Plug

Female 150.2 Series Housings, Pull-to-Seat

No. of Cavities	Typical Applications	Female Housings	Pkg. Qty.	
2	Temperature Sensors	12162193	5	
2	Temperature Sensors	12162197	1	
2	Throttle Bodies, Injectors	12162215	1	
3	Crankshaft Sensors, Head Lamps	12162182	1	

No. of Cavities	Typical Applications	Female Housings	Pkg. Qty.	
3	Crankshaft Sensors, Head Lamps	12162280	1	
4	Distributor Modules	12162188	1	
5	Sensors, Modules	12162825	1	
6	Various Applications	12162210	1	

Metri-Pack 150 Series, Unsealed Tools

Works With	Style	Crimp Method	Part Number	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Terminal Release Tool	-------	12094429	
Metri-Pack 150, 280, and 630 Series, 22-10 Gauge Metri-Pack GT 150 and GT 280 Series, 22-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094429HD	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Terminal Release Tool	-------	12094430	
Metri-Pack 480, 630, and 800 Series, 20-10 Gauge Packard 56, 58, and 59 Series, 20-10 Gauge	Heavy Duty Terminal Release Tool	-------	12094430HD	

Delphi Recommended Tool

Metri-Pack 150 Series, Unsealed, 22-16 Gauge Metri-Pack 150 Pull to Seat Series, Unsealed, 22-16 Gauge Metri-Pack 150.1 Pull to Seat Series, Unsealed, 22-16 Gauge Metri-Pack 150.2 Pull to Seat Series, Unsealed, 22-16 Gauge	OEM Ratchet	Quick Single Motion	12039500	

Deutsch DT Series Connectors & Kit

Deutsch DT Series Connectors

Deutsch's DT Series connectors offer field proven reliability in corrosive and rugged environments. 13 amps max. per circuit.

Terminals

Select the terminal that fits your wire size. Terminals are Deutsch size 16. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool #0411-310-1605. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.



Solid Pin



Solid Socket



Stamped & Formed Pin



Stamped & Formed Socket



Plug

Wire Size (AWG)	Feature	Material	Pin Pkg. Qty.		Socket Pkg. Qty.	
Solid						
20-16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
20-16	Extended Crimp	Nickel	0460-247-16141	1	-------	---
20-16	High Conductivity	Gold	0460-247-1631	1	0462-221-1631	1
14	Std. Green Band	Nickel	0460-215-16141	25	0462-209-16141	10
14	High Conductivity	Gold	0460-215-1631	10	0462-209-1631	10
Stamped and Formed, Reel						
20-16	Standard	Nickel	1060-16-0622	25	1062-16-0622	10
20-16	High Conductivity	Gold	1060-16-0644	10	1062-16-0644	10
18-14	Standard	Nickel	1060-16-0122	25	1062-16-0122	10
18-14	Standard	Nickel	1060-14-0122	25	1062-14-0122	10
18-14	High Conductivity	Gold	1060-14-0144	10	1062-14-0144	10
18-14	High Conductivity	Gold	1060-16-0144	10	1062-16-0144	10
18-14	High Conductivity	Gold	1060-16-0988	10	1062-16-0988	10
16-12	Standard	Nickel	1060-16-1222	25	1062-16-1222	10
16-12	Standard	Nickel	-------	---	1062-16-1422	10
Plug for empty slot #114017 (25/pkg.)						

Housings

Select the housing that has the number of circuits you need. Each of the housings are Deutsch size 16, accepts 20-14 gauge wire and requires a wedgelock to hold terminals in place.



Pin Housing



Pin Wedgelock



Socket Housing



Socket Wedgelock

Circuits	Pin Housing	Pin Pkg. Qty.	Pin Wedgelock	Pin Pkg. Qty.	Socket Housing	Socket Qty.	Socket Wedgelock	Socket Pkg. Qty.
2-Way	DT04-2P	10	W2P	10	DT06-2S	10	W2S	10
3-Way	DT04-3P	5	W3P	10	DT06-3S	5	W3S	10
4-Way	DT04-4P	5	W4P	10	DT06-4S	5	W4S	10
6-Way	DT04-6P	1	W6P	10	DT06-6S	1	W6S	10
8-Way	DT04-08PA	1	W8P	10	DT06-08SA	1	W8S	10
12-Way	DT04-12PA	1	W12P	10	DT06-12SA	1	W12S	10

Quick Splice for DT Series Terminals #JS16-00 (1/pkg.)

Deutsch DT Series Kit

This kit contains all of the DT series housings, wedgelocks, and pin and socket solid terminals you need to create a connection - 30 items, over 190 pieces in a large metal box, 18"w x 12"d x 3"h. Use OEM crimp tool **#HDT-48-00**, see page 61. 13 amps max. per circuit.



Part # DEUTSCH KIT LG

Kit Contains	Description	Qty.
0460-202-16141	20-16 Gauge Pin Terminals	25
0462-201-16141	20-16 Gauge Socket Terminals	25
0460-215-16141	14 Gauge Pin Terminals	25
0462-209-16141	14 Gauge Socket Terminals	25
DT04-2P	2-Way Pin Housings	5
W2P	2-Way Pin Wedgelocks	5
DT06-2S	2-Way Socket Housings	5
W2S	2-Way Socket Wedgelocks	5
DT04-3P	3-Way Pin Housings	5
W3P	3-Way Pin Wedgelocks	5
DT06-3S	3-Way Socket Housings	5
W3S	3-Way Socket Wedgelocks	5
DT04-4P	4-Way Pin Housings	5
W4P	4-Way Pin Wedgelocks	5
DT06-4S	4-Way Socket Housings	5

(Cont.)	Description	Qty.
W4S	4-Way Socket Wedgelocks	5
DT04-6P	6-Way Pin Housings	1
W6P	6-Way Pin Wedgelocks	1
DT06-6S	6-Way Socket Housings	1
W6S	6-Way Socket Wedgelocks	1
DT04-08PA	8-Way Pin Housings	1
W8P	8-Way Pin Wedgelocks	1
DT06-08SA	8-Way Socket Housings	1
W8S	8-Way Socket Wedgelocks	1
DT04-12PA	12-Way Pin Housings	1
W12P	12-Way Pin Wedgelocks	1
DT06-12SA	12-Way Socket Housings	1
W12S	12-Way Socket Wedgelocks	1
0411-310-1605	18-16 Ga. Lt. Blue Removal Tool	1
114017	Plugs for DT and DTP Series	25

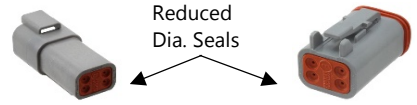
Deutsch DT Series Connectors

Specialty Housings

Select the specialty housing that has the number of circuits you need. Each of the housings are size 16, accepts 20-14 gauge wire and requires a wedgelock to hold terminals in place. The standard housings offer reliability and rugged quality. Standard black are shown below and standard gray are shown on previous page. 13 amps max. per circuit.

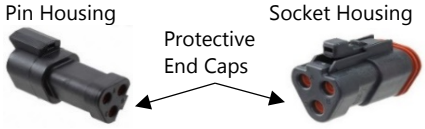
Reduced Diameter Seal Housings

The reduced diameter seal housings have a reduced diameter insert seal to allow a good seal with smaller wire insulation. It is also called an "E" seal.



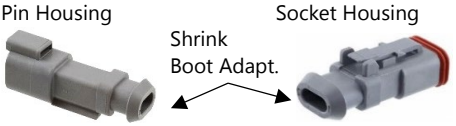
Protective End Cap Housings

The protective end cap housings have a extra cap at the rear of the housing and the holes allow the pins to be inserted.



Shrink Boot Adapter Housings

The shrink boot adapter housings have an adapter that accepts shrink tubing, which allows added protection for the wires.



	Pin				Socket			
Feature	Gray	Pkg. Qty.	Black	Pkg. Qty.	Gray	Pkg. Qty.	Black	Pkg. Qty.
2-Way Circuits	**(Wedgelock #W2P for 2-way pin housings)**				**(Wedgelock #W2S for 2-way socket housings)**			
Standard	-------	---	DT04-2P-E004	5	-------	---	DT06-2S-E004	5
Reduced Diameter Seals	DT04-2P-C015	5	DT04-2P-CE02	5	DT06-2S-C015	5	-------	---
Protective End Cap	DT04-2P-E003	5	DT04-2P-E005	5	DT06-2S-E003	5	DT06-2S-E005	5
Shrink Boot Adapter	DT04-2P-E008	5	-------	---	DT06-2S-E008	5	-------	---
3-Way Circuits	**(Wedgelock #W3P for 3-way pin housings)**				**(Wedgelock #W3S for 3-way socket housings)**			
Standard	-------	---	DT04-3P-E004	1	-------	---	DT06-3S-E004	1
Reduced Diameter Seals	DT04-3P-C015	5	DT04-3P-CE02	5	DT06-3S-C015	5	DT06-3S-CE02	5
Protective End Cap	DT04-3P-E003	5	DT04-3P-E005	5	DT06-3S-E003	5	DT06-3S-E005	5
Shrink Boot Adapter	DT04-3P-E008	1	DT04-3P-EE01	1	DT06-3S-E008	1	-------	---
4-Way Circuits	**(Wedgelock #W4P for 4-way pin housings)**				**(Wedgelock #W4S for 4-way socket housings)**			
Standard	-------	---	DT04-4P-E004	5	-------	---	DT06-4S-E004	1
Reduced Diameter Seals	DT04-4P-C015	5	DT04-4P-CE02	5	DT06-4S-C015	1	DT06-4S-CE02	1
Protective End Cap	DT04-4P-E003	1	DT04-4P-E005	1	DT06-4S-E003	5	DT06-4S-E005	5
Shrink Boot Adapter	DT04-4P-E008	1	-------	---	DT06-4S-E008	1	-------	---
6-Way Circuits	**(Wedgelock #W6P for 6-way pin housings)**				**(Wedgelock #W6S for 6-way socket housings)**			
Standard	-------	---	DT04-6P-E004	1	-------	---	DT06-6S-E004	1
Reduced Diameter Seals	DT04-6P-C015	1	DT04-6P-CE02	1	DT06-6S-C015	1	DT06-6S-CE02	1
Protective End Cap	DT04-6P-E003	1	DT04-6P-E005	1	DT06-6S-E003	1	DT06-6S-E005	1
8-Way Circuits	**(Wedgelock #W8P for 8-way pin housings)**				**(Wedgelock #W8S for 8-way socket housings)**			
Standard	-------	---	DT04-08PA-E004	1	-------	---	-------	---
Reduced Diameter Seals	DT04-08PA-C015	1	DT04-08PA-CE02	1	DT06-08SA-C015	1	-------	---
Protective End Cap	DT04-08PA-E003	1	DT04-08PA-E005	1	DT06-08SA-E003	1	DT06-08SA-E005	1
Shrink Boot Adapter	DT04-08PA-E008	1	-------	---	DT06-08SA-E008	1	-------	---
12-Way Circuits	**(Wedgelock #W12P for 12-way pin housings)**				**(Wedgelock #W12S for 12-way socket housings)**			
Standard			DT04-12PA-E004	1	-------	---	-------	---
Reduced Diameter Seals	DT04-12PA-C015	1	DT04-12PA-CE02	1	DT06-12SA-C015	1	DT06-12SA-CE02	1
Protective End Cap	DT04-12PA-E003	1	DT04-12PA-E005	1	DT06-12SA-E003	1	DT06-12SA-E005	1
Shrink Boot Adapter	DT04-12PA-E008	1	-------	---	DT06-12SA-E008	1	-------	---

Socket Housing Replacement Seals

Lose or damage a seal? We have replacement front seals for the socket housings.

A 
B 
C 
D 
E 
F 

Circuits		Seal Part #	Fits Socket #	Pkg. Qty.
2-Way	(A)	1010-009-0206	DT06-2S	50
3-Way	(B)	1010-002-0306	DT06-3S	25
4-Way	(C)	1010-016-0406	DT06-4S	25

Circuits		Seal Part #	Fits Socket #	Pkg. Qty.
6-Way	(D)	1010-017-0606	DT06-6S	25
8-Way	(E)	1010-007-0806	DT06-08S	10
12-Way	(F)	1010-020-1206	DT06-12S	10

Small Deutsch DT Series Kit

Deutsch Kit contains 72 pieces, housings, wedgelocks, solid terminals, and 2 removal tools. Comes in a small plastic box, 11"w x 6 3/4"d x 1 3/4"h. Use OEM crimp tool **#HDT-48-00** or economy tool **#DT-TOOL-E**, see page 61. 13 amps max. per circuit.



Part # DEUTSCH KIT SM

Kit Contains	Description	Qty.
0460-215-16141	14 Gauge Pin Terminals	25
0462-209-16141	14 Gauge Socket Terminals	25
DT04-2P	2-Way Pin Housings	5
W2P	2-Way Pin Wedgelocks	5

(Cont.)	Description	Qty.
DT06-2S	2-Way Socket Housings	5
W2S	2-Way Socket Wedgelocks	5
DT-RT	Pick Removal Tool	1
0411-310-1605	18-16 Ga. Lt. Blue Removal Tool	1

Deutsch DT Series Connectors

Deutsch DT Series Connectors

Dust Caps

Dust caps snap on and offer protection from moisture and dirt for unmated plugs. They are black and fit the pin housings. **Temporary dust caps** push on and are made to offer temporary protection. Dust caps are made of thermoplastic or plastisol.



2-Way Dust Cap



12-Way
Temporary Dust Cap

	Dust Cap			Temporary Dust Cap		
Circuits	Dust Cap	Fits Housing #	Pkg. Qty.	Dust Cap	Fits Housing #	Pkg. Qty.
Pin Housings Caps						
2-Way	1011-344-0205	DT06-2S	5	-------	-------	10
3-Way	1011-345-0305	DT06-3S	5	DT3P-DC	DT04-3P	10
4-Way	1011-346-0405	DT06-4S	5	DT4P-DC	DT04-4P	5
6-Way	1011-347-0605	DT06-6S	5	DT6P-DC	DT04-6P	---
8-Way	1011-348-0805	DT06-08S	5	-------	-------	---
12-Way	1011-349-1205	DT06-12S	5	DT12P-DC	DT04-12P	5
12-Way, Black	-------	-------	---	DT12P-DC-BK	DT04-12P	5
Socket Housings Caps						
12-Way	-------	-------	---	DT12S-DC	DT06-12S	5

Housing Boots

Housing boots protect your connections from harsh environments and chemical spray. Boots come in gray, black and yellow.

Pin Boot For 6-Way



Socket Boot For 4-Way



Pin Boot For 6-Way



Socket Boot For 4-Way



Pin Boot For 6-Way



Socket Boot For 4-Way



	Gray		Black		Yellow	
Housing Circuits		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
Pin Housing Boots						
2-Way	DT2P-BT	5	DT2P-BT-BK	5	DT2P-BT-YW	5
3-Way	DT3P-BT	5	DT3P-BT-BK	5	DT3P-BT-YW	5
4-Way	DT4P-BT	5	DT4P-BT-BK	5	DT4P-BT-YW	5
6-Way	DT6P-BT	5	DT6P-BT-BK	5	DT6P-BT-YW	5
8-Way	DT8P-BT	5	DT8P-BT-BK	1	-------	---
12-Way	DT12P-BT	5	DT12P-BT-BK	1	DT12P-BT-YW	5
Socket Housing Boots						
2-Way	DT2S-BT	5	DT2S-BT-BK	10	DT2S-BT-YW	5
3-Way	DT3S-BT	5	DT3S-BT-BK	10	DT3S-BT-YW	5
4-Way	DT4S-BT	5	DT4S-BT-BK	10	DT4S-BT-YW	5
6-Way	DT6S-BT	5	DT6S-BT-BK	5	DT6S-BT-YW	5
8-Way	DT8S-BT	5	DT8S-BT-BK	5	-------	---
12-Way	DT12S-BT	5	DT12S-BT-BK	1	DT12S-BT-YW	5

Mounting Clips

Mounting clips attach to the pin housings to mount Deutsch connectors and provide a secure connection to your project.

A



B



C



D



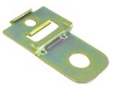
E



F



G



H



I



J



K



L



Deutsch #	Material	Hole Dia.	Pkg. Qty.	Deutsch #	Material	Hole Dia.	Pkg. Qty.
Fit 2, 3, 4, 5 & 12-Way Circuit Pin Housings				**Fit 8-Way Circuit Pin Housings**			
(A) 1027-003-1200	Stainless Steel	0.433"	1	(H) 1027-001-0800	Stainless Steel	0.433"	1
(B) 1027-004-1200	Zinc plated Steel	0.512"	1	(I) 1011-027-0805	Thermoplastic, Gray	0.200"	5
(C) 1011-026-0205	Thermoplastic, Gray	0.200"	10	(J) 1027-006-0800	Stainless Steel	0.512"	1
(D) 1011-030-0205	Thermoplastic, Black	0.250"	10	(K) 1027-002-0800	Zinc plated Steel	0.512"	1
(E) 1011-310-0205	Thermoplastic, Black	-------	5	(L) 1027-014-0800	Zinc plated Steel	0.323"	1
(F) 1027-005-1200	Stainless Steel	0.512"	1				
(G) 1027-008-1200	Zinc plated Steel	0.433"	5				
(G) 1027-017-1200	Zinc plated Steel	0.323"	5				

Deutsch DTV Series Connectors

The DEUTSCH DTV series similar to the DT series, with an 18 cavity flanged design. 13 amps max. per circuit.

Terminals

Select the terminal that fits your wire size. Terminals are Deutsch size 16. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool #0411-310-1605. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.

Wire Size (AWG)	Feature	Material	Pin	Pkg. Qty.	Socket	Pkg. Qty.
Solid						
20-16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
20-16	Extended Crimp	Nickel	4602-471-6141	1	-------	---
20-16	Extended Crimp	Gold	0460-247-1631	1	0462-221-1631	1
14	Std. Green Band	Nickel	0460-215-16141	25	0462-209-16141	10
14	High Conductivity	Gold	0460-215-1631	10	0462-209-1631	10
Stamped and Formed, Reel						
20-16	Standard	Nickel	1060-16-0622	25	1062-16-0622	10
20-16	High Conductivity	Gold	1060-16-0644	10	1062-16-0644	10
18-14	Standard	Nickel	1060-16-0122	25	1062-16-0122	10
18-14	-------	Nickel	1060-14-0122	25	1062-14-0122	10
18-14	High Conductivity	Gold	1060-14-0144	10	1062-14-0144	10
18-14	High Conductivity	Gold	1060-16-0144	10	1062-16-0144	10
18-14	High Conductivity	Gold	1060-16-0988	10	1062-16-0988	10
16-12	Standard	Nickel	1060-16-1222	25	1062-16-1222	10
16-12	-------	Nickel	-------	---	1062-16-1422	10

Plug for empty slot #114017 (25/pkg.)


Solid Pin


Solid Socket


Stamped & Formed Pin


Stamped & Formed Socket


Plug

Housings

Wire gauge 20-14. Sealed flange, gasket and end cap. Each of the housings are Deutsch size 16 and accept 20-14 gauge wires. Requires a wedgelock to hold terminals in place. Key configurations prevent mismating and ensures pin housings and socket housings are aligned correctly.


Pin Housing


Pin Wedgelock


Socket Housing


Socket Wedgelock

Key Configuration	Pin Housing	Color	Pin Pkg. Qty.	Pin Wedgelock	Pin Pkg. Qty.	Socket Housing	Color	Socket Pkg. Qty.	Socket Wedgelock	Socket Pkg. Qty.
18-Way Circuits										
A	DTV02-18PA	Gray	1	WV-18P	1	DTV06-18SA	Gray	1	WV-18S	1
B	DTV02-18PB	Black	1	WV-18P	1	DTV06-18SB	Black	1	WV-18S	1
C	DTV02-18PC	Green	1	WV-18P	1	DTV06-18SC	Green	1	WV-18S	1
D	DTV02-18PD	Brown	1	WV-18P	1	DTV06-18SD	Brown	1	WV-18S	1

Connector Boots

Housing boots protect your connections from harsh environments and chemical spray. Boots come in black.

Circuits	Pin Boot	Pin Pkg. Qty.	Socket Boot	Socket Pkg. Qty.
18-Way	DTV18P-BT-BK	5	DTV18S-BT-BK	5

Pin 

Socket 

Deutsch Connectors Performance Specifications

Deutsch Housings Properties	
Temperature	Operating at temperatures from -67° F to +257° F
Moisture Resistance	Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.

Deutsch Terminal Current Rating

Deutsch Size	Max. Current	Deutsch Size	Max. Current
20	7.5 amps	8	60 amps
16	13 amps	4	100 amps
12	25 amps		

Deutsch DTP Series Connectors & Kit

Deutsch DTP Series Connectors

Deutsch's DTP Series connectors are the solution for your power application requirements. Building on the DT series design strengths, the DTP connector line was developed for higher amperage applications, up to 25 amps max. per circuit.

Terminals

Select the terminal that fits your wire size. Terminals are Deutsch size 12. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool ##114010. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.



Solid Pin



Solid Socket



Stamped & Formed Pin



Stamped & Formed Socket

Wire Size (AWG)	Feature	Material	Pin Pkg. Qty.		Socket Pkg. Qty.	
Solid						
18-16	High Conductivity	Gold	0460-256-12233	1	-------	---
14-12	Standard	Nickel	0460-204-12141	10	0462-203-12141	10
14-12	High Conductivity	Gold	0460-220-1231	1	0462-210-1231	1
14-12	High Conductivity	Gold	-----	---	0462-215-1231	5
Stamped and Formed, Reel						
14-12	Standard	Nickel	1060-12-0166	10	1062-12-0166	10
14-12	High Conductivity	Gold	1060-12-0144	1	1062-12-0144	10
10	Standard	Nickel	1060-12-0222	10	1062-12-0222	10
Plug for empty slot #114017 (25/pkg.)						

Housings

Select the housing that has the number of circuits you need. Each of the housings are size 12, accepts 14-10 gauge wire and requires a wedgelock to hold terminals in place.



Pin Housing



Pin Wedgelock



Socket Housing



Socket Wedgelock

Circuits	Pin Housing	Pin Pkg. Qty.	Pin Wedgelock	Pin Pkg. Qty.	Socket Housing	Socket Qty.	Socket Wedgelock	Socket Pkg. Qty.
2-Way	DTP04-2P	1	WP-2P	10	DTP06-2S	1	WP-2S	10
4-Way	DTP04-4P	1	WP-4P	10	DTP06-4S	1	WP-4S	10

Specialty Housings

Select the specialty housing that has the number of circuits you need. Each of the housings are Deutsch size 12, accepts 14-10 gauge wire and requires a wedgelock to hold terminals in place. The standard housings offer reliability and rugged quality. Standard black housings are shown below and standard gray are shown above.

Reduced Diameter Seal Housings

The reduced diameter seal housings have a reduced diameter insert seal to allow a good seal with smaller wire insulation. It is also called an "E" seal.

Protective End Cap Housings

The protective end cap housings have a extra cap at the rear of the housing and the holes allow the pins to be inserted.

Shrink Boot Adapter Housings

The shrink boot adapter housings have an adapter that accepts shrink tubing, which allows added protection for the wires.

Feature	Pin Gray	Pin Pkg. Qty.	Pin Black	Pin Pkg. Qty.	Socket Gray	Socket Pkg. Qty.	Socket Black	Socket Pkg. Qty.
2-Way Circuits	**(Wedgelock #WP-2P for 2-way pin housings)**				**(Wedgelock #WP-2S for 2-way socket housings)**			
Standard	-------	---	DTP04-2P-E004	1	-------	---	DTP06-2S-E004	1
Reduced Diameter Seals	DTP04-2P-C015	1	-------	---	DTP06-2S-C015	1	-------	---
Protective End Cap	DTP04-2P-E003	1	-------	---	DTP06-2S-E003	1	-------	---
Shrink Boot Adapter	-------	---	DTP04-2P-EE01	1	-------	---	DTP06-2S-EE01	1
4-Way Circuits	**(Wedgelock #WP-4P for 4-way pin housings)**				**(Wedgelock #WP-4S for 4-way socket housings)**			
Standard	-------	---	DTP04-4P-E004	1	-------	---	DTP06-4S-E004	1
Reduced Diameter Seals	DTP04-4P-C015	1	-------	---	DTP06-4S-C015	1	-------	---
Protective End Cap	DTP04-4P-E003	1	-------	---	DTP06-4S-E003	1	-------	---
Shrink Boot Adapter	-------	---	-------	---	-------	---	DTP06-4S-EE01	1

Deutsch DTP Series Kit

This kit contains all of the DTP series housings, wedgelocks, and pin and socket solid terminals you need to create a connection - 13 items, over 100 pieces in a small plastic box, 11"w x 6 3/4"d x 1 3/4"h. Use OEM crimp tool **#HDT-48-00**, see page 61. 25 amps max. per circuit.



Part # DEUTSCH DTP-KIT

Kit Contains	Description	Qty.
0460-204-12141	14-12 Ga. Pin Terminals	25
0462-203-12141	14-12 Ga. Socket Terminals	25
DTP04-2P	2-Way Pin Housings	5
WP-2P	2-Way Pin Wedgelocks	5
DTP06-2S	2-Way Socket Housings	5
WP-2S	2-Way Socket Wedgelocks	5
DTP04-4P	4-Way Pin Housings	5

(Cont.)	Description	Qty.
WP-4P	4-Way Pin Wedgelocks	5
DTP06-4S	4-Way Socket Housings	5
WP-4S	4-Way Socket Wedgelocks	5
114010	Deutsch 12 Ga. Yellow Removal Tool	1
DT-RT	Deutsch Pick Removal Tool #DT-RT1	1
114017	Plugs for DT and DTP Series	25

Deutsch DTP Series Connectors

Housing Boots

Housing boots protect your connections from harsh environments and chemical spray. Boots come in gray and black.


2-Way Gray Pin Boot


2-Way Black Pin Boot


4-Way Gray Socket Boot

	Pin				Socket	
Circuits	Gray	Pkg. Qty.	Black	Pkg. Qty.	Gray	Pkg. Qty.
2-Way	DTP2P-BT	5	DTP2P-BT-BK	5	DTP2S-BT	5
4-Way	DTP4P-BT	5	-------	---	DTP4S-BT	5

DTP & DTHD Mounting Clips

Mounting clips attach to the pin housings to mount Deutsch connectors and provide a secure connection to your project.

A 
B 
C 
D 
E 
F 
G 

Part #	Material	Hole Dia.	Pkg. Qty.	Part #	Material	Hole Dia.	Pkg. Qty.
Fit 2, 3, 4, 5 & 12-Way Circuit Pin Housings							
(A) 1027-003-1200	Stainless Steel	0.433"	1	(E) 1011-310-0205	Thermoplastic, Black	-------	5
(B) 1027-004-1200	Zinc Plated Steel	0.512"	1	(F) 1027-005-1200	Stainless Steel	0.512"	1
(C) 1011-026-0205	Thermoplastic, Gray	0.200"	10	(G) 1027-008-1200	Zinc Plated Steel	0.433"	5
(D) 1011-030-0205	Thermoplastic, Black	0.250"	10	(G) 1027-017-1200	Zinc Plated Steel	0.323"	5

Deutsch Single Terminal Connectors

Use DTHD series connectors and Jiffy Splices when single terminal connections are needed. One pin and one socket. They provide connections that seal out the elements. Size 6 ga. terminals are max. 100 amps, size 10-8 ga. terminals are max. 60 amps and 14-10 ga. terminals are max. 25 amps per circuit.

DTHD Series Terminals

Select the terminal that fits your wire size and matches the Deutsch size. Solid terminals are shown below. For Deutsch size 16 and 12 use tool **#HDT-48-00** and for Deutsch size 8 and 4 use tool **#HDT-04-08-E.** See page 61.

Wire Size	Deutsch			Pin		Socket	
(AWG)	Size	Feature	Material		Pkg. Qty.		Pkg. Qty.
Solid							
20-16	16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
14	16	Std. Green Band	Nickel	0460-215-16141	25	0462-209-16141	10
14	16	High Conductivity	Gold	0460-215-1631	10	0462-209-1631	10
14-12	12	Standard	Nickel	0460-204-12141	10	0462-203-12141	10
14-12	12	High Conductivity	Gold	0460-220-1231	1	0462-210-1231	1
10-8	8	Standard	Nickel	0460-204-08141	1	0462-203-08141	1
6	4	Standard	Nickel	0460-204-0490	1	0462-203-04141	1



Solid Pin — Solid Socket



High Conductivity
Solid Pin — Solid Socket

DTHD Series Housings

DTHD connectors are 1-way circuits used for heavy duty applications. They are an alternative to a splice and are mounted in-line. End caps provide an extra protection.


Pin Housing Without End Cap


Pin Housing With End Cap


Socket Housing Without End Cap


Socket Housing With End Cap

		Pin				Socket			
Wire Size (AWG)	Deutsch Size	Without End Cap	Pkg. Qty.	With End Cap	Pkg. Qty.	Without End Cap	Pkg. Qty.	With End Cap	Pkg. Qty.
14-10	12	DTHD04-1-12P	1	DTHD04-1-12P-E003	1	DTHD06-1-12S	1	DTHD06-1-12S-E003	1
10-8	8	DTHD04-1-8P	1	DTHD04-1-8P-E003	1	DTHD06-1-8S	1	DTHD06-1-8S-E003	1
6	4	DTHD04-1-4P	1	DTHD04-1-4P-E003	1	DTHD06-1-4S	1	DTHD06-1-4S-E003	1

Jiffy Splices

In-line Jiffy splice connectors are a high-quality alternative to permanent splices and stand up to harsh conditions. They are easy to install with standard tools and easy to remove with the correct removal tool. Simply insert one pin terminal in one side and the mating socket terminal in the other to have a complete connection.

Wire Size (AWG)	Deutsch Size	Removal Tool	Jiffy Splice #	Pkg. Qty.
20-14	16	0411-310-1605	JS-16-00	1
14-10	12	114010	JS-12-00	1

JS16-00 
JS-12-00 

Deutsch DTM Series Connectors & Kit

Deutsch DTM Series Connectors

Deutsch's DTM series connectors are small by design and fit tight places, like motorcycles and boat motors. Each of the housings are Deutsch size 20, accepts 22-16 gauge wire and requires a wedgelock to hold terminals in place. 7.5 amps max. per circuit.

Terminals

Select the terminal that fits your wire size. Terminals are Deutsch size 16. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00,** see page 61**.** Release tool #0411-240-2005. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.



Solid Pin



Solid Socket



Stamped & Formed Pin



Stamped & Formed Socket

Wire Size (AWG)	Feature	Material	Pin Pkg. Qty.		Socket Pkg. Qty.	
Solid						
20	Standard	Nickel	0460-202-20141	10	0462-201-20141	10
20	High Conductivity	Gold	0460-202-2031	5	0462-201-2031	1
18-16	Standard	Nickel	0460-010-20141	5	0462-005-20141	5
18-16	High Conductivity	Gold	0460-010-2031	5	0462-005-2031	1
Stamped and Formed, Reel						
22-16	Standard	Nickel	1060-20-0122	25	1062-20-0122	10
Plug for empty slot #0413-204-2005 (25/pkg.)						

Housings

Select the housing that has the number of circuits you need. Each of the DTM housings are Deutsch size 20, accepts 22-16 gauge wire and require a wedgelock to hold terminals in place.



Pin Housing



Pin Wedgelock



Socket Housing



Socket Wedgelock

	Pin				Socket			
Circuits	Housing	Pkg. Qty.	Wedgelock	Pkg. Qty.	Housing	Qty.	Wedgelock	Pkg. Qty.
2-Way	DTM04-2P	5	WM-2P	10	DTM06-2S	5	WM-2S	10
3-Way	DTM04-3P	1	WM-3P	5	DTM06-3S	1	WM-3S	5
4-Way	DTM04-4P	1	WM-4P	5	DTM06-4S	1	WM-4S	5
6-Way	DTM04-6P	1	WM-6P	5	DTM06-6S	1	WM-6S	5
8-Way	DTM04-08PA	1	WM-8P	5	DTM06-08SA	1	WM-8S	5
12-Way	DTM04-12PA	1	WM-12P	5	DTM06-12SA	1	WM-12S	5

Socket Housing Replacement Seals



4-Way Seal

Lose or damage a seal, we have replacement front seals for the socket housings.

Circuits	Seal Part #	Fits Socket #	Pkg. Qty.
2-Way	1010-033-0206	DTM04-2P	10
3-Way	1010-044-0306	DTM04-3P	10
4-Way	1010-036-0406	DTM04-4P	5

Circuits	Seal Part #	Fits Socket #	Pkg. Qty.
6-Way	1010-038-0606	DTM04-6P	5
8-Way	1010-040-0806	DTM04-08P	5
12-Way	1010-042-1206	DTM04-12P	5

Deutsch DTM Series Kit

This kit contains all of the DTM series housings, wedgelocks, and pin and socket solid terminals you need to create a connection - 31 items, over 200 pieces in a large metal box, 18"w x 12"d x 3"h. Use OEM tool **#HDT-48-00**, see page 61. 7.5 amps max. per circuit.



Part # DEUTSCH DTM-KIT

Kit Contains	Description	Qty.
0460-202-20141	20 Ga. Pin Terminals	25
0462-201-20141	20 Ga. Socket Terminals	25
0460-010-20141	18-16 Ga. Pin Terminals	25
0462-005-20141	18-16 Ga. Socket Terminals	25
DTM04-2P	2-Way Pin Housings	5
WM-2P	2-Way Pin Wedgelocks	5
DTM06-2S	2-Way Socket Housings	5
WM-2S	2-Way Socket Wedgelocks	5
DTM04-3P	3-Way Pin Housings	5
WM-3P	3-Way Pin Wedgelocks	5
DTM06-3S	3-Way Socket Housings	5
WM-3S	3-Way Socket Wedgelocks	5
DTM04-4P	4-Way Pin Housings	5
WM-4P	4-Way Pin Wedgelocks	5
DTM06-4S	4-Way Socket Housings	5
WM-4S	4-Way Socket Wedgelocks	5

(Cont.)	Description	Qty.
DTM04-6P	6-Way Pin Housings	3
WM-6P	6-Way Pin Wedgelocks	3
DTM06-6S	6-Way Socket Housings	3
WM-6S	6-Way Socket Wedgelocks	3
DTM04-08PA	8-Way Pin Housings	3
WM-8P	8-Way Pin Wedgelocks	3
DTM06-08SA	8-Way Socket Housings	3
WM-8S	8-Way Socket Wedgelocks	3
DTM04-12PA	12-Way Pin Housings	3
WM-12P	12-Way Pin Wedgelocks	3
DTM06-12SA	12-Way Socket Housings	3
WM-12S	12-Way Socket Wedgelocks	3
0411-240-2005	Deutsch 24-20 Ga. Red Removal Tool	1
0411-310-1605	Deutsch 18-16 Ga. Lt Blue Removal Tool	1
0413-204-2005	Plugs for DTM Series	25

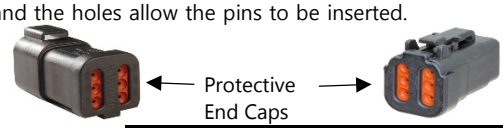
Deutsch DTM Series Connectors

Specialty Housings

Select the specialty housing that has the number of circuits you need. Each of the housings are size 20, accepts 22-16 gauge wire and requires a wedgelock to hold terminals in place. The standard housings offer reliability and rugged quality. Standard black are shown below and standard gray are shown on previous page.

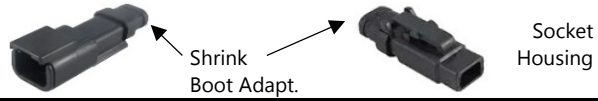
Protective End Cap Housings

The protective end cap housings have a extra cap at the rear of the housing and the holes allow the pins to be inserted.



Shrink Boot Adapter Housings

The shrink boot adapter housings have an adapter that accepts shrink tubing, which allows added protection for the wires.



	Pin				Socket			
Feature	Housing	Pkg. Qty.	Wedgelock	Pkg. Qty.	Housing	Pkg. Qty.	Wedgelock	Pkg. Qty.
2-Way Circuits, Gray								
Protective End Cap	DTM04-2P-E003	1	WM-2P	10	DTM06-2S-E003	5	WM-2S	10
Shrink Boot Adapter	DTM04-2P-E007	1	WM-2P	10	DTM06-2S-E007	1	WM-2S	10
2-Way Circuits, Black								
Standard	DTM04-2P-E004	5	WM-2P	10	DTM06-2S-E004	5	WM-2S	10
Protective End Cap	DTM04-2P-E005	1	WM-2P	10	DTM06-2S-E005	1	WM-2S	10
Shrink Boot Adapter	DTM04-2P-EE03	1	WM-2P	10	DTM06-2S-EE03	1	WM-2S	10
3-Way Circuits, Gray								
Protective End Cap	DTM04-3P-E003	5	WM-3P	5	-------	---	-------	---
3-Way Circuits, Black								
Standard	DTM04-3P-E004	1	WM-3P	5	DTM06-3S-E004	5	WM-3S	5
Protective End Cap	DTM04-3P-E005	1	WM-3P	5	-------	---	-------	---
Shrink Boot Adapter	-------	---	-------	---	DTM06-3S-E007	1	WM-3S	5
4-Way Circuits, Gray								
Protective End Cap	DTM04-4P-E003	1	WM-4P	5	-------	---	-------	---
4-Way Circuits, Black								
Standard	DTM04-4P-E004	1	WM-4P	5	DTM06-4S-E004	1	WM-4S	5
Protective End Cap	DTM04-4P-E005	1	-------	5	-------	---	-------	---
Shrink Boot Adapter	-------	---	-------	---	DTM06-4S-E007	1	WM-4S	5
6-Way Circuits, Gray								
Protective End Cap	DTM04-6P-E003	1	WM-6P	5	-------	---	-------	---
Shrink Boot Adapter	-------	---	-------	---	DTM06-6S-E007	1	WM-6S	5
6-Way Circuits, Black								
Standard	DTM04-6P-E004	1	WM-6P	5	DTM06-6S-E004	1	WM-6S	5
Protective End Cap	DTM04-6P-E005	1	WM-6P	5	DTM06-6S-E005	1	WM-6S	5
Shrink Boot Adapter	-------	---	-------	---	DTM06-6S-EE03	1	WM-6S	5
8-Way Circuits, Gray								
Protective End Cap	DTM04-08PA-E003	1	WM-8P	5	-------	---	-------	---
Shrink Boot Adapter	-------	---	-------	---	DTM06-08SA-E007	1	WM-8S	5
8-Way Circuits, Black								
Protective End Cap	DTM04-08PA-E005	1	WM-8P	5	-------	---	-------	---
12-Way Circuits, Gray								
Protective End Cap	DTM04-12PA-E003	1	WM-12P	5	DTM06-12SA-E003	1	WM-12S	5
Shrink Boot Adapter	-------	---	-------	---	DTM06-12SA-E007	1	WM-12S	5
12-Way Circuits, Black								
Protective End Cap	DTM04-12PA-E005	1	WM-12P	5	-------	---	-------	---

High-Temperature Housings

DTM series EE04 modification connectors are high-temperature housings sealed from the environment. They have operating temperatures of -67°F to over 300°F. Deutsch size 20, accepts 22-16 gauge wire, black and require a wedgelock.

	Pin				Socket			
Feature	Housing	Pkg. Qty.	Wedgelock	Pkg. Qty.	Housing	Pkg. Qty.	Wedgelock	Pkg. Qty.
6-Way Circuits	DTM04-6P-EE04	1	WM-6P	1	-------	---	-------	---
8-Way Circuits, key A	DTM04-08PA-EE04	1	WM-8P	1	DTM06-08SA-EE04	1	WM-8S	1
12-Way Circuits, key A	-------	---	-------	---	DTM06-12SA-EE04	1	WM-12S	1

Temporary Dust Caps

Temporary dust caps push on to offer temporary protection from moisture and dirt for unmated plugs. Temporary dust caps are made of plastisol.

	Pin			Socket		
Circuits	Dust Cap	Fits Pin Housing	Pkg. Qty.	Dust Cap	Fits Pin Housing	Pkg. Qty.
12-Way	DTM12P-DC	DTM04-12P	10	DTM3S-DC	DTM06-3S	5

Deutsch DTM, DTMH & DTMN Series Connectors

Deutsch DTM Series Connectors

Housing Boots

Housing boots protect your connections from harsh environments and chemical spray. Boots come in gray and black.


2-Way Gray Pin Boot


12-Way Black Pin Boot


4-Way Gray Socket Boot


8-Way Black Socket Boot

	Pin				Socket			
Circuits	Gray Boots	Pkg. Qty.	Black Boots	Pkg. Qty.	Gray Boots	Pkg. Qty.	Black Boots	Pkg. Qty.
2-Way	DTM2P-BT	5	DTM2P-BT-BK	5	DTM2S-BT	5	DTM2S-BT-BK	5
3-Way	DTM3P-BT	5	-------	---	DTM3S-BT	5	DTM3S-BT-BK	5
4-Way	DTM4P-BT	5	-------	---	DTM4S-BT	5	-------	5
6-Way	DTM6P-BT	5	-------	---	DTM6S-BT	5	-------	5
8-Way	DTM8P-BT	5	-------	---	DTM8S-BT	5	DTM8S-BT-BK	5
12-Way	DTM12P-BT	5	DTM12P-BT-BK	5	DTM12S-BT	5	DTM12S-BT-BK	5

DTM Mounting Clips

Mounting clips attach to the pin housings to mount Deutsch connectors and provide a secure connection to your project.

A 
B 
C 
D 
E 
F 
G 

Part #	Material	Hole Dia.	Pkg. Qty.	Part #	Material	Hole Dia.	Pkg. Qty.
Fit 2, 3, 4, 5 & 12-Way Circuit Pin Housings							
(A) 1027-003-1200	Stainless Steel	0.433"	1	(E) 1011-310-0205	Thermoplastic, Black	-------	5
(B) 1027-004-1200	Zinc Plated Steel	0.512"	1	(F) 1027-005-1200	Stainless Steel	0.512"	1
(C) 1011-026-0205	Thermoplastic, Gray	0.200"	10	(G) 1027-008-1200	Zinc plated Steel	0.433"	5
(D) 1011-030-0205	Thermoplastic, Black	0.250"	10	(G) 1027-017-1200	Zinc plated Steel	0.323"	5

Deutsch DTMH Series High Temperature Connectors

The DTMH series high-temperature connectors are sealed from the environment. They have operating temperatures of -67°F to over 300°F. These connectors are black and have a joined TPA for easy assembly. Each of the housings are Deutsch size 20 and accepts 22-16 gauge wire.




	Pin				Socket			
Key Configuration	2-Way Circuits	Pkg. Qty.	4-Way Circuits	Pkg. Qty.	2-Way Circuits	Pkg. Qty.	4-Way Circuits	Pkg. Qty.
A	DTMH04-2PA	1	DTMH04-4PA	1	DTMH06-2SA	1	DTMH06-4SA	1
B	DTMH04-2PB	1	-------	1	DTMH06-2SB	1	DTMH06-4SB	1
C	DTMH04-2PC	1	DTMH04-4PC	1	DTMH06-2SC	1	DTMH06-4SC	1
D	DTMH04-2PD	1	DTMH04-4PD	1	DTMH06-2SD	1	DTMH06-4SD	1

Deutsch DTMN Series Connectors

The DTMN is a non-environmental connector offering good quality and reliability when a sealed connector in not required. Each of the housings are Deutsch size 20 and accepts 22-16 gauge wire.




	Pin		Socket	
Circuits	Housing	Pkg. Qty.	Housing	Pkg. Qty.
2-Way	DTMN04-2P	5	DTMN06-2S	5

Deutsch DTMH & DTMN Series Terminals

Select the terminal that fits your wire size and matches the Deutsch size 20.

				Pin		Socket	
Wire Size (AWG)	Deutsch Size	Feature	Material		Pkg. Qty.		Pkg. Qty.
Solid							
20	20	Standard	Nickel	0460-202-20141	10	0462-201-20141	10
20	20	High Conductivity	Gold	0460-202-2031	5	0462-201-2031	1
18-16	20	Standard	Nickel	0460-010-20141	5	0462-005-20141	5
18-16	20	High Conductivity	Gold	0460-010-2031	5	0462-005-2031	1
Stamped and Formed, Reel							
22-16	20	Standard	Nickel	1060-20-0122	25	1062-20-0122	10
22-16	20	High Conductivity	Gold	1060-20-0144	10	1062-20-0144	10
22-16	20	Standard	Nickel	1060-20-0222	25	1062-20-0222	25
22-16	20	High Conductivity	Gold	1060-20-0244	10	1062-20-0244	10

HD10 Series Connectors

The HD10 series are round, thermoplastic, and sealed to keep out the environment. HD10 series are not compatible with the HD30 and HDP30 series.

Terminals

Select the terminal that fits your wire size. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool #0411-310-1605 for Deutsch size 16 and #114010 for Deutsch size 12. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.

				Pin		Socket	
Wire Size (AWG)	Deutsch Size	Feature	Material		Pkg. Qty.		Pkg. Qty.
Solid							
20-16	16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
20-16	16	Extended Crimp	Nickel	0460-247-16141	1	-------	---
20-16	16	Extended Crimp	Gold	0460-247-1631	1	0462-221-1631	1
20-16	16	Extended Interface	Nickel	0460-264-16141	1	-------	---
14	16	Std. Green Band	Nickel	0460-215-16141	25	0462-209-16141	10
14	16	High Conductivity	Gold	0460-215-1631	10	0462-209-1631	10
Stamped and Formed, Reel							
20-16	16	Standard	Nickel	1060-16-0622	25	1062-16-0622	10
20-16	16	High Conductivity	Gold	1060-16-0644	10	1062-16-0644	10
18-14	16	Standard	Nickel	1060-16-0122	25	1062-16-0122	10
18-14	16	High Conductivity	Gold	1060-16-0144	10	1062-16-0144	10
18-14	16	High Conductivity	Gold	1060-16-0988	10	1062-16-0988	10
18-14	16	Standard	Nickel	1060-14-0122	25	1062-14-0122	10
18-14	16	High Conductivity	Gold	1060-14-0144	10	1062-14-0144	10
16-12	16	Standard	Nickel	1060-16-1222	25	1062-16-1222	10
16-12	16	Standard	Nickel	-------	---	1062-16-1422	10
14-12	12	High Conductivity	Gold	1060-12-0144	10	1062-12-0144	10
14-12	12	Standard	Nickel	1060-12-0166	10	1062-12-0166	10
10	12	Standard	Nickel	1060-12-0222	10	1062-12-0222	10


Solid Pin


Solid Socket


Stamped & Formed Pin


Stamped & Formed Socket

Housings

Pin housings are gray and available flanged (panel mount) or in-line. Socket housings are gray and will mate with flanged or in-line pin housings of the same size.







				Pin				Socket	
Circuits	Wire Size AWG	Deutsch Size	Rear	Flange	Pkg. Qty.	In-line	Pkg. Qty.		Pkg. Qty.
3-Way	20-14	16	Non-threaded	-------	---	HD14-3-16P	1	HD16-3-16S	1
3-Way	20-14	16	Threaded	HD10-3-96P	1	HD14-3-96P	1	HD16-3-96S	1
4-Way	20-6	1) 14, 3) 16	Threaded	HD10-4-4P	1	-------	---	HD16-4-4S	1
5-Way	20-14	16	Non-threaded	HD10-5-16P	1	HD14-5-16P	1	HD16-5-16S	1
6-Way	20-14	16	Threaded	HD10-6-96P	1	HD14-6-96P	1	HD16-6-96S	1
6-Way	14-10	12	Threaded	HD10-6-12P	1	HD14-6-12P	1	HD16-6-12S*	1
9-Way	20-14	16	Non-threaded	HD10-9-16P	1	HD14-9-16P	1	HD16-9-16S	1
9-Way	20-14	16	Threaded	HD10-9-96P	1	HD14-9-96P	1	HD16-9-96S	1

*No coupling ring

Pin Housing Flange Gaskets

Flange gaskets used on the above flange pin housings, create a tight seal between the housing flange and panel face. Help seal out the elements, such as dirt, sand, and salt. Made of neoprene, .125" thick and operating temperature of -70°F to 225°F.

Circuits	Works With		Pkg. Qty.
3-Way	HD10-3-96P	HD10-3-GKT	5
5-Way	HD10-5-16P	HD10-5-GKT	5
6-Way	HD10-6-96P	HD10-6-GKT	5
9-Way	HD10-9-16P and HD10-9-96P	HD10-9-GKT	5



HD10 Series Strain Reliefs

The HD10 strain reliefs screw onto threaded 3, 4, 6 and 9-way HD10 housings reducing the strain on the wires. Also offering a neater look.

Circuits		Pkg. Qty.
3-Way	HD18-003	1
6-Way	HD18-006	1
4 or 9-Way	HD18-009	1

3-Way 

6-Way 

4 or 9-Way 

Deutsch HD10 Series Connectors

HD10 Series Connectors

Housing Boots

The HD10 boots slide on both pin and socket housings. Made of plastisol and provide protection from dirt and debris. They are rated from -20°F to 212°F.



3-Way Gray



9-Way Black

Circuits	Gray	Pkg. Qty.	Black	Pkg. Qty.
3-Way	HD10-3BT	5	-------	---
5-Way	HD10-5BT	10	HD10-5BT-BK	10
6-Way	HD10-6BT	5	HD10-6BT-BK	5
9-Way	HD10-9BT	5	HD10-9BT-BK	5

Protective Caps and Lanyards

Protective dust caps seal housings from the elements and are used to protect the connector when it's not mated. Lanyards help you to keep your caps from being lost. They come in rubber or steel.



Pin Cap



Pin Cap and Rubber Lanyard



Socket Cap and Steel Lanyard

Circuits	Pin Gray	Pkg. Qty.	Pin Black	Pkg. Qty.	Socket Gray	Pkg. Qty.
Cap Only						
3-Way	HDC16-3	1	-------	---	HDC14-3	5
5-Way	HDC16-5	1	-------	---	-------	---
6-Way	HDC16-6	1	HDC16-6-E004	1	HDC14-6	1
9-Way	HDC16-9	1	HDC16-9-E004	1	HDC14-9	1
Cap and Rubber Lanyard						
3-Way	HDC16-3-JDL	1	-------	---	HDC14-3-JDL	1
6-Way	HDC16-6-JDL	1	-------	---	HDC14-6-JDL	1
9-Way	HDC16-9-JDL	1	HDC9-JDL082397	1	HDC14-9-JDL	1
Cap and Steel Lanyard						
3-Way	HDC16-3-LA	1	-------	---	-------	---
5-Way	HDC16-5-LA	1	-------	---	-------	---
6-Way	HDC16-6-LA	1	-------	---	HDC14-6-LA	1
9-Way	HDC16-9-L47N	1	HDC16-9-E004-L47N	1	-------	---

Lanyards

Do you have the caps you need? You can purchase the lanyards without the caps.



Rubber Lanyard



Steel Lanyard

Material	Size		Pkg. Qty.
Rubber	0.7" x 5.31"	JDL082397	5
Steel	0.047" x 16"	L47N-1600-1	1
Steel	0.047" x 6"	L47N-600-1	1

Crimping Tools for Solid Terminals



Production 4 Indents



Production 4 Indents



Field Service 2 Indents



Economy 4 Indents



Economy 2 Indents

Deutsch Size	Wire Size (AWG)	Amps	Production 4 Indents Ratcheting/OEM	Production 4 Indents Non-Ratcheting	Field Service 2 Indents Ratcheting/OEM	Economy 4 Indents Ratcheting	Economy 2 Indents Non-Ratcheting
20	20	7.5	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
20	18-16	7.5	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	20	13	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	14	13	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
12	12	25	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
8	10-8	60	-------	HDT-04-08*	-------	-------	HDT-04-08-E**
4	6	100	-------	HDT-04-08*	-------	-------	HDT-04-08-E**

* HDT-04-08 tool comes with 1 set of #0434-205-0800 and 1 set of #0434-205-0400 dies

** HDT-04-08-E tool comes with 1 set of #18874 and 1 set of #18873 dies

HD30 Series Connectors

The HD30 series are circular and have a metal shell. Designed for truck and bus industry. Sealed to keep out the environment. Can quickly be connected and disconnected.

Terminals

Select the terminal that fits your wire size. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool #0411-240-2005 for Deutsch size 20, #0411-310-1605 for Deutsch size 16 and #114010 for Deutsch size 12. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.

Wire Size (AWG)	Deutsch Size	Feature	Material	Pin	Pkg. Qty.	Socket	Pkg. Qty.
Solid							
20	20	Standard	Nickel	0460-202-20141	10	0462-201-20141	10
20	20	High Conductivity	Gold	0460-202-2031	5	0462-201-2031	1
20-16	16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
18-16	20	Standard	Nickel	0460-010-20141	5	0462-005-20141	25
18-16	20	High Conductivity	Gold	0460-010-2031	5	0462-005-2031	1
14-12	12	Standard	Nickel	0460-204-12141	10	0462-203-12141	10
14-12	12	High Conductivity	Gold	0460-220-1231	1	0462-210-1231	1
14	16	Std., Green Band	Nickel	0460-215-16141	25	0462-209-16141	25
14	16	High Cond.,Grn Band	Gold	0460-215-1631	10	0462-209-1631	10
10-8	16	Standard	Nickel	0460-204-08141	1	0462-203-08141	1
Stamped and Formed, Reel							
22-16	20	Standard	Nickel	1060-20-0122	25	1062-20-0122	10
22-16	20	High Conductivity	Gold	1060-20-0144	10	1062-20-0144	10
22-16	20	Standard	Nickel	1060-20-0222	25	1062-20-0222	25
22-16	20	High Conductivity	Gold	1060-20-0244	10	1062-20-0244	10
20-16	16	Standard	Nickel	1060-16-0622	10	1062-16-0622	10
20-16	16	High Conductivity	Gold	1060-16-0644	10	1062-16-0644	10
18-14	16	Standard	Nickel	1060-16-0122	25	1062-16-0122	10
18-14	16	High Conductivity	Gold	1060-16-0144	10	1062-16-0144	10
18-14	16	High Conductivity	Gold	1060-16-0988	10	1062-16-0988	10
18-14	16	Standard	Nickel	1060-14-0122	25	1062-14-0122	10
18-14	16	High Conductivity	Gold	1060-14-0144	10	1062-14-0144	10
16-12	16	Standard	Nickel	1060-16-1222	25	1062-16-1222	10
14-12	12	Standard	Nickel	1060-12-0166	10	1062-12-0166	10
14-12	12	High Conductivity	Gold	1060-12-0144	10	1062-12-0144	10
10	12	Standard	Nickel	1060-12-0222	10	1062-12-0222	10

Standard



Solid Pin | Solid Socket



Stamped & Formed Pin | Stamped & Formed Socket

High Conductivity



Solid Pin | Solid Socket



Stamped & Formed Pin | Stamped & Formed Socket

Housings

The HD30 series are compact, light, with a rugged metal housing. This protects the contacts and grommets. There are several different terminal configuration options, to prevent mismatching.

18 Shell Pin #HD34-18-6PN



24 Shell Pin #HD34-24-9PN



18 Shell Socket #HD36-18-20SN



24 Shell Socket #HD36-24-18SN



Circuits	Circuits - Deutsch Size	Pin	Pkg. Qty.	Socket	Pkg. Qty.
18 Shell Size					
6-Way	4-size 16 / 2-size 4	HD34-18-6PN	1	HD36-18-6SN	1
8-Way	8-size 12	HD34-18-8PN	1	HD36-18-8SN	1
14-Way	14-size 16	HD34-18-14PN	1	HD36-18-14SN	1
20-Way	18-size 20 / 2-size 16	HD34-18-20PN	1	HD36-18-20SN	1
21-Way	21-size 20	HD34-18-21PN	1	HD36-18-21SN	1
24 Shell Size					
9-Way	6-size 12 / 2-size 8 / 1-size 4	HD34-24-9PN	1	HD36-24-9SN	1
14-Way	12-size 16 / 1-size 12 / 1-size 4	HD34-24-14PN	1	HD36-24-14SN	1
16-Way	16-size 12	HD34-24-16PN	1	HD36-24-16SN	1
18-Way	14-size 16 / 3-size 12 / 1-size 8	HD34-24-18PN	1	HD36-24-18SN	1
19-Way	13-size 16 / 6-size 12	HD34-24-19PN	1	HD36-24-19SN	1
21-Way	17-size 16 / 4-size 12	HD34-24-21PN	1	HD36-24-21SN	1
23-Way	23-size 16	HD34-24-23PN	1	HD36-24-23SN	1
33-Way	33-size 20	HD34-24-33PN	1	HD36-24-33SN	1
35-Way	32-size 20 / 3-size 16	HD34-24-35PN	1	HD36-24-35SN	1
91-Way	5-size 16 / 2-size 12 / 2-size 8	HD34-24-91PN	1	-------	---

Deutsch HD30 Series Connectors

HD30 Series Connectors

Sealing Plugs

Plugs for empty slots in the housings.



#0413-204-2005
Deutsch Size 20
Thermoplastic
Pkgs. of 25



#114017
Deutsch Size 16 & 12
Thermoplastic
Pkgs. of 25



#114018
Deutsch Size 8
Thermoplastic
Pkgs. of 10



114019
Deutsch Size 4
Silicone Rubber
Pkgs. of 10

Lock Washers and Panel Nuts

Used together, the **lock washers** and **panel nuts** help in mounting the HD30 series connectors. Lock washers add tension between the threads and the nuts to provide a secure connection.



Lock washer

Panel Nut



	Lock Washers		Panel Nuts	
Shell Size		Pkg. Qty.		Pkg. Qty.
18	2414-002-1886	5	112263-90	1
24	2414-001-2486	5	114020-90	1

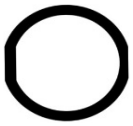
Gaskets

Help seal out the elements, such as moisture, dirt, sand and salt. Made of neoprene, .125" thick and operating temperature of -70°F to 225°F. Gaskets are 0.125" thick.



18 Shell Gasket

24 Shell Gasket



Shell Size		Pkg. Qty.
18	16-04978	5
24	16-04477	10

Housing Strain Reliefs

The HD30 series offer a metal strain relief in straight or 90° configuration. They attach to the housing, to reduces the strain on the wires. The strain relief has a screw in the back of the connector and is attached to the wires with a tie wrap.



18 Shell
Straight Strain Relief



24 Shell
90° Strain Relief

Shell Size	Orientation		Pkg. Qty.
18	Straight	WHDS-18-1	1
18	90° angle	WHDS-18-2	1
24	Straight	WHDS-24-1	1
24	90° angle	WHDS-24-2	1

Housing Boots

The HD30 boots slide on both pin and socket housings. Made of plastisol and provide protection from dirt and debris. They are rated from -20°F to 212°F.



18 Shell
Gray Straight Boot



24 Shell
Black 90° Boot

		18 Shell		24 Shell	
Color	Orientation		Pkg. Qty.		Pkg. Qty.
Gray	Straight	HD30-18BT	10	HD30-24BT	5
Black	Straight	HD30-18BT-BK	10	HD30-24BT-BK	5
Black	90°	HD30-18BT-90BK	1	HD30-24BT-90BK	1

Dust Caps and Eyelet Chains

Protective dust caps seal housings from the elements and are used to protect the connector when it's not mated. Caps can be purchased separately, or with mounting chain.



18 Shell Pin
Cap



24 Shell Pin
Cap with Chain



18 Shell Socket
Cap with Chain



24 Shell Socket
Cap

	Pin				Socket			
Feature	18 Shell	Pkg. Qty.	24 Shell	Pkg. Qty.	18 Shell	Pkg. Qty.	24 Shell	Pkg. Qty.
Cap with Eyelet Chain	HDC36-18	1	HDC36-24	1	HDC34-18	1	HDC34-24	1
Cap with No Chain	HDC36-18-1E	1	HDC36-24-1E	1	HDC34-18-1E	1	HDC34-24-1E	1

HDP20 Series Connectors

The HDP20 series are round, black, thermoplastic and have a heavy duty rating. Best option to keep chemicals from damaging your connector housings. Can quickly be connected and disconnected.

Terminals

Select the terminal that fits your wire size. Use a plug in place of a terminal to fill an empty slot. Crimp solid terminals with the OEM tool **#HDT-48-00**, see page 61. Use release tool #0411-240-2005 for Deutsch size 20, #0411-310-1605 for Deutsch size 16 and #114010 for Deutsch size 12. For stamped and formed terminal crimpers see page 61. Stamped terminals are available on reels.

				Pin		Socket	
Wire Size (AWG)	Deutsch Size	Feature	Material		Pkg. Qty.		Pkg. Qty.
Solid							
20	20	Standard	Nickel	0460-202-20141	10	0462-201-20141	10
20	20	High Conductivity	Gold	0460-202-2031	5	0462-201-2031	1
20-16	16	Standard	Nickel	0460-202-16141	25	0462-201-16141	25
20-16	16	High Conductivity	Gold	0460-202-1631	10	0462-201-1631	10
18-16	20	Standard	Nickel	0460-010-20141	5	0462-005-20141	25
18-16	20	High Conductivity	Gold	0460-010-2031	5	0462-005-2031	1
14-12	12	Standard	Nickel	0460-204-12141	10	0462-203-12141	10
14-12	12	High Conductivity	Gold	0460-220-1231	1	0462-210-1231	1
14	16	Std., Green Band	Nickel	0460-215-16141	25	0462-209-16141	25
14	16	High Cond.,Grn Band	Gold	0460-215-1631	10	0462-209-1631	10
10-8	8	Standard	Nickel	0460-204-08141	1	0462-203-08141	1
Stamped and Formed, Reel							
22-16	20	Standard	Nickel	1060-20-0122	25	1062-20-0122	10
22-16	20	High Conductivity	Gold	1060-20-0144	10	1062-20-0144	10
22-16	20	Standard	Nickel	1060-20-0222	25	1062-20-0222	25
22-16	20	High Conductivity	Gold	1060-20-0244	10	1062-20-0244	10
20-16	16	Standard	Nickel	1060-16-0622	10	1062-16-0622	10
20-16	16	High Conductivity	Gold	1060-16-0644	10	1062-16-0644	10
18-14	16	Standard	Nickel	1060-16-0122	25	1062-16-0122	10
18-14	16	High Conductivity	Gold	1060-16-0144	10	1062-16-0144	10
18-14	16	High Conductivity	Gold	1060-16-0988	10	1062-16-0988	10
18-14	16	Standard	Nickel	1060-14-0122	25	1062-14-0122	10
18-14	16	High Conductivity	Gold	1060-14-0144	10	1062-14-0144	10
16-12	16	Standard	Nickel	1060-16-1222	25	1062-16-1222	10
14-12	12	Standard	Nickel	1060-12-0166	10	1062-12-0166	10
14-12	12	High Conductivity	Gold	1060-12-0144	10	1062-12-0144	10
10	12	Standard	Nickel	1060-12-0222	10	1062-12-0222	10

Standard



Solid Pin | Solid Socket



Stamped & Formed Pin | Stamped & Formed Socket

High Conductivity



Solid Pin | Solid Socket



Stamped & Formed Pin | Stamped & Formed Socket

Housings

The HDP20 housings are compact, light, made of thermoplastic. This protects the contacts and grommets. There are several different terminal configuration options, to prevent mismatching.

24 Shell Pin Housing



18 Shell Socket



24 Shell Socket



		Pin		Socket	
Circuits	Circuits - Deutsch Size		Pkg. Qty.		Pkg. Qty.
18 Shell Size					
6-Way	4-size 16 / 2-size 4	-------	---	HDP26-18-6SN	1
8-Way	8-size 12	-------	---	HDP26-18-8SN	1
14-Way	14-size 16	-------	---	HDP26-18-14SN	1
20-Way	18-size 20 / 2-size 16	-------	---	HDP26-18-20SN	1
21-Way	21-size 20	-------	---	HDP26-18-21SN	1
24 Shell Size					
9-Way	6-size 12 / 2-size 8 / 1-size 4	HDP24-24-9PN	1	HDP26-24-9SN	1
14-Way	12-size 16 / 1-size 12 / 1-size 4	-------	---	HDP26-24-14SN	1
16-Way	16-size 12	-------	---	HDP26-24-16SN	1
18-Way	14-size 16 / 3-size 12 / 1-size 8	-------	---	HDP26-24-18SN	1
19-Way	13-size 16 / 6-size 12	-------	---	HDP26-24-19SN	1
21-Way	17-size 16 / 4-size 12	-------	---	HDP26-24-21SN	1
23-Way	23-size 16	-------	---	HDP26-24-23SN	1
33-Way	33-size 20	HDP24-24-33PN	1	HDP26-24-33SN	1
35-Way	32-size 20 / 3-size 16	HDP24-24-35PN	1	HDP26-24-35SN	1

Deutsch HDP20 Series Connectors

HDP20 Series Connectors

Sealing Plugs

Plugs for empty slots in the housings.



#0413-204-2005
Deutsch Size 20
Thermoplastic
Pkgs. of 25



#114017
Deutsch Size 16 & 12
Thermoplastic
Pkgs. of 25



#114018
Deutsch Size 8
Thermoplastic
Pkgs. of 10



114019
Deutsch Size 4
Silicone Rubber
Pkgs. of 10

Lock washers and Panel Nuts

Used together, the **lock washers** and **panel nuts** help in mounting the HDP20 series connectors. Lock washers add tension between the threads and the nuts to provide a secure connection.



Lock washer

Panel Nut 

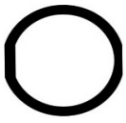
	Lock washers		Panel Nuts	
Shell Size		Pkg. Qty.		Pkg. Qty.
18	2414-002-1886	5	2411-002-1805	5
24	2414-001-2486	5	2411-001-2405	5

Gaskets

Help seal out the elements, such as moisture, dirt, sand and salt. Made of neoprene, .125" thick and operating temperature of -70°F to 225°F. Gaskets are 0.125" thick.



18 Shell Gasket

24 Shell Gasket 

Shell Size		Pkg. Qty.
18	16-04978	5
24	16-04477	10

Housing Boots

The HDP20 boots slide on both pin and socket housings. Made of plastisol and provide protection from dirt and debris. They are rated from -20°F to 212°F.



18 Shell
Gray Straight Boot



24 Shell
Black 90° Boot

		18 Shell		24 Shell	
Color	Orientation		Pkg. Qty.	24 Shell	Pkg. Qty.
Gray	Straight	HD30-18BT	10	HD30-24BT	5
Black	Straight	HD30-18BT-BK	10	HD30-24BT-BK	5
Black	90°	HD30-18BT-90BK	1	HD30-24BT-90BK	1

Dust Caps

Protective dust caps seal housings from the elements and are used to protect the connector when it's not mated.



18 Shell Dust Cap

24 Shell Dust Cap 

Shell Size		Pkg. Qty.
18	HDC26-18	1
24	HDC26-24	1

Lanyards

Do you have the caps you need? You can purchase the lanyards without the caps.



Rubber Lanyard



Steel Lanyard

Material	Size		Pkg. Qty.
Rubber	0.7" x 5.31"	JDL082397	5
Steel	0.047" x 16"	L47N-1600-1	1
Steel	0.047" x 6"	L47N-600-1	1

D Hole Punch Tools for HDP20 & HD30 Series

A D hole punch is used to cut a D shaped hole that allows the HDP20 and HD30 connectors to mount securely. The D shape keeps connectors from spinning.



18-D-PUNCH



PUNCH-DRAW-STUD

Shell Size		Pkg. Qty.
D Hole Punches		
18	24-D-PUNCH	1
24	18-D-PUNCH	1
Replacement Draw Stud for D Hole Punches		
18 & 24	PUNCHDRAWSTUD	1

Deutsch Tools

There are two styles of Deutsch pins, solid and stamped & formed. Both types need to be crimped, solder is not recommended. Several hand and production tools are available to crimp terminals, insert and remove wire, and position your terminals and wedgelocks.

Pick Removal Tool

Works with	Description	Part Number
Deutsch DT, DTM, and DTP Series	The tool has a double ended removal tool. One end has a sturdy 90° hook for non-slip wedgelock removal. The other end has a standard flat head screwdriver which can be used as a straight pick or driver.	DT-RT



Terminal Removal Tools

Removal tools remove the Deutsch contacts from their housings. The **plastic** removal tools are economical. The **metal** removal tools are more durable.

(A)  (B)  (C)  (D)  (E)  (F) 

(G)  (H)  (I)  (J)  (K) 

(L) 

Wire Size (AWG)	Deutsch Size	Works with	Plastic Color		Plastic Part Number	Metal Color		Metal Part Number
24-20	20	DTM, DRC20, HDP, and HD30 Series	Red	**(A)**	0411-240-2005	Red	**(G)**	0411-240-2005HD
18-16	16	DT, DRC, HD, HDP, and HD10 Series	Lt. Blue	**(B)**	0411-310-1605	Lt. Blue	**(H)**	0411-310-1605HD
16-14	14	DRC, HD, HDP, and HD10 Series	Green	**(C)**	0411-291-1405	-------		-------
12	12	DTP, DTCE, DTHD, HD10, HD30 Series	Yellow	**(D)**	114010	Yellow	**(I)**	114010HD
10-8	8	DTHD, DTCE, HD, and HDP Series	Green	**(E)**	114008	Gray	**(J)**	114008HD
6	4	DTHD, DTCE, HD, and HDP Series	White	**(F)**	114009	Green	**(K)**	114009HD
Metal Removal Tool Set / Contains all three metal tools: 0411-310-1605HD, 0411-240-2005HD, 114010HD.							**(L)**	REMOVAL KIT

Crimp Tools for Solid Terminals, Deutsch Series DT, DTM, DTP, HD30, HDP20, HD10, DRC, DRB, DTHD, DTV, AEC











Deutsch Size	Wire Size (AWG)	Production 4 Indents Ratcheting/OEM	Production 4 Indents Non-Ratcheting	Field Service 2 Indents Ratcheting/OEM	Economy 4 Indents Ratcheting	Economy 2 Indents Non-Ratcheting
20	20	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
20	18-16	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	20	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	14	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
12	12	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
8	10-8	-------	HDT-04-08*	-------	-------	HDT-04-08-E**
4	6	-------	HDT-04-08*	-------	-------	HDT-04-08-E**

* HDT-04-08 tool comes with 1 set of #0434-205-0800 and 1 set of #0434-205-0400 dies

** HDT-04-08-E tool comes with 1 set of #18874 and 1 set of #18873 dies

OEM Crimp Tools for Stamped and Formed Terminals, Deutsch Series DT, DTM, DTP, HD30, HDP20, HD10, DRC, DRB, DTHD, DTV, AEC





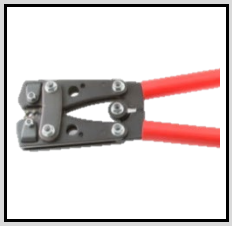


Deutsch Size	Wire Size (AWG)	Production	Field Service	Production
20	22-18	DTT-20-02	-------	-------
20	20-16	DTT-20-00	-------	-------
16	18	DTT-16-01	-------	-------
16	16-14	DTT-16-00	-------	-------
12	14-12	-------	DTT-12-00	-------
12	10	-------	-------	DTT-12-01

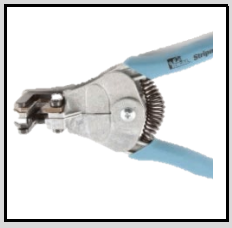
Notes

Tools

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Crimping Tools for Insulated Terminals

Crimping Tools for Insulated Terminals



Part # TH-450

Crimps:
- **26-6 gauge** insulated terminals
- 26-6 gauge non-insulated terminals
- 22-10 gauge non-insulated flag terminals
- 26-10 gauge closed end connectors

Strips:
- 20-8 gauge wire

Features:
- Heavy-duty multi-purpose 3M tool



Part # RATCHET TRIO

Crimps:
- **20-10 gauge** insulated terminals
- 26-8 gauge non-insulated terminals
- 20-10 gauge "B" crimp (wing type) terminals

Features:
- Three quick change dies
- Release lever
- Ratcheting tool



Part # MPT

Crimps:
- **26-10 gauge** insulated terminals
- 22-10 gauge non-insulated terminals

Strips:
- 26-8 gauge wire

Features:
- Economy multi-purpose tool



Part # RATCHET 2614

Crimps:
- **26-16 gauge** insulated terminals

Features:
- Release lever
- Pressure adjustment lever
- Ratcheting tool



Part # 500RATCHET26-14

Crimps:
- **26-14 gauge** insulated terminals

Features:
- Release lever
- Pressure adjustment lever
- Ratcheting tool



Part # 500 RATCHET

Crimps:
- **22-10 gauge** insulated terminals

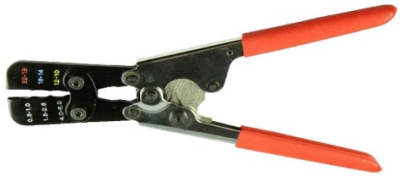
Features:
- Release lever
- Pressure adjustment lever
- Ratcheting tool



Part # 500RATCHET UL-S

Crimps:
- **26-14 gauge** insulated and heat heat shrink terminals

Features:
- Release lever
- UL ratcheting action



Part # 500 RATCHET UL

Crimps:
- **22-10 gauge** insulated and heat shrink terminals

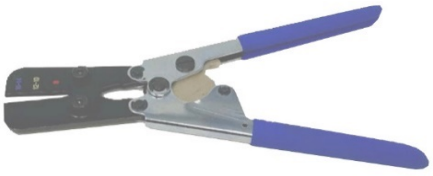
Features:
- Release lever
- UL ratcheting tool



Part # 429

Crimps:
- **22-10 gauge** insulated terminals
- 22-10 gauge non-insulated terminals

Features:
- Cutter on nose



Part # 500RATCHET UL-L

Crimps:
- **16-8 gauge** insulated and heat shrink terminals

Features:
- Release lever
- UL ratcheting tool



Part # 500 RATCHET-ERG

Crimps:
- **22-10 gauge** insulated terminals

Features:
- Release lever
- Pressure adjustment lever
- Ratcheting tool



Part # 6220

Crimps:
- **8-2 gauge** insulated terminals
- 8-2 gauge non-insulated terminals

Features:
- 18.5" long
- Compound crimping

Crimping Tools for Non-Insulated Terminals

Crimps:
- **26-6 gauge** non-insulated terminals
- 26-6 gauge insulated terminals
- 22-10 gauge non-insulated flag terminals
- 26-10 gauge closed end connectors

Strips:
- 20-8 gauge wire

Features:
- Heavy-duty multi-purpose tool



Part # TH-450

Crimps:
- **22-10 gauge** non-insulated terminals
- 22-10 gauge insulated terminals

Features:
- Cutter on nose



Part # 429

Crimps:
- **26-8 gauge** non-insulated terminals
- 20-10 gauge insulated terminals
- 20-10 gauge "B" crimp (wing type) terminals

Features:
- Three quick change dies
- Release lever
- Ratcheting tool

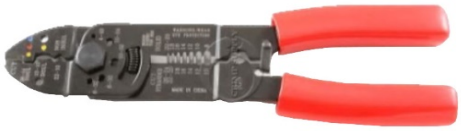


Part # RATCHET TRIO

Crimps:
- **22-10 gauge** non-insulated terminals
- 26-10 gauge insulated terminals

Strips:
- 26-8 gauge wire

Features:
- Economy multi-purpose tool



Part # MPT

Crimps:
- **8-2 gauge** non-insulated terminals
- 8-2 gauge insulated terminals

Features:
- 18.5" long
- Compound crimping



Part # 6220

Crimps:
- **16-6 gauge** non-insulated terminals

Features:
- 11" long spring loaded handles
- Release Lever
- Four die nests: 16-14 ga., 12-10 ga., 8 ga., 6 ga.



Part # RT-6

Crimps:
- **8 gauge-250MCM** non-insulated terminals
- 8-4/0 gauge non-insulated flag terminals
- 8 gauge-250MCM copper lugs

Features:
- 22" long handles
- Dieless indent
- Wire calibration screw
- Single indent



Part # MT-25

Crimps:
- **8-1/0 gauge** non-insulated terminals
- 8-1/0 gauge battery terminals
- 8-1/0 gauge copper lugs

Features:
- 18" long handles
- Compound action



Part # ET10-1JR

Crimps:
- **8-2 gauge** non-insulated terminals

Features:
- Release lever
- Ergonomic extended handles
- Four rotating dies
- Ratcheting tool



Part # 4290

Crimps:
- **8-2 gauge** non-insulated terminals

Features:
- 13.75" long high leverage TPR handle
- Four die nests: 8 ga., 6 ga., 4 ga., 2 ga.
- Ratcheting tool



Part # NON INS 8-2

Crimps:
- **20-8 gauge** non-insulated terminals

Features:
- Release Lever
- Pressure adjustment wheel
- Ratcheting tool



Part # 501 RATCHET

Crimps:
- **8-2 gauge** non-insulated terminals
- 8-2 gauge non-insulated flag terminals
- 8-2 gauge copper lugs

Features:
- 24.75" long
- Four rotating dies



Part # CT-38

(Continued on following page)

Crimping Tools for Non-Insulated, Heat Shrink & Insulated Flag Terminals

Crimping Tools for Non-Insulated Terminals (Continued from previous page)



Part # ET8-6/0

Crimps:
- **6 gauge - 250MCM** non-insulated terminals
- 6 gauge - 250MCM battery terminals
- 6 gauge - 250MCM copper lugs

Features:
- 25" long handles
- Rotating dies
- Compound action



Part # ET8-6/0-R
Ratcheting Tool

Crimps:
- **6 gauge - 250MCM** non-insulated terminals
- 6 gauge - 250MCM battery terminals
- 6 gauge - 250MCM copper lugs

Features:
- 25" long handles
- Rotating dies



Part # ETH8-4/0

Crimps:
- **6-4/0 gauge** non-insulated terminals
- 6-4/0 gauge battery terminals
- 6-4/0 gauge copper lugs

Features:
- Three quick change dies
- Hammer indent tool
- Economy crimper



Part # ET8-6/0 BENCH

Crimps:
- **6 gauge - 250MCM** non-insulated terminals

Features:
- Simple setting changes
- Compound crimping
- Bench mount

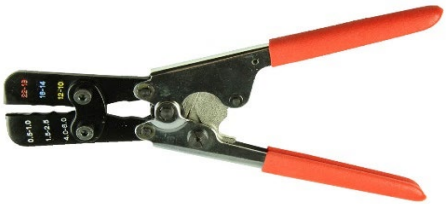
Crimping Tools for Heat Shrink Terminals



Part # 500RATCHET UL-S

Crimps:
- **26-14 gauge** heat shrink and insulated terminals

Features:
- UL listed with 26-14 gauge heavy-duty heat shrink terminals
- Release lever
- Ratcheting tool



Part # 500 RATCHET UL

Crimps:
- **22-10 gauge** heat shrink and insulated terminals

Features:
- UL listed with 22-10 gauge heavy-duty heat shrink terminals
- Release lever
- Ratcheting tool



Part # SHRINK 22-8

Crimps:
- **22-8 gauge** heat shrink terminals
- 22-8 gauge insulated terminals

Features:
- Wider crimp surface for perfect heat shrink terminal crimps



Part # 500RATCHET UL-L

Crimps:
- **16-8 gauge** heat shrink and insulated terminals

Features:
- UL listed with 16-8 gauge heavy duty heat shrink terminals
- Release lever
- Ratcheting tool

Crimping Tools for Insulated Quick Connect Flag Terminals



Part # FLAG-INS 2214

Crimps:
- **22-14 gauge** insulated quick connect flag terminals

Features:
- Pressure adjustment wheel
- Release lever
- Ratcheting tool



Part # FLAG-INS 1410

Crimps:
- **16-10 gauge** insulated quick connect flag terminals

Features:
- Pressure adjustment wheel
- Release lever
- Ratcheting tool

Crimping Tools for Non-Insulated Flag Terminals & "B" Crimp Wing Terminals

Crimping Tools for Non-Insulated Flag Terminals

Crimps:
- **22-10 gauge** non-insulated flag terminals
- 26-14 gauge insulated terminals
- 26-6 gauge non-insulated terminals
- 26-10 gauge closed end connectors

Strips:
- 20-8 gauge wire

Features:
- Heavy-duty multi-purpose 3M tool



Part # TH-450

Crimps:
- **8-4/0 gauge** non-insulated flag terminals
- 8 gauge-250MCM non-insulated terminals
- 8 gauge-250MCM copper lugs

Features:
- 22" long handles
- Dieless indent
- Wire calibration screw



Part # MT-25

Crimps:
- **22-14 gauge** non-insulated female quick connect flag terminals

Features:
- Pressure adjustment wheel
- Release lever
- Ratcheting tool



Part # FLAG-NON 2214

Crimps:
- **8-2 gauge** non-insulated flag terminals
- 8-2 gauge non-insulated terminals
- 8-2 gauge copper lugs

Features:
- 24.75" long
- Four rotating dies



Part # CT-38

Crimping Tools for "B" Crimp-Wing Terminals

Crimps:
- **30-18 gauge** open barrel used in D-SubS, Molex, and AMP Mate-N-Lok connectors

Features:
- Release lever
- Ratcheting tool



Part # OB RATCHET30-18

Crimps:
- **22-10 gauge** "B" crimp (wing type) terminals

Features:
- Crimping wings are folded over to capture wire
- Open barrel type
- Release lever
- Ratcheting tool



Part # 480 RATCHET

Crimps:
- **24-14 gauge** "B" crimp (wing type) terminals

Features:
- 5 different open barrel wing crimps
- Compound Action
- Crimping Tool
- Economy



Part # T-11

Crimps:
- **20-10 gauge** "B" crimp (wing type) terminals
- 26-8 gauge non-insulated terminals
- 20-10 gauge insulated terminals

Features:
- Three quick change dies
- Release lever
- Ratcheting tool



Part # RATCHET TRIO

Crimps:
- **6-2 gauge** "B" crimp and open barrel terminals

Features:
- No dies to move
- 19" handles
- Compound crimping



Part # OB 6-2

Crimping Tools for Compression Lugs, Copper Lugs & Battery Terminals

Heavy Duty Crimping Tools for Compression Lugs, Copper Lugs, and Battery Terminals



Part # MT-25

Crimps:
- **8 gauge-250MCM** copper lugs
- 8 gauge-250MCM non-insulated terminals
- 8-4/0 gauge non-insulated flag flag terminals

Features:
- 22" long handles
- Dieless indent
- Wire calibration screw
- Single indent



Part # ET8-6/0

Crimps:
- **6 gauge - 250MCM** battery terminals
- 6 gauge - 250MCM copper lugs
- 6 gauge - 250MCM non-insulated terminals

Features:
- 25" long handles
- Rotating dies
- Compound crimping tool



Part # ET10-1JR

Crimps:
- **8-1/0 gauge** battery terminals
- 8-1/0 gauge copper lugs
- 8-1/0 gauge non-insulated terminals

Features:
- 18" long handles
- Compound crimping tool



Part # ET8-6/0-R

Crimps:
- **6 gauge - 250MCM** battery terminals
- 6 gauge - 250MCM copper lugs
- 6 gauge - 250MCM non-insulated terminals

Features:
- 25" long handles
- Rotating dies
- Ratcheting tool



Part # 6220

Crimps:
- **8-2 gauge** insulated terminals
- 8-2 gauge non-insulated terminals

Features:
- 18.5" long
- Compound crimping tool



Part # ET8-6/0 BENCH

Crimps:
- **6 gauge-250MCM** non-insulated terminals

Features:
- Simple setting changes
- Compound crimping tool



Part # CT-38

Crimps:
- **8-2 gauge** copper lugs
- 8-2 gauge non-non-insulated terminals
- 8-2 gauge non-insulated flag terminals

Features:
- 24.75" long
- Four rotating dies



Part # ETH8-4/0

Crimps:
- **6-4/0 gauge** battery terminals
- 6-4/0 gauge copper lugs
- 6-4/0 gauge non-non-insulated terminals

Features:
- Three quick change dies
- Economy hammer indent tool

Klein Heavy Duty Crimping Tool and Kit for Copper, Aluminum and ACSR Cables





Crimps:
- **8 gauge to 750MCM** copper and aluminum, and **556MCM** ACSR with 12 tons of force

Features:
- 360-degree rotating head for ease of positioning
- Green light to confirm full pressure for a good crimp
- Lighted crimping area for dark spaces
- Compatible with industry standard U-style dies
- Safety lockout switch

Part # KL-1016 Includes: tool and case (rechargeable battery not included)

Part # KL-1017 Includes: tool, case, two rechargeable batteries and charger

Deutsch Tools

There are two styles of Deutsch pins, solid and stamped & formed. Both types need to be crimped, solder is not recommended. Several hand and production tools are available to crimp terminals, insert and remove wire, and position your terminals and wedgelocks.

Pick Removal Tool

Works with	Description	Part Number
Deutsch DT, DTM, and DTP Series	The tool has a double ended removal tool. One end has a sturdy 90° hook for non-slip wedgelock removal. The other end has a standard flat head screwdriver which can be used as a straight pick or driver.	DT-RT



Terminal Removal Tools

Removal tools remove the Deutsch contacts from their housings. The **plastic** removal tools are economical. The **metal** removal tools are more durable.

(A)  (B)  (C)  (D)  (E)  (F) 

(G)  (H)  (I)  (J)  (K) 

(L) 

Wire Size (AWG)	Deutsch Size	Works with	Plastic Color		Plastic Part Number	Metal Color		Metal Part Number
24-20	20	DTM, DRC20, HDP, and HD30 Series	Red	**(A)**	0411-240-2005	Red	**(G)**	0411-240-2005HD
18-16	16	DT, DRC, HD, HDP, and HD10 Series	Lt. Blue	**(B)**	0411-310-1605	Lt. Blue	**(H)**	0411-310-1605HD
16-14	14	DRC, HD, HDP, and HD10 Series	Green	**(C)**	0411-291-1405	-------		-------
12	12	DTP, DTCE, DTHD, HD10, HD30 Series	Yellow	**(D)**	114010	Yellow	**(I)**	114010HD
10-8	8	DTHD, DTCE, HD, and HDP Series	Green	**(E)**	114008	Gray	**(J)**	114008HD
6	4	DTHD, DTCE, HD, and HDP Series	White	**(F)**	114009	Green	**(K)**	114009HD
Metal Removal Tool Set / Contains all three metal tools: 0411-310-1605HD, 0411-240-2005HD, 114010HD.							**(L)**	REMOVAL KIT

Crimp Tools for Solid Terminals, Deutsch Series DT, DTM, DTP, HD30, HDP20, HD10, DRC, DRB, DTHD, DTV, AEC











Deutsch Size	Wire Size (AWG)	Production 4 Indents Ratcheting/OEM	Production 4 Indents Non-Ratcheting	Field Service 2 Indents Ratcheting/OEM	Economy 4 Indents Ratcheting	Economy 2 Indents Non-Ratcheting
20	20	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
20	18-16	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	20	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
16	14	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
12	12	HDT-48-00	-------	HDT-1561	DT-TOOL-E	-------
8	10-8	-------	HDT-04-08*	-------	-------	HDT-04-08-E**
4	6	-------	HDT-04-08*	-------	-------	HDT-04-08-E**

* HDT-04-08 tool comes with 1 set of #0434-205-0800 and 1 set of #0434-205-0400 dies

** HDT-04-08-E tool comes with 1 set of #18874 and 1 set of #18873 dies

OEM Crimp Tools for Stamped and Formed Terminals, Deutsch Series DT, DTM, DTP, HD30, HDP20, HD10, DRC, DRB, DTHD, DTV, AEC







Deutsch Size	Wire Size (AWG)	Production	Field Service	Production
20	22-18	DTT-20-02	-------	-------
20	20-16	DTT-20-00	-------	-------
16	18	DTT-16-01	-------	-------
16	16-14	DTT-16-00	-------	-------
12	14-12	-------	DTT-12-00	-------
12	10	-------	-------	DTT-12-01

Packard Weather Pack & Metri-Pack Tools



#15359996



#12085270

Weather Pack, Metri-Pack, Micro-Pack, Pack-Con, and 56-58 Series terminals often require different crimping tools. The terminal series, wire size and part number make it easier to find the right tool. The **ratchet** style design allows you to make easier crimps with less effort.

Use a **quick single motion** tool that crimps both the terminal and seal in one motion, rather than two, for higher volumes.

The **standard two crimp** tools crimp in two separate motions. One motion to crimp the terminal and one motion to crimp the seal.

Crimping Tools



Part # 12014254

Crimps **Weather Pack**:
- 20-14 gauge

Crimps **Metri-Pack**:
- 280 series, sealed, 20-14 gauge (must remove terminal locator on tool)

Features:
- OEM ratcheting tool



Park # PACK TOOL

Crimps **Weather Pack**:
- 22-14 gauge

Crimps **Metri-Pack**:
- 150 series, sealed, 22-14 gauge
- 280 series, sealed, 22-14 gauge

Features:
- Economy tool



Part # 15155975

Crimps **Weather Pack**:
- 12 gauge

Crimps **Metri-Pack**:
- 280 series, sealed, 12-10 gauge

Also Crimps:
- Open barrel rings, 12-10 gauge

Features:
- Ratcheting tool



Part # 6285847

Crimps **Metri-Pack**:
- 480 series, unsealed, 16-14 gauge
- 480 pull to seat series, unsealed, 16-14 gauge
- 630 series, unsealed, 16-14 gauge
- 630 pull to seat series, unsealed, 16-14 gauge

Crimps **Pack-Con**:
- Series I & II, unsealed, female, 20-14 gauge
- Series II, unsealed, female, 12-10 gauge

Crimps **Packard**:
- 56, 58, and 59 series, 20-14 gauge
- 56, 58, and 59 series, 12-10 gauge (core wings only)
- 56 Series, 20-10 gauge, splice clips
- Open barrel rings, unsealed, 20-14 gauge, up to 0.032" thick
- wedge base lamp sockets, 20-14 gauge

Features:
- OEM non-ratcheting tool



Part # 12085270

Crimps **Weather Pack**:
- 12 gauge

Crimps **Metri-Pack**:
- 280 series, sealed, 12 gauge
- 480 series, sealed, 18-14 gauge
- 480 series, unsealed, 16-14 gauge
- 480 pull to seat series, unsealed, 18-14 gauge
- 150, 480, and 630 series (crimps seals only)
- 630 series, sealed, 18-14 gauge

Features:
- OEM ratcheting tool



Part # 12085115

Crimps **Metri-Pack**:
- 280, 480, and 630 series, unsealed, 16-12 gauge

Crimps **Packard**:
- 56, 58, and 59 series, 12-10 gauge
- Open barrel rings, 14-10 gauge,

Crimps **Heat Shrink**:
22-10 gauge heat shrink terminals

Features:
- Standard two crimp
- OEM ratcheting tool



Part # 8913440

Crimps **Pack-Con:**
- Series I & II, unsealed, female, 20-14 gauge

Crimps **Packard:**
- 56, 58, and 59 series, 20-14 gauge
- Open barrel rings, unsealed, 20-14 gauge, up to 0.032" thick
- wedge base lamp sockets, 20-14 gauge

Features:
- OEM ratcheting tool

(Continued on following page)

Crimping Tools (Continued from previous page)

Crimps **Metri-Pack**:
- 150 series, sealed, 20-14 gauge
- 280 series, sealed 20-14 gauge

Features:
- OEM ratcheting tool



Part # 12155975

Crimps **Metri-Pack**:
- 800 series, sealed 8 gauge (female only)

Features:
- Quick single motion OEM ratcheting tool



Part # 15370042

Crimps **Metri-Pack**:
- 280 series, unsealed, 20-14 gauge
- 280 ACT pull to seat series, unsealed, 20-14 gauge
- 480 series, unsealed, 20-18 gauge
- 480 and 630 pull to seat series, unsealed 20-18 gauge
- 630 series, unsealed, 20-18 gauge

Crimps **Pack-Con**:
- Series II, unsealed, female, 20-14 gauge

Features:
- OEM ratcheting tool



Part # 12085271

Crimps **Metri-Pack**:
- 280 and 480 series, unsealed, 12-10 gauge
- 280 ACT series, unsealed, 12-10 gauge
- 480 pull to seat series, 12-10 gauge
- 630 series, unsealed, 12-10 gauge
- 630 pull to seat series, 22-10 gauge
- 800 series, unsealed, female, 14-10 gauge

Crimps **Pack-Con**
- Series I & III, unsealed, 12-10 gauge

Features:
- Quick single motion OEM ratcheting tool



Part # 12070947

Crimps **Metri-Pack**:
- 150 series, unsealed, 22-16 gauge
- 150, 150-1, and 150-2 pull to seat series, 22-16 gauge

Features:
- Quick single motion OEM ratcheting tool



Part # 12039500

Crimps **Metri-Pack**:
- GT 150 series, sealed 22-16 gauge
- GT 280 series, 22-16 gauge (must remove locator on tool)

Features:
- Quick single motion OEM ratcheting tool



Part # 15359995

Crimps **Metri-Pack**:
- 480 series, sealed, 12-10 gauge
- 630 series, sealed, 12-10 gauge

Features:
- Standard two crimp OEM non-ratcheting tool



Part # 12071687

Crimps **Micro-Pack**
- 100 series, unsealed, 22-14 gauge (female only)

Features:
- Quick single motion OEM ratcheting tool



Part # 12070948

Crimps **Metri-Pack**:
- GT 150 series, sealed 22-16 gauge

Features:
- Quick single motion OEM ratcheting tool



Part # 15359996

Crimps **Micro-Pack**
- 100 W series, 22-18 gauge, 3.5 mm center line

Features:
- Quick single motion OEM ratcheting tool



Part # 12125080

Packard Terminal Release Tools, Rennsteig Tools & Wire Ferrule Tools

Terminal Release Tools



Part # T-3

Releases **Weather Pack**:
- 24-12 gauge



Part # T-3HD

Releases **Weather Pack**:
- 24-12 gauge

Features:
- Heavy-duty tool

Terminal Release Pick Tools



Part # 12094429

Releases **Metri-Pack**:
- 150, 280, and 630 series, 22-10 gauge
- 150 GT and 280 GT series, 22-10 gauge

Features:
- 0.035" tip width



Part # 12094429HD

Releases **Metri-Pack**:
- 150, 280, and 630 series, 22-10 gauge
- 150 GT and 280 GT series, 22-10 gauge

Features:
- Heavy-duty tool



Part # 12094430

Releases **Metri-Pack**:
- 480, 630, and 800, series, 20-10 gauge

Releases **Weather Pack**:
- 56, 58, and 59 series, 20-10 gauge

Features:
- 0.090" tip width



Part # 12094430HD

Releases **Metri-Pack**:
- 480, 630, and 800, series, 20-10 gauge

Releases **Packard**:
- 56, 58, and 59 series, 20-10 gauge

Features:
- Heavy-duty tool

Rennsteig Crimping Kits & Dies for Metri-Pack and Weather Pack Terminals





This German-made tool offers the most precise crimp available for production and high volume.

Kits include a die and a crimping handle. Additional dies can be purchased to fit this handle.

Dies fit any handle from the 624 series kits.

GM/Delphi recommended crimpers and dies.

Wire Size (AWG)	Series		Rennsteig Number	Die	Kit
22-12	Metri-Pack 280	Unsealed	624 1504	504-DIE	504-KIT
22-16	Metri-Pack 150	Sealed	624 1495	495-DIE	495-KIT
22-16	Metri-Pack 150.2	Unsealed	624 1490	490-DIE	490-KIT
22-16	Metri-Pack GT150	Sealed	624 1489	489-DIE	489-KIT
22-16	Metri-Pack 280	Sealed	624 1501	501-DIE	501-KIT
22-16	Metri-Pack GT280	Sealed	624 1486	486-DIE	486-KIT
22-18	Micro-Pack	-------	624 1545	545-DIE	545-KIT
22-18	Metri-Pack GT150	Sealed	624 1488	488-DIE	488-KIT
20-16	Metri-Pack 150	Sealed	624 1527	527-DIE	527-KIT

Wire Size (AWG)	Series		Rennsteig Number	Die	Kit
20-16	Metri-Pack 150	Unsealed	624 1530	530-DIE	530-KIT
20-16	Metri-Pack 280	Sealed	624 1513	513-DIE	513-KIT
20-16	Metri-Pack 280	Unsealed	624 1506	506-DIE	506-KIT
20-18	Weather Pack	-------	624 1528	528-DIE	528-KIT
20-18	Metri-Pack 630	Unsealed	624 1511	511-DIE	511-KIT
16-12	Weather Pack	-------	624 1476	476-DIE	476-KIT
16-12	Metri-Pack 630	Unsealed	624 1510	510-DIE	510-KIT
14-10	Metri-Pack 280	Sealed	624 1498	498-DIE	498-KIT
12-10	Metri-Pack 280	Sealed	624 1492	492-DIE	492-KIT

Wire Ferrule Crimping Tools



Part # FER TOOL 22-12

Crimps:
- **22-10 gauge** insulated and non-insulated

Features:
- Quick-release
- Five crimp zones
- Economy ratcheting tool



Part # FER TOOL 10-6E

Crimps:
- **10-6 gauge** insulated and non-insulated

Features:
- Quick-release
- Pressure adjustment wheel
- Three crimp zones
- Economy ratcheting tool



Part # FER TOOL 10-6

Crimps:
- **10-6 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp
- US or DIN type wire ferrules, conforms to DIN 46228 Pt #1 and #4 or EN-60947-1, three crimp zones are registered in accordance with VG 95211 (military designation VG 95236 T 14 A0001)

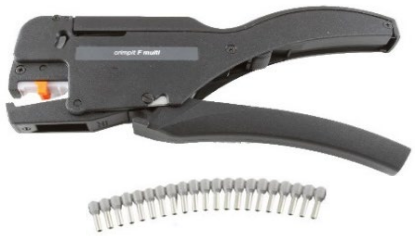
Features:
- German precision engineered tool
- Ratcheting tool

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Wire Ferrule Crimping Tools (Continued from previous page)

Crimps:
- **22-14 gauge** strip ferrules

Features:
- Semi automatic tool cuts, strips and crimps with each squeeze of the handle.
- Speeds application by 200-300% over standing crimping tools
- Load strip ferrules into this tool for high volume applications



Customer's Choice

Part # FER TOOL STRAP

Crimps:
- **28-6 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp
- seven crimp zones

Features:
- German precision engineered tool
- Ratcheting tool



Part # FER TOOL 28-6

Crimps:
- **22-12 gauge** insulated and non-insulated
- DIN 46228 Pt #1 and #4

Features:
- One crimp zone crimps all sizes
- German precision engineered tool
- Non-ratcheting tool



Part # FER TOOL20-12-E

Crimps:
- **1-3/0 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp

Features:
- Quick-release
- Extra long handle for greater leverage
- Ratcheting tool



Part # FER TOOL 1-3/0

Crimps:
- **6-2 gauge** insulated and non-insulated wire ferrules

Features:
- Quick-release
- Three crimp zones
- Pressure adjustment wheel
- Ratcheting tool



Part # FER TOOL 6-2

Crimps:
- **24-10 gauge** insulated and non-insulated, with a rotating crimp die
- DIN 46228 Pt #1 and #4 or EN-60947-1 type wire ferrules

Features:
- Rotary action head turns 90° to allow crimp to be made from front or side
- German precision engineered tool



Customer's Choice

Part # FER TOOL ROTO

Crimps:
- **28-6 gauge** insulated and non-insulated wire ferrules

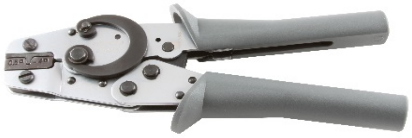
Features:
- Side loading tool automatically adjusts to wire ferrule sizes
- Precision crimp over full length of the sleeve
- German patented crimp technology produces a high quality six sided crimp
- Ratcheting tool



Part # FERATCHET 28-6

Crimps:
- **20-12 gauge** insulated and non-insulated wire ferrules
- US or DIN type wire ferrules

Features:
- German precision engineered tool
- Ratcheting tool



Part # PA-1648

Crimps:
- **8-1 gauge** insulated and non-insulated wire ferrules, with a trapezoid crimp

Features:
- Quick-release
- Extra long handle
- Five crimp zones
- Ratcheting tool



Part # FER TOOL 8-1

Crimps:
- **4/0 gauge -250MCM** insulated and non-insulated wire ferrules with a trapezoid crimp

Features:
- Heavy-duty ratchet tool



Part # FER-TOOL 250MCM

Stripping Tools

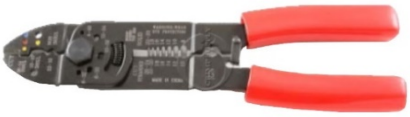
Stripping Tools



Part # STRIPIT 6

Strips:
- **28-10 gauge** wire

Features:
- Settable strip depth up to 5/16"
- Adjustable switch on the tool for insulation thickness
- Fiberglass
- Hand pressure tool



Part # MPT

Strips:
- **26-8 gauge** wire

Crimps:
- 26-10 gauge insulated terminals
- 22-10 gauge non-insulated terminals

Features:
- Economy multi-purpose tool



Part # 45-227

Strips:
- **20-12 gaug**e wire

Features:
- Pistol Handle
- Self adjusting blades
- Strip length gauge
- Fiberglass
- Hand pressure tool



Part # 45-120

Strips:
- **20-12 gauge** wire
- 18-10 gauge solid wire

Features:
- Spring loaded
- Plier nose ends for extra griping strength
- Hand pressure tool



Part # TH-450

Strips:
- **20-8 gauge** wire

Crimps:
- 26-6 gauge non-insulated terminals
- 26-6 gauge insulated terminals
- 22-10 gauge non-insulated flag terminals
- 26-10 gauge closed end connector

Features:
- Heavy-duty multi-purpose 3M tool



Part # 45-128

Strips:
- **0.25"-0.75"**
- For center of power cable up to 5/32" thick

Features:
- Extra blade stored in the handle



Part # 45-129

Strips:
- **0.75"-1.5"**
- For end or center of power cable up to 5/32" thick

Features:
- Extra swivel blade stored in the handle



Part # 45-100

Strips:
- **24-10 gauge** wire

Features:
- Hand pressure tool



Part # 45-101

Strips:
- **24-10 gauge** wire

Features:
- Spring release
- Hand pressure tool



Part # 45-092

Strips:
- **22-10 gauge** wire

Features:
- Eliminates nicking, cutting, and fraying of wire
- Spring action with wire gripper
- Replacement blades #L-4421
- Hand pressure tool

Cable Cutting Tools

Cuts:
- **Up to 4/0** cable

Features:
- Offset bite which eliminates frayed ends and compression
- Heavy duty tool
- Hand pressure tool



Part # WCC-HD

Cuts:
- **10 gauge to 350MCM** cable

Features:
- Clean scissor action cuts
- 18" long handle
- Hand pressure tool



Part # CABLE CUTTER

Cuts:
- **Up to 2/0** cable

Features:
- Lightweight
- Compact
- Hand pressure tool



Part # WCC

Glass Fuse and Ferrule Fuse Testers

Features:
- Test glass fuses and ferrule fuses, up to 24 volt, up to 1 7/8" length
- Green light shines when fuse is good
- Not for use with fuses in fuse panel



Part # FT-2

Features:
- Test automotive, glass tube and ferrule fuses, up to 1 1/4" length
- Adjustable probe for appropriate fuse length
- Replaceable battery
- Not for use with fuses in fuse panel



Part # FT-3

Fuse Pullers

Removes:
- **13/32" to 13/16"** diameter fuses



Part # FP-2

Removes:
- **9/32" to 1/2"** diameter fuses

Features:
- 5" long, with a fully insulated no-slip handle
- 250 volts, amperage ranges are marked on the handle



Part # FUSEPULL-S

Removes:
- **1" to 1 3/4"** diameter fuses



Part # FP-3

Removes:
- **1/2" to 1"** diameter fuses

Features:
- 7 1/2" long, with a fully insulated no-slip handle
- 0 to 100 amps at 250 volts and 600 volts, amperage ranges are marked on the handle



Part # FUSEPULL-M

Removes:
- **1 3/4" to 2 1/2"** diameter fuses



Part # FP-4

Removes:
- **0-60A T-Tron** fuses



Part # FP-6

Removes:
- **2 1/2"** diameter fuses

Features:
- 7 1/2" long, with a fully insulated no-slip handle
- 31 to 600 amps at 250 volts and 31 to 400 amps at 600 volts, amperage ranges are marked on the handle



Part # FUSEPULL-L

Removes:
- This 3-way fuse puller removes **glass tube** and ATC blade fuses



Part # BK2/FP-A3

Torches, Heat Gun & Miscellaneous Tools

Torches, Heat Gun and Refills

Torches



Features:
- Powerful high-output torch
- Piezzo ignition

Part # MEGA BLASTER



Features:
- Lightweight torch
- Adjustable flame
- Piezzo ignition
- 2500° F
- 5.3" tall polymer body with stand

Part # HG-3000



Features:
- Long-use torch
- 120 minutes of fuel
- Adjustable flame
- Piezzo ignition
- 2500° F
- 5.5" tall brass body with rubber grip

Part # HG-2001



Part # PT-4000

Features:
- Compact pencil torch
- 6" long cigar torch
- Flip out stand
- Piezzo button ignition
- 2500° F
- Burn time 30 minutes

Heat Gun



Features:
- 120 vac, 1200 watt
- Heat deflector
- High/Low/Off
- High=1,100°F and Low=250°F
- UL approved
- CSA certified

Part # HEAT GUN

Butane Refills



Features:
- **5.3 oz.**
- multiple tips included

Part # RF-CAN



Features:
- **1 oz.**
- multiple tips included

Part # RF-CAN-SM

Miscellaneous Tools

Circuit Testing Tools



Features:
- Test **12 and 24 volt** vehicle systems
- Hand operated
- Hook on end of tool tip holds while piercing wire insulation

Part # 121



Features:
- Test **6 and 12 volt** vehicle systems
- "Ice pick" type
- Flexible Hypalon ground wire
- Hand Operated
- Spring strain relief on wire to handle
- Replaceable bulb

Part # 27000

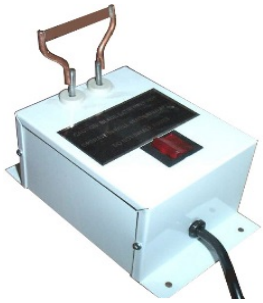
Rosin Core Wire Solder 63/37



Diameter	Part Number
0.032	RC-.032
0.062	RC-.062
0.093	RC-.093

One pound spools.

Hot Knife Tool



Features:
- 600° blade cuts most any style sleeve
- Hot blade fuses sleeving fibers
- Preventing fraying on expandable sleeving
- Bench mount
- Replaceable blades #BLADES

Part # HOT KNIFE

Razor Blades



Features:
- Single edge razor blades
- 1 1/4" x 4 7/8"

Part # RZB

Wire

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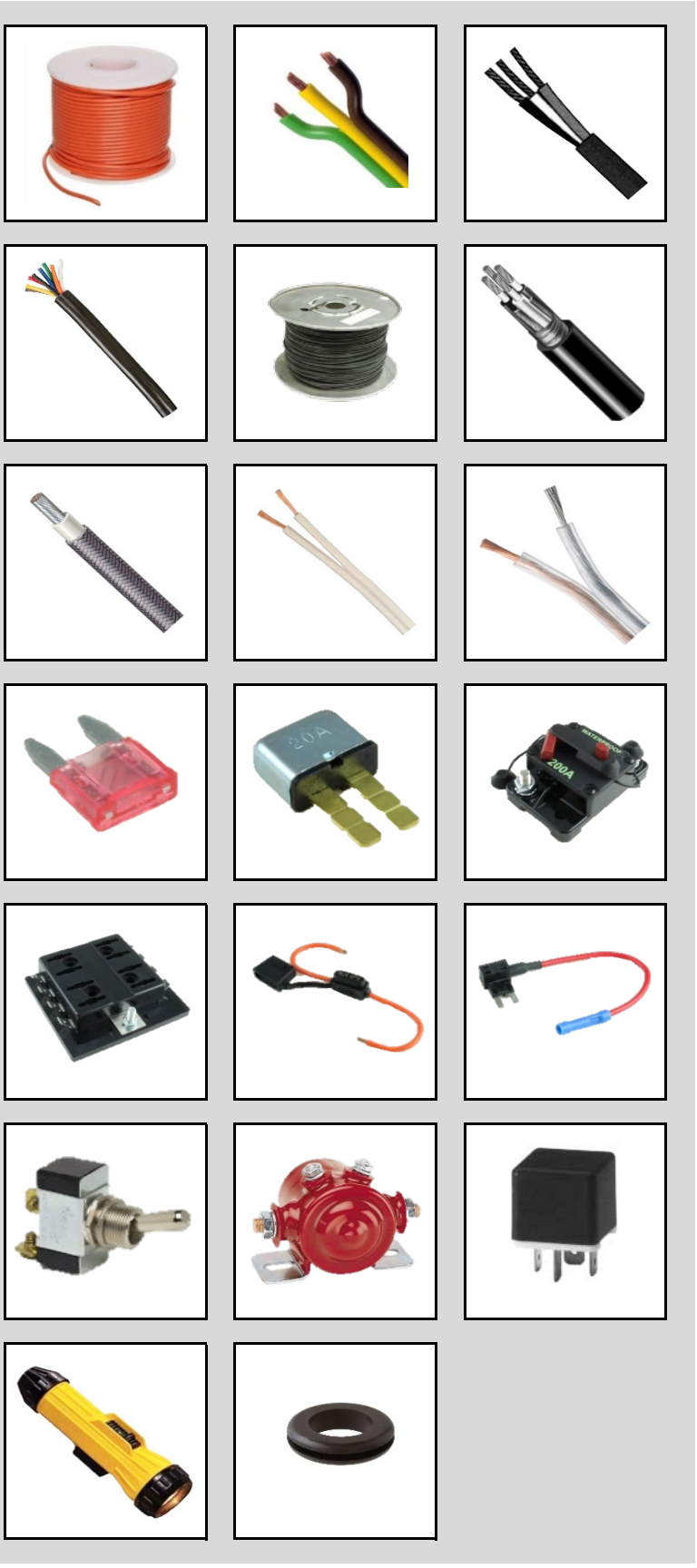
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GPT Automotive, GXL Abrasion Resistant Automotive, Bonded, & Mechanic's Wire

GPT Automotive Wire



Commonly used in automotive, truck, trailer, boat, and other low voltage applications. Smooth PVC jacket is resistant to abrasion. Made in the USA. 60 volts max. Maximum temperature rating of 176°F. Order in 50-ft., 100-ft., 500-ft. and 1,000-ft. spool sizes.

Color	
22 Ga.	
Black	22GPT-BK
Brown	22GPT-BN
Dark Blue	22GPT-DKB
Light Blue	22GPT-LTB
Gray	22GPT-GY
Green	22GPT-GRN
Orange	22GPT-O
Purple	22GPT-PU
Red	22GPT-R
White	22GPT-W
Yellow	22GPT-Y
20 Ga.	
Black	20GPT-BK
Brown	20GPT-BN
Light Blue	20GPT-LTB
Light Green	20GPT-LTG
Red	20GPT-R
White	20GPT-W
Yellow	20GPT-Y

Color	
18 Ga.	
Black	18GPT-BK
Brown	18GPT-BN
Dark Blue	18GPT-DKB
Light Blue	18GPT-LTB
Gray	18GPT-GY
Dark Green	18GPT-DKG
Light Green	18GPT-LTG
Orange	18GPT-O
Pink	18GPT-PK
Purple	18GPT-PU
Red	18GPT-R
Tan	18GPT-TAN
White	18GPT-W
Yellow	18GPT-Y
16 Ga.	
Black	16GPT-BK
Brown	16GPT-BN
Dark Blue	16GPT-DKB
Light Blue	16GPT-LTB

Color	
16 Ga. (cont.)	
Gray	16GPT-GY
Dark Green	16GPT-DKG
Light Green	16GPT-LTG
Orange	16GPT-O
Pink	16GPT-PK
Purple	16GPT-PU
Red	16GPT-R
Tan	16GPT-TAN
White	16GPT-W
Yellow	16GPT-Y
14 Ga.	
Black	14GPT-BK
Brown	14GPT-BN
Dark Blue	14GPT-DKB
Light Blue	14GPT-LTB
Gray	14GPT-GY
Dark Green	14GPT-DKG
Light Green	14GPT-LTG
Orange	14GPT-O

Color	
14 Ga. (cont.)	
Pink	14GPT-PK
Purple	14GPT-PU
Red	14GPT-R
Tan	14GPT-TAN
White	14GPT-W
Yellow	14GPT-Y
12 Ga.	
Black	12GPT-BK
Brown	12GPT-BN
Dark Blue	12GPT-DKB
Light Blue	12GPT-LTB
Gray	12GPT-GY
Dark Green	12GPT-DKG
Light Green	12GPT-LTG
Orange	12GPT-O
Red	12GPT-R
White	12GPT-W
Yellow	12GPT-Y

Color	
10 Ga.	
Black	10GPT-BK
Brown	10GPT-BN
Dark Blue	10GPT-DKB
Light Blue	10GPT-LTB
Dark Green	10GPT-DKG
Light Green	10GPT-LTG
Red	10GPT-R
White	10GPT-W
Yellow	10GPT-Y
8 Ga.	
Black	8GPT-BK
Light Green	8GPT-LTG
Red	8GPT-R
White	8GPT-W

GXL Abrasion Resistant Automotive Wire



It's so tough that it's commonly found in automotive applications and engine compartments where vibration and heat can cause wire fatigue. A step up from GPT wire, the polyethylene coating of this wire holds up to oil, heat and flame. It stands up to scrapes and cuts that can occur in the field. Also know as high-temperature automotive wire. Maximum temperature rating of 257°F. Made in the USA. 60 volts max. Order in 25-ft., 50-ft., 100-ft., 500-ft., and 1,000-ft. spool sizes.

Color	
20 Ga.	
Black	20GXL-BK
Blue	20GXL-BLUE
Green	20GXL-GRN
Red	20GXL-R
White	20GXL-W
18 Ga.	
Black	18GXL-BK
Brown	18GXL-BN
Dark Blue	18GXL-DKB
Light Blue	18GXL-LTB
Gray	18GXL-GY
Dark Green	18GXL-DKG
Light Green	18GXL-LTG
Orange	18GXL-O

Color	
18 Ga. (cont.)	
Pink	18GXL-PK
Purple	18GXL-PU
Red	18GXL-R
Tan	18GXL-TAN
White	18GXL-W
Yellow	18GXL-Y
16 Ga.	
Black	16GXL-BK
Brown	16GXL-BN
Dark Blue	16GXL-DKB
Light Blue	16GXL-LTB
Dark Green	16GXL-DKG
Light Green	16GXL-LTG
Orange	16GXL-O

Color	
16 Ga. (cont.)	
Pink	16GXL-PK
Purple	16GXL-PU
Red	16GXL-R
White	16GXL-W
Yellow	16GXL-Y
14 Ga.	
Black	14GXL-BK
Brown	14GXL-BN
Dark Blue	14GXL-DKB
Light Blue	14GXL-LTB
Gray	14GXL-GY
Dark Green	14GXL-DKG
Light Green	14GXL-LTG
Orange	14GXL-O

Color	
14 Ga. (cont.)	
Pink	14GXL-PK
Purple	14GXL-PU
Red	14GXL-R
Tan	14GXL-TAN
White	14GXL-W
Yellow	14GXL-Y
12 Ga.	
Black	12GXL-BK
Brown	12GXL-BN
Dark Blue	12GXL-DKB
Light Blue	12GXL-LTB
Dark Green	12GXL-DKG
Orange	12GXL-O
Red	12GXL-R

Color	
12 Ga. (cont.)	
White	12GXL-W
Yellow	12GXL-Y
10 Ga.	
Black	10GXL-BK
Dark Green	10GXL-DKG
Red	10GXL-R
White	10GXL-W
8 Ga.	
Black	8GXL-BK
Red	8GXL-R
White	8GXL-W

Bonded GPT Wire



Need to run multiple wires? This wire makes it easy. The bonded GPT wires are color coded and have PVC insulation. -22°F to 176°F. Order in 50-ft., 100-ft., 500-ft., and 1,000-ft. spool sizes.

Wire Size (AWG)	2 Conductor Red/Black	2 Conductor Yellow/Brown	2 Conductor Green/Brown	3 Conductor Brown/Yellow/Green	4 Conductor White/Brown/Yellow/Green	5 Conductor White/Brown/Yellow/Green/Blue
18	18-2B	-------	-------	EP-02923	EP-02926	-------
16	16-2B	EP-02929	EP-02932	16-3B	16-4B	EP-02939
14	14-2B	-------	-------	14-3B	14-4B	EP-02935
12	12-2B	-------	-------	-------	-------	-------

Fastening Wire (Mechanic's Wire)



Annealed for extra flexibility. Made of steel. Sold on 5lb. spools.

Wire Size (AWG)	5lb. Spool Length	
18	830-ft.	MW-18
14	295-ft.	MW-14
12	100-ft.	MW-12

Duplex Wire, Trailer Cable, Corrosion Resistant Boat Cable, Betts Wire & Grommet Kit

Duplex GPT Wire

Run and protect multiple circuits in this easy to use wire. Duplex wire has excellent protection against cuts and corrosion. This heavy duty wire has GPT conductors covered in a flat PVC jacket. -22°F to 221°F, for 60 volts or less. Order in 50-ft., 100-ft., 500-ft., and 1,000-ft. spool sizes.



Wire Size (AWG)	2 Conductor Black/White	2 Conductor Black/Red	2 Conductor Black/Blue	3 Conductor Black/Green/White	4 Conductor White/Green/Red/Black
18	18-2D	-------	-------	-------	-------
16	16-2D	EP-03205	-------	16-3D	16-4D
14	14-2D	EP-03211	-------	14-3D	14-4D
12	12-2D	EP-03217	EP-03220	12-3D	EP-03246
10	10-2D	-------	-------	EP-03237	EP-03249
8	8-2D	-------	-------	-------	-------

Corrosion Resistant Boat Cable

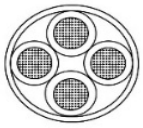
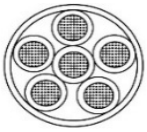
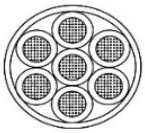
2-Conductor Black/White	2-Conductor Red/Black	2-Conductor Yellow/Red	3-Conductor Black/Green/White
EP-04510	EP-04065	EP-04534	EP-04522
14-2 BOAT CABLE	EP-04064	EP-04531	14-3 BOAT CABLE
12-2 BOAT CABLE	EP-04063	EP-04528	12-3 BOAT CABLE
--------	--------	--------	10-3 BOAT CABLE

This corrosion resistant wire is used in the most corrosive of environments and is Coast Guard approved. It is rated for use up to 600 volts and temperatures up to 221°F in dry conditions and 167°F in wet conditions. Has copper wire with a flat PVC jacket and is UL listed. Order in 50-ft., 100-ft., 500-ft., and 1,000-ft. spool sizes.



Trailer Cable

The trailer cable wires are color-coded with PVC Insulation and have a heavy duty black jacket to keep them protected from the weather, chemicals and abrasion. They have a temperature rating of -40°F to 176°F. Order in 100-ft., 500-ft. spool sizes.

A 
B 
C 

Wire Size	Color of Conductors	
2 Conductors		
14 Ga.(2)	Green/Yellow	EP-03674
(A) 4 Conductors		
16 Ga.(4)	Black/Red/Brown/White	EP-04901
16 Ga.(4)	Yellow/Red/Green/Brown	EP-04920
14 Ga.(4)	Black/Red/Brown/White	TC-4N
14 Ga.(4)	Yellow/Red/Green/Brown	EP-99104
14 Ga.(4)	White/Brown/Yellow/Green	EP-98224
12 Ga.(4)	Black/Red/Brown/White	EP-04911

Wire Size	Color of Conductors	
(B) 6 Conductors		
16 Ga.(6)	Red/Green/Brown/White/Black/Yellow	EP-04903
16 Ga.(6)	Green/Blue/Yellow/Black/Red/Brown	EP-04922
14 Ga.(6)	Red/Green/Brown/White/Black/Yellow	TC-6N
14 Ga.(6)	Red/Blue/Green/Yellow/Brown/Black	EP-04926
12 Ga.(6)	Red/Green/Brown/White/Black/Yellow	EP-14875
(C) 7 Conductors		
14 Ga.(7)	Red/Green/Brown/White/Black/Yellow/Blue	TC-7P
14 Ga.(6), 12 Ga.(1)	White/Black/Yellow/Red/Green/Brown/Blue	EP-98044
12 Ga.(6), 10 Ga.(1)	White/Black/Yellow/Red/Green/Brown/Blue	TC-7N

Betts Trailer Cable and Push-in Choke Seals

Trailer Cable

Temperature rating on all Betts cable is 221° F. Available in various lengths.

Wire Size	Color of Conductors	Length
2 Conductors, Jacket OD 0.295"		
14 Ga.(2)	Brown/White	BE-920403
14 Ga.(2)	Blue/White	BE-920584
3 Conductors, Jacket OD 0.375"		
14 Ga.(3)	Red/Brown/White	BE-920404
4 Conductors, Jacket OD 0.375"		
14 Ga.(3), 12 Ga.(1)	Red/Brown/Yellow-Green/White	BE-920373

Wire Size	Color of Conductors	Length
5 Conductors, Jacket OD 0.520"		
12 Ga.(4), 10 Ga.(1)	Red/Yellow/Brown/Green/White	BE-920374
6 Conductors, Jacket OD 0.590"		
12 Ga.(5), 10 Ga.(1)	Black/Brown/Green/Red/Yellow/White	BE-920375
7 Conductors, Jacket OD 0.690"		
12 Ga.(6), 10 Ga.(1)	Black/Brown/Green/Red/Yellow/Blue/White	BE-920376

Use one hole push-in style choke seal, Part #BE-920413 for 1,2,3,4 conductor cable.
Use four hole push-in style choke seal, Part #BE-920420 for 4 individual wires.

Grommet Kit

(A) Inner Diameter	**(B)** Maximum Panel Width	**(C)** Panel Hole Diameter	Qty.
1/8"	3/32"	3/8"	7
5/32"	1/16"	1/4"	13
3/16"	1/16"	5/16"	8
3/16"	3/32"	9/32"	12
3/16"	1/4"	5/16"	9
1/4"	1/16"	7/16"	7
5/16"	1/16"	7/16"	8
5/16"	1/8"	9/16"	4
5/16"	1/4"	9/16"	4

(A) Inner Diameter	**(B)** Maximum Panel Width	**(C)** Panel Hole Diameter	Qty.
3/8"	1/16"	1/2"	8
3/8"	1/16"	1"	2
3/8"	1/4"	5/8"	3
1/2"	3/32"	3/4"	3
1/2"	1/4"	13/16"	2
5/8"	1/8"	7/8"	3
5/8"	1/16"	7/8"	3
3/4"	1/16"	1 1/16"	2
3/4"	1/4"	1 1/4"	1





Rubber grommets protect your wires from abrasion and seal around the panel hole.

Part #GROMMET KIT

Welding Cable, Jumper Cable Ends, MTW, THHN, Lamp Cord & Speaker Wire

Welding Cable



This weather resistant cable is commonly used to wire truck and car batteries and for jumper cables. Excellent flexibility and able to carry a higher amperage load due to a larger number of strands. The thick EPDM jacket allows the cable to stand the test of time. Resists abrasion, cuts, flame, grease, oil, and solvents. Made in the USA. 600 volts max. Available in 10-ft., 25-ft., 50-ft., 100-ft., 500-ft., and 1,000-ft. Check website for larger spool quantities.

Wire Size (AWG)	Jacket OD	Stranding OD	Black	Red
8	0.28"	0.14"	SF8-B	SF8-R
6	0.31"	0.18"	SF6-B	SF6-R
4	0.34"	0.20"	SF4-B	SF4-R
2	0.42"	0.29"	SF2-B	SF2-R
1	0.49"	0.31"	SF1-B	SF1-R
1/0	0.53"	0.36"	SF1/0-B	SF1/0-R

Wire Size (AWG)	Jacket OD	Stranding OD	Black	Red
2/0	0.57"	0.40"	SF2/0-B	SF2/0-R
3/0	0.62"	0.45"	SF3/0-B	SF3/0-R
4/0	0.69"	0.52"	SF4/0-B	SF4/0-R
250	0.81"	0.60"	SF250-B	-----
350	0.93"	0.72"	SF350-B	-----

Bonded Welding Cable

Need to run two leads? This welding cable has two welding cables bonded together to make installation and wire management easier. Used on lifts, jumper cables, auxiliary power sources. Packaged in 1-ft., 10-ft., 25-ft., 50-ft., and 100 ft. lengths. 60 amps max.



Wire Size (AWG)	Color	
8	Black and Yellow	SF-88
6	Black and Orange	SF-66

Wire Size (AWG)	Color	
4	Black and White	SF-44
2	Black and Red	SF-22

Jumper Cable Ends





Color	500 Amps	900 Amps
Black	TR-510B-500	JCE900-B
Red	TR-510R-500	JCE900-R

The **500 amp jumper cable ends** have copper jaws and accept up to 1/0 gauge welding cable. They come in red and black.

The **900 amp jumper cable ends** are solid copper and accept up to 2/0 gauge welding cable. The lugs bolt to the booster clamp. The jaws grip the battery posts, studs and side terminals. They come with red or black insulated grips.

Crimping, Cutting and Stripping Tools

Crimping Tool



Crimps:
- **6 gauge - 250MCM** non-insulated and battery terminals, and copper lugs

Features:
- Rotating dies
- Compound action

Part # ET8-6/0
Part # ET8-6/0-R (Ratcheting)

Cable Cutting Tool



Cuts:
- **Up to 4/0** cable

Features:
- Offset bite which eliminates frayed ends and compression
- Heavy duty tool
- Hand pressure tool

Part # WCC-HD

Ideal® Stripping Tools



Strips:
- **0.25"-0.75"**
- For center of power cable up to 5/32" thick

Features:
- Extra blade stored in the handle

Part # 45-128



Strips:
- **0.25"-0.75"**
- For end or center of power cable up to 5/32" thick

Features:
- Extra blade stored in the handle

Part # 45-129

Machine Tool Wire (MTW)



Machine tool wire is bare stranded copper with PVC insulation. It is rated for use up to 600 volts and temperatures up to 194°F. UL & CSA listed. Colors available black, blue, brown, green, red, white, yellow, dark green, dark green, light blue, light green, orange, pink, and purple. Order in 100-ft., and 500-ft. spool sizes.

Wire Size (AWG)	Stranding	Insulation Thickness	
18	16	0.031"	18 MTW
16	19	0.031"	16 MTW
14	19	0.031"	14 MTW
12	19	0.031"	12 MTW
10	19	0.031"	10 MTW
8	19	0.047"	8 MTW

THHN/TFFN Wire



THHN is bare stranded copper with a nylon jacket over the PVC insulation. It is rated for use up to 600 volts, UL listed. Temperatures up to 194°F. Has an abrasion resistant slippery surface. Highly resistant to acids, chemicals, gasoline & flame. Colors available black, red, white, green, dark blue, brown, yellow, and orange. Order in 10-ft., 25-ft., 50-ft., 100-ft., and 500-ft. spool sizes.

Wire Size (AWG)	Stranding	Insulation Thickness	
18	16	0.004"	18 THHN
16	19	0.004"	16 THHN
14	19	0.004"	14 THHN
12	19	0.004"	12 THHN
10	19	0.004"	10 THHN
8	19	0.005"	8 THHN

Lamp Cord



Our lamp cord is ribbed for polarity. It is rated for use up to 300 volts. UL listed and CSA certified. Order in 25-ft., 50-ft., 100-ft., and 250-ft. spool sizes.

Wire Size (AWG)	Color	Conductor	
18	Black	2	18/2-LC-BK
18	White	2	18/2-LC-W

Speaker Wire



Speaker wire has a clear coating with a polarity stripe. Order in 100-ft., and 500-ft. spool sizes.

Wire Size (AWG)	
18	18-2SW

Service Cord, High Temperature Wire (SRML & MG), Test Lead Wire & Alligator Clips

Service Cord

SJO and **SO** CSA certified. All of our service cord is UL listed and can be purchased in 10-ft., 25-ft., 50-ft., 100-ft., and 500-ft. spool sizes.



Service Cord (SJO)

SJO is a hard service cord, with an oil resistant round jacket. It is rated for use up to 300 volts and temperatures up to 194°F.

Wire Size (AWG)	Conductors	Overall O.D.		Wire Size (AWG)	Conductors	Overall O.D.		Wire Size (AWG)	Conductors	Overall O.D.	
18	3	0.300"	18-3 SJO	16	4	0.350"	16-4 SJO	12	3	0.425"	12-3 SJO
16	3	0.325"	16-3 SJO	14	3	0.360"	14-3 SJO	12	4	0.465"	12-4 SJO
16	3	0.325"	16-3 SJO YELLOW	14	4	0.390"	14-4 SJO	10	3	0.565"	10-3 SJO

Heavy Duty Service Cord (SO)

SO is a extra hard service cord, with an oil resistant round jacket. It is rated for use up to 600 volts and temperatures up to 194°F.

Wire Size (AWG)	Conductors	Overall O.D.	
14	3	0.540"	14-3 SO
12	3	0.610"	12-3 SO
10	3	0.671"	10-3 SO

Ultra Flexible Service Cord (STO)

Very flexible, STO is a hard service cord, with a yellow oil resistant round jacket. Used as portable cord and dock/marine extensions. It is rated for use up to 600 volts and temperatures up to 194°F.

Wire Size (AWG)	Conductors	Overall O.D.	
16	3	0.400"	16-3 STO
16	4	0.430"	16-4 STO
14	3	0.540"	14-3 STO
12	3	0.610"	12-3 STO

392°F High-Temperature Wire (SRML)



Glass braid silicone rubber motor lead wire is for hazardous locations and for equipment in high temperature environments. Also quite flexible. Fire resistant. Color is black. Can handle 600 volts maximum. Use with our high temperature (900°) terminals.
Order in 25-ft., 50-ft., and 100-ft. spool sizes.

Wire Size (AWG)	
18	18-SRML
16	16-SRML
14	14-SRML

Wire Size (AWG)	
12	12-SRML
10	10-SRML

868°F Extreme-Temperature Wire (MG)



Often used in industrial ovens, this braided glass yarn wire withstands temperatures up to 868°F. Max 600 volts and is UL listed. Order in 10-ft., 25-ft., 50-ft., and 100-ft. spool sizes.

Wire Size (AWG)	
18	18MG
16	16MG
14	14MG

Wire Size (AWG)	
12	12MG
10	10MG
8	8MG

Alligator Clips

Spring loaded test clips or hands free contact.

(A) 
(B) 
(C) 
(D) 

Amps	Length	Opening	Material		Type	Clip Only	Clip & Cover	Black Cover Only	Red Cover Only
10	2"	5/16"	Zinc Plated Steel	(A)	Alligator Clip with Screw	60-A	60-C	60 COVER BLACK	60 COVER RED
10	2"	7/16"	Zinc Plated Steel	(B)	Clip with Spring	55-A	55-C	55 COVER BLACK	55 COVER RED
20	2.4"	5/8"	Zinc Plated Steel	(B)	Clip with Spring	27-A	27-C	27 COVER BLACK	27 COVER RED
25	2.8"	3/4"	HD Zinc Plated Steel	(B)	Grounding Cable Clip	24-A	24-C	24 COVER BLACK	24 COVER RED
50	4.1"	1 1/16"	HD Zinc Plated Steel	(B)	Automotive Clip with Spring	21-A	21-C	21 COVER BLACK	21 COVER RED
75	2.95"	7/16"	Copper	(C)	Charging Clip with Black Handle	-------	46-C-B	-------	-------
75	2.95"	7/16"	Copper	(C)	Charging Clip with Red Handle	-------	46-C-R	-------	-------
75	3"	3/4"	Solid Copper	(D)	Automotive Clip with Spring	25-A	25-C	25 COVER BLACK	25 COVER RED
100	4.6"	1 1/16"	HD Solid Copper	(D)	Automotive Clip with Spring	21 COPPER	-------	21 COVER BLACK	21 COVER RED
100	6"	1 5/8"	HD Zinc Plated Steel	(B)	HD Grounding Cable Clip	11-A	11-C	11 COVER BLACK	11 COVER RED

Test Lead Wire (RTLW)

Annealed, tinned copper conductor for test equipment. Very flexible.



Wire Size (AWG)	Color		Pkg. Qty.
18	Black	RTLW-18B	Per foot
18	Red	RTLW-18R	Per foot
18	Red/Black	RTLW-25	25' Red/25' Black

Banana Plugs

One piece construction with set screw that holds up to 18 gauge wire. These banana plugs are 15 amp rated and have a nickel plated brass body with a bronze spring.



Color	Length	Part Number	Pkg. Qty.
Black	1.08"	BANANA PLUG-B	5
Red	1.08"	BANANA PLUG-R	5

Glass Fuses

Glass, Industrial, and Ceramic Fuses (Bussmann fuses shown, we also offer **Littlefuse**)

Glass Fuses		
Amps		Pkg. Qty.
AGA		
1/4	AGA-1/4	5
1/2	AGA-1/2	5
3/4	AGA-3/4	1
1	AGA-1	10
1 1/2	AGA-1-1/2	10
2	AGA-2	50
2 1/2	AGA-2-1/2	10
3	AGA-3	10
5	AGA-5	50
6	AGA-6	25
7	AGA-7	10
7 1/2	AGA-7-1/2	25
10	AGA-10	10
15	AGA-15	50
20	AGA-20	25
25	AGA-25	50
30	AGA-30	50
AGC		
1/200	AGC-1/200	1
1/50	AGC-1/50	1
1/32	AGC-1/32	1
1/20	AGC-1/20	1
1/10	AGC-1/10	1
1/8	AGC-1/8	5
15/100	AGC-15/100	1
175/10	AGC-175/1000	1
3./16	AGC-3/16	1
2/10	AGC-2/10	1
1/4	AGC-1/4	5
3/10	AGC-3/10	5
3/8	AGC-3/8	5
4/10	AGC-4/10	1
45/100	AGC-45/100	1
1/2	AGC-1/2	10
6/10	AGC-6/10	10
3/4	AGC-3/4	25
8/10	AGC-8/10	10
1	AGC-1	25
1 2/10	AGC-1-2/10	5
1 1/4	AGC-1-1/4	25
1 1/2	AGC-1-1/2	25
1 6/10	AGC-1-6/10	10
1 3/4	AGC-1-3/4	10
1 8/10	AGC-1-8/10	10
2	AGC-2	25
2 1/4	AGC-2-1/4	10
2 1/2	AGC-2-1/2	25
3	AGC-3	25
3 2/10	AGC-3-2/10	10
3 1/2	AGC-3-1/2	10
4	AGC-4	25
4 1/2	AGC-4-1/2	1
5	AGC-5	25
6	AGC-6	25
6 1/4	AGC-6-1/4	10
7	AGC-7	25
7 1/2	AGC-7-1/2	25
8	AGC-8	25
9	AGC-9	25
10	AGC-10	25
12	AGC-12	25
14	AGC-14	25
15	AGC-15	25
20	AGC-20	25

Glass Fuses (Cont.)		
Amps		Pkg. Qty.
AGC (Cont.)		
25	AGC-25	25
30	AGC-30	25
35	AGC-35	25
40	AGC-40	25
50	AGC-50	10
AGC-V		
1/32	AGC-V-1/32	1
1/2	AGC-V-1/2	1
1	AGC-V-1	1
1 1/4	AGC-V-1-1/4	1
2	AGC-V-2	1
3	AGC-V-3	1
5	AGC-V-5	1
20	AGC-V-20	1
AGU		
1	AGU-1	10
2	AGU-2	10
3	AGU-3	10
4	AGU-4	10
5	AGU-5	10
8	AGU-8	10
10	AGU-10	10
15	AGU-15	10
20	AGU-20	10
25	AGU-25	10
30	AGU-30	5
35	AGU-35	10
40	AGU-40	5
50	AGU-50	10
60	AGU-60	10
AGU-Gold Plated		
20	AGU-20GP	10
35	AGU-35GP	10
40	AGU-40GP	10
50	AGU-50GP	10
60	AGU-60GP	10
AGW		
1	AGW-1	10
1 1/2	AGW-1-1/2	10
2	AGW-2	5
2 1/2	AGW-2-1/2	10
3	AGW-3	10
4	AGW-4	25
5	AGW-5	10
6	AGW-6	10
7 1/2	AGW-7-1/2	5
10	AGW-10	5
15	AGW-15	25
20	AGW-20	25
25	AGW-25	5
30	AGW-30	25
AGX		
1/200	AGX-1/200	1
1/100	AGX-1/100	1
1/32	AGX-1/32	1
1/10	AGX-1/10	1
1/8	AGX-1/8	1
3/16	AGX-3/16	1
2/10	AGX-2/10	1
1/4	AGX-1/4	10
3/10	AGX-3/10	1
3/8	AGX-3/8	1
4/10	AGX-4/10	1
1/2	AGX-1/2	10

Glass Fuses (Cont.)		
Amps		Pkg. Qty.
AGX (Cont.)		
3/4	AGX-3/4	1
1	AGX-1	5
1 1/4	AGX-1-1/4	5
1 1/2	AGX-1-1/2	5
2	AGX-2-1/2	5
2 1/2	AGX-2	10
3	AGX-3	10
4	AGX-4	5
5	AGX-5	25
6	AGX-6	10
7	AGX-7	10
8	AGX-8	10
10	AGX-10	25
15	AGX-15	10
20	AGX-20	25
25	AGX-25	10
30	AGX-30	25
CF		
1	CF-1	1
1.5	CF-1.5	1
2	CF-3	1
3	CF-2	1
5	CF-5	1
125	CF-125	1
250	CF-250	1
500	CF-500	1
C520		
2	C520-2	1
3	C520-3A	1
5	C520-5	1
125	C520-125MA	1
250	C520-250	1
GBC		
5	GBC-5	10
8	GBC-8	5
15	GBC-15	5
16	GBC-16	10
25	GBC-25	10
30	GBC-30	5
GDB		
1	GDB-1A	1
1.25	GDB-1.25A	1
1.6	GDB-1.6A	1
2	GDB-2A	1
2.5	GDB-2.5A	1
3	GDB-3.15A	1
4	GDB-4A	1
5	GDB-5A	1
6	GDB-6.3A	1
8	GDB-8A	1
10	GDB-10A	1
16	GDB-16A	1
32	GDB-32MA	1
40	GDB-40MA	1
50	GDB-50MA	1
63	GDB-63MA	1
80	GDB-80MA	1
100	GDB-100MA	1
125	GDB-125MA	1
160	GDB-160MA	1
200	GDB-200MA	1
250	GDB-250MA	1
315	GDB-315MA	1
400	GDB-400MA	1

Glass Fuses (Cont.)		
Amps		Pkg. Qty.
GDB (Cont.)		
500	GDB-500MA	1
630	GDB-630MA	1
800	GDB-800MA	1
GDC		
1	GDC-1A	1
1.25	GDC-1.25A	1
1.6	GDC-1.6A	1
2	GDC-2A	1
2.5	GDC-2.5A	1
3.15	GDC-3.15A	1
4	GDC-4A	1
5	GDC-5A	1
6.3	GDC-6.3A	1
32	GDC-32MA	1
40	GDC-40MA	1
50	GDC-50MA	1
63	GDC-63MA	1
100	GDC-100MA	1
125	GDC-125MA	1
160	GDC-160MA	1
200	GDC-200MA	1
250	GDC-250MA	1
315	GDC-315MA	1
500	GDC-500MA	1
630	GDC-630MA	1
800	GDC-800MA	1
GLD		
1/2	GLD-1/2	1
3/4	GLD-3/4	1
1	GLD-1	1
1 1/2	GLD-1-1/2	1
2	GLD-2	1
3	GLD-3	5
4	GLD-4	1
5	GLD-5	1
6	GLD-6	1
10	GLD-10	1
15	GLD-15	1
GLQ		
2	GLQ-2	1
3	GLQ-3	1
5	GLQ-5	1
GLR		
1/2	GLR-1/2	1
1	GLR-1	1
1 1/2	GLR-1-1/2	1
1 6/10	GLR-1-6/10	1
2	GLR-2	1
3	GLR-3	1
4	GLR-4	1
5	GLR-5	1
6	GLR-6	1
7	GLR-7	1
8	GLR-8	1
9	GLR-9	1
10	GLR-10	1
12	GLR-12	1
15	GLR-15	1
GMA		
1	GMA-1	5
1.25	GMA-1.25	5
1.5	GMA-1.5	5
1.6	GMA-1.6	5
2	GMA-2	5

Glass Fuses (Cont.)		
Amps		Pkg. Qty.
GMA (Cont.)		
2 1/2	GMA-2.5	5
3	GMA-3	5
3.15	GMA-3.15	5
3.5	GMA-3.5	5
4	GMA-4	5
5	GMA-5	5
6	GMA-6	5
7	GMA-7	5
8	GMA-8	5
10	GMA-10	5
15	GMA-15	5
63	GMA-63	5
100	GMA-100	5
125	GMA-125	5
200	GMA-200	5
250	GMA-250	5
300	GMA-300	5
315	GMA-315	5
500	GMA-500	5
600	GMA-600	5
750	GMA-750	5
800	GMA-800	5
GMA-V		
4	GMA-V-4	1
GMC		
1	GMC-1	1
1.5	GMC-1.5	1
1.6	GMC-1.6	1
2	GMC-2	1
2.5	GMC-2.5	1
3	GMC-3	1
3.15	GMC-3.15	1
3.5	GMC-3.5	1
4	GMC-4	1
5	GMC-5A	1
6	GMC-6	1
6.3	GMC-6.3	1
7	GMC-7	1
8	GMC-8	1
10	GMC-10	1
63	GMC-63	1
80	GMC-80	1
100	GMC-100	1
125	GMC-125	1
150	GMC-150	1
200	GMC-200	1
250	GMC-250	1
300	GMC-300	1
315	GMC-315	1
400	GMC-400	1
500	GMC-500	1
600	GMC-600	1
630	GMC-630	1
750	GMC-750	1
800	GMC-800	1
GMC-V		
5	GMC-V-5A	1
8	GMC-V-8	1
GMD		
1	GMD-1	1
1.25	GMD-1.25	1
1.5	GMD-1.5	1

(Continued on following page)

Glass, Industrial, and Ceramic Fuses (Bussmann fuses shown, we also offer **Littlefuse**)

Glass Fuses (Cont.)

Amps		Pkg. Qty.
GMD	(Cont.)	
1.6	GMD-1.6	1
2	GMD-2	1
2.5	GMD-2.5	1
3	GMD-3	1
4	GMD-4	1
125	GMD-125	1
150	GMD-150	1
200	GMD-200MA	1
250	GMD-250	1
300	GMD-300	1
315	GMD-315	1
400	GMD-400	1
500	GMD-500	1
600	GMD-600	1
630	GMD-630	1
750	GMD-750	1
800	GMD-800	1
GMF		
1/2	GMF-1/2	1
1	GMF-1	1
2	GMF-2	1
2 1/2	GMF-2-1/2	1
3	GMF-3	1
3 2/10	GMF-3-2/10	1
4	GMF-4	1
5	GMF-5	1
6/10	GMF-6/10	1
GMQ		
1/2	GMQ-1/2	1
6/10	GMQ-6/10	1
8/10	GMQ-8/10	1
1	GMQ-1	1
1 1/4	GMQ-1-1/4	1
1 6/10	GMQ-1-6/10	1
2	GMQ-2	1
2 1/2	GMQ-2-1/2	1
3	GMQ-3	1
3 2/10	GMQ-3-2/10	1
4	GMQ-4	1
5	GMQ-5	1
6 1/4	GMQ-6-1/4	1
MDA		
1/10	MDA-1/10	1
1/8	MDA-1/8	1
15/100	MDA-15/100	1
2/10	MDA-2/10	1
1/4	MDA-1/4	1
3/10	MDA-3/10	1
3/8	MDA-3/8	1
4/10	MDA-4/10	1
1/2	MDA-1/2	5
6/10	MDA-6/10	1
3/4	MDA-3/4	1
8/10	MDA-8/10	1
1	MDA-1	1
1 1/4	MDA-1-1/4	1
1 1/2	MDA-1-1/2	1
1 6/10	MDA-1-6/10	1
2	MDA-2	1
2 1/2	MDA-2-1/2	1
2 8/10	MDA-2-8/10	1
3	MDA-3	1
3 2/10	MDA-3-2/10	1
4	MDA-4	1

Glass Fuses (Cont.)

Amps		Pkg. Qty.
MDA	(Cont.)	
5	MDA-5	1
6	MDA-6	1
6 1/4	MDA-6-1/4	1
7	MDA-7	1
8	MDA-8	1
10	MDA-10	5
12	MDA-12	5
15	MDA-15	5
20	MDA-20	5
25	MDA-25	1
25	MDA-25A	1
30	MDA-30	5
MDL		
1/100	MDL-1/100	1
1/32	MDL-1/32	1
1/16	MDL-1/16	1
1/10	MDL-1/10	1
1/8	MDL-1/8	1
15/100	MDL-15/100	1
175/10(	MDL-175/1000	1
3/16	MDL-3/16	1
2/10	MDL-2/10	1
1/4	MDL-1/4	1
3/10	MDL-3/10	1
3/8	MDL-3/8	1
4/10	MDL-4/10	1
1/2	MDL-1/2	1
6/10	MDL-6/10	1
7/10	MDL-7/10	1
3/4	MDL-3/4	1
8/10	MDL-8/10	1
1	MDL-1	1
1 2/10	MDL-1-2/10	1
1 1/4	MDL-1-1/4	1
1 1/2	MDL-1-1/2	5
1 6/10	MDL-1-6/10	1
1 8/10	MDL-1-8/10	1
2	MDL-2	5
2 1/4	MDL-2-1/4	1
2 1/2	MDL-2-1/2	1
2 8/10	MDL-2-8/10	1
3	MDL-3	1
3 2/10	MDL-3-2/10	1
3 1/2	MDL-3-1/2	1
4	MDL-4	1
5	MDL-5	5
6	MDL-6	1
6 1/4	MDL-6-1/4	1
7	MDL-7	1
7 1/2	MDL-7-1/2	1
8	MDL-8	1
9	MDL-9	1
10	MDL-10	1
12	MDL-12	1
15	MDL-15	1
20	MDL-20	1
25	MDL-25	1
30	MDL-30	1
35	MDL-35	1
40	MDL-40	1
MDL-V		
3/4	MDL-V-3/4	1
1	MDL-V-1	1
1-1/4	MDL-V-1-1/4	1

Glass Fuses (Cont.)

Amps		Pkg. Qty.
MDM		
6/10	MDM-6/10	1
3	MDM-3	1
10	MDM-10	1
15	MDM-15	1
20	MDM-20	1
30	MDM-30	1
MDQ		
1/32	MDQ-1/32	1
1/16	MDQ-1/16	1
1/32	MDQ-1/8	1
1/16	MDQ-15/100	1
15/100	MDQ-1/10	1
3/16	MDQ-3/16	1
2/10	MDQ-2/10	1
1/4	MDQ-1/4	1
3/10	MDQ-3/10	1
3/8	MDQ-3/8	1
4/10	MDQ-4/10	1
1/2	MDQ-1/2	1
6/10	MDQ-6/10	1
7/10	MDQ-7/10	1
3/4	MDQ-3/4	1
8/10	MDQ-8/10	1
1	MDQ-1	1
1 2/10	MDQ-1-2/10	1
1 1/4	MDQ-1-1/4	1
1 1/2	MDQ-1-1/2	1
1 6/10	MDQ-1-6/10	1
1 8/10	MDQ-1-8/10	1
2	MDQ-2	1
2 1/4	MDQ-2-1/4	1
2 1/2	MDQ-2-1/2	1
2-8/10	MDQ-2-8/10	1
3	MDQ-3	1
3 2/10	MDQ-3-2/10	1
3 1/2	MDQ-3-1/2	1
4	MDQ-4	1
5	MDQ-5	1
6	MDQ-6	1
6 1/4	MDQ-6-1/4	1
7	MDQ-7	1
7 1/2	MDQ-7-1/2	1
8	MDQ-8	1
9	MDQ-9	1
10	MDQ-10	1
12	MDQ-12	1
15	MDQ-15	1
SFE		
4	SFE-4	25
6	SFE-6	25
7 1/2	SFE-7-1/2	25
9	SFE-9	25
14	SFE-14	25
20	SFE-20	25
30	SFE-30	25
S500		
1	S500-1	1
1.25	S500-1.25	1
1.6	S500-1.6	1
2	S500-2	1
3.15	S500-3.15	1
4	S500-4	1
5	S500-5	1
6.3	S500-6.3	1

Glass Fuses (Cont.)

Amps		Pkg. Qty.
S500	(Cont.)	
8	S500-8	1
10	S500-10	1
32	S500-32	1
40	S500-40	1
50	S500-50	1
63	S500-63	1
80	S500-80	1
100	S500-100	1
125	S500-125	1
160	S500-160	1
200	S500-200	1
250	S500-250	1
315	S500-315	1
400	S500-400	1
500	S500-500	1
630	S500-630	1
800	S500-800	1
S506		
1	S506-1	1
1.25	S506-1.25	1
1.6	S506-1.6	1
2	S506-2	1
2.5	S506-2.5	1
3.15	S506-3.15	1
4	S506-4	1
5	S506-5	1
6.3	S506-6.3	1
8	S506-8	1
10	S506-10	1
12.5	S506-12.5	1
15	S506-15	1
32	S506-32	1
40	S506-40	1
50	S506-50	1
63	S506-63	1
80	S506-80	1
100	S506-100	1
125	S506-125	1
160	S506-160	1
200	S506-200	1
250	S506-250	1
315	S506-315	1
400	S506-400	1
500	S506-500	1
630	S506-630	1
800	S506-800	1
S506-V		
8	S506-V-8	1

Ceramic Fuses

ABC		
1/16	ABC-1/16	1
1/10	ABC-1/10	1
1/8	ABC-1/8	5
1/4	ABC-1/4	5
3/8	ABC-3/8	5
1/2	ABC-1/2	5
3/4	ABC-3/4	5
1	ABC-1	5
1 1/4	ABC-1-1/4	5
1 1/2	ABC-1-1/2	5
2	ABC-2	5
2	ABC-2-1/2	5
3	ABC-3	5
4	ABC-4	5

Ceramic Fuses (Cont.)

Amps		Pkg. Qty.
ABC	(Cont.)	
5	ABC-5	5
6	ABC-6	5
7	ABC-7	5
8	ABC-8	5
9	ABC-9	5
10	ABC-10	5
12	ABC-12	5
13	ABC-13	5
15	ABC-15	5
20	ABC-20	5
25	ABC-25	5
30	ABC-30	5
ABS		
5	ABS-5	1
10	ABS-10	1
15	ABS-15	1
20	ABS-20	1
25	ABS-25	1
30	ABS-30	1
GBB		
1	GBB-1	1
1 1/4	GBB-1-1/4	1
2	GBB-2	1
3	GBB-3	1
4	GBB-4	1
5	GBB-5	1
6	GBB-6	1
7	GBB-7	1
8	GBB-8	1
9	GBB-9	1
10	GBB-10	1
12	GBB-12	1
15	GBB-15	1
20	GBB-20	1
25	GBB-25	1
30	GBB-30	1
GDA		
1	GDA-1	1
1.25	GDA-1.25A	1
1.6	GDA-1.6A	1
2	GDA-2A	1
2.5	GDA-2.5A	1
3.15	GDA-3.15A	1
4	GDA-4A	1
5	GDA-5A	1
6.3	GDA-6.3A	1
50	GDA-50MA	1
63	GDA-63MA	1
80	GDA-80MA	1
100	GDA-100MA	1
125	GDA-125MA	1
160	GDA-160MA	1
200	GDA-200MA	1
250	GDA-250MA	1
315	GDA-315MA	1
400	GDA-400MA	1
500	GDA-500MA	1
630	GDA-630MA	1
800	GDA-800MA	1
MBO		
2	MBO-2	1
10	MBO-10	1
15	MBO-15	1

(Continued on following page)

Ceramic & Industrial Fuses

Ceramic and Industrial Fuses (Bussmann fuses shown, we also offer **Littlefuse**)

Amps		Pkg. Qty.
Ceramic Fuses (Cont.)		
S501		
1	S501-1	1
1.25	S501-1.25	1
2	S501-2	1
2.5	S501-2.5	1
3.15	S501-3.15	1
4	S501-4	1
5	S501-5	1
6.3	S501-6.3	1
8	S501-8	1
10	S501-10	1
50	S501-50	1
63	S501-63	1
80	S501-80	1
100	S501-100	1
125	S501-125	1
160	S501-160	1
200	S501-200	1
250	S501-250	1
500	S501-500	1
800	S501-800	1
S505		
1	S505-1	1
1.25	S505-1.25	1
1.6	S505-1.6	1
2	S505-2	1
2.5	S505-2.5	1
3.15	S505-3.15	1
4	S505-4	1
5	S505-5	1
6.3	S505-6.3	1
8	S505-8	1
10	S505-10	1
12	S505-12	1
500	S505-500	1
800	S505-800	1
Industrial Fuses		
ACK		
40	ACK-40	1
60	ACK-60	1
80	ACK-80	1
100	ACK-100	1
140	ACK-140	1
160	ACK-160	1
175	ACK-175	1
200	ACK-200	1
200	ACK-300	1
ANL		
35	ANL-35	1
40	ANL-40	1
50	ANL-50	1
60	ANL-60	1
80	ANL-80	1
100	ANL-100	1
125	ANL-125	1
130	ANL-130	1
150	ANL-150	1
175	ANL-175	1
200	ANL-200	1
225	ANL-225	1
250	ANL-250	1
275	ANL-275	1
300	ANL-300	5
325	ANL-325	1
350	ANL-350	1

Amps		Pkg. Qty.
Industrial Fuses (Cont.)		
ANL (Cont.)		
400	ANL-400	1
500	ANL-500	1
600	ANL-600	1
675	ANL-675	1
750	ANL-750	1
ANN		
10	ANN-10	1
35	ANN-35	1
40	ANN-40	1
50	ANN-50	1
60	ANN-60	1
80	ANN-80	1
90	ANN-90	1
100	ANN-100	1
125	ANN-125	1
150	ANN-150	1
175	ANN-175	1
200	ANN-200	1
225	ANN-225	1
250	ANN-250	1
275	ANN-275	1
300	ANN-300	1
325	ANN-325	1
350	ANN-350	1
400	ANN-400	1
500	ANN-500	1
600	ANN-600	1
700	ANN-700	1
800	ANN-800	1
BAF		
1/2	BAF-1/2	1
1	BAF-1	1
1 1/2	BAF-1-1/2	1
2	BAF-2	1
2 1/2	BAF-2-1/2	1
3	BAF-3	1
4	BAF-4	1
5	BAF-5	1
6	BAF-6	1
6 1/4	BAF-6-1/4	1
7	BAF-7	1
8	BAF-8	1
9	BAF-9	1
10	BAF-10	1
12	BAF-12	1
15	BAF-15	1
20	BAF-20	1
25	BAF-25	1
30	BAF-30	1
BBS		
2/10	BBS-2/10	1
4/10	BBS-4/10	1
6/10	BBS-6/10	1
3/4	BBS-3/4	1
8/10	BBS-8/10	1
1 6/10	BBS-1-6/10	1
1 8/10	BBS-1-8/10	1
2	BBS-2	1
3	BBS-3	1
4	BBS-4	1
5	BBS-5	1
6	BBS-6	1
7	BBS-7	1
8	BBS-8	1

Amps		Pkg. Qty.
Industrial Fuses (Cont.)		
BBS (Cont.)		
20	BBS-20	1
25	BBS-25	1
30	BBS-30	1
CDS		
15	CDS15	1
20	CDS20	1
30	CDS30	1
35	CDS35	1
45	CDS45	1
50	CDS50	1
90	CDS90	1
125	CDS125	1
150	CDS150	1
200	CDS200	1
CGL		
15	CGL-15	1
20	CGL-20	1
100	CGL-100	1
CDN		
10	CDN10	1
12	CDN12	1
15	CDN15	1
20	CDN20	1
25	CDN25	1
30	CDN30	1
35	CDN35	1
40	CDN40	1
45	CDN45	1
50	CDN50	1
60	CDN60	1
100	CDN100	1
110	CDN110	1
175	CDN175	1
200	CDN200	1
DFJ		
40	DFJ-40	1
60	DFJ-60	1
100	DFJ-100	1
150	DFJ-150	1
200	DFJ-200	1
400	DFJ-400	1
600	DFJ-600	1
ECNR		
1	ECNR1	1
2	ECNR2	1
2.5	ECNR2.5	1
3	ECNR3	1
3.2	ECNR3.2	1
4	ECNR4	1
5	ECNR5	1
6	ECNR6	1
8	ECNR8	1
10	ECNR10	1
12	ECNR12	1
15	ECNR15	1
20	ECNR20	1
25	ECNR25	1
30	ECNR30	1
35	ECNR35	1
40	ECNR40	1
45	ECNR45	1
50	ECNR50	1
60	ECNR60	1
70	ECNR70	1

Amps		Pkg. Qty.
Industrial Fuses (Cont.)		
ECNR (Cont.)		
80	ECNR80	1
90	ECNR90	1
100	ECNR100	1
125	ECNR125	1
150	ECNR150	1
175	ECNR175	1
200	ECNR200	1
225	ECNR225	1
250	ECNR250	1
300	ECNR300	1
400	ECNR400	1
600	ECNR600	1
ECSR		
1	ECSR1	1
2	ECSR2	1
2.5	ECSR2.5	1
3	ECSR3	1
3.2	ECSR3.2	1
3.5	ECSR3.5	1
4	ECSR4	1
5	ECSR5	1
6	ECSR6	1
7	ECSR7	1
8	ECSR8	1
9	ECSR9	1
10	ECSR10	1
12	ECSR12	1
15	ECSR15	1
17.5	ECSR17.5	1
20	ECSR20	1
25	ECSR25	1
30	ECSR30	1
35	ECSR35	1
40	ECSR40	1
45	ECSR45	1
50	ECSR50	1
60	ECSR60	1
70	ECSR70	1
80	ECSR80	1
90	ECSR90	1
100	ECSR100	1
110	ECSR110	1
125	ECSR125	1
150	ECSR150	1
175	ECSR175	1
200	ECSR200	1
225	ECSR225	1
250	ECSR250	1
300	ECSR300	1
350	ECSR350	1
400	ECSR400	1
500	ECSR500	1
600	ECSR600	1
FNA		
2/10	FNA-2/10	1
8/10	FNA-8/10	1
1/2	FNA-1/2	1
1	FNA-1	10
1 1/8	FNA-1-1/8	1
1 1/4	FNA-1-1/4	1
1 6/10	FNA-1-6/10	1
2	FNA-2	10
2 1/2	FNA-2-1/2	1
3	FNA-3	10

Amps		Pkg. Qty.
Industrial Fuses (Cont.)		
FNA (Cont.)		
3 1/2	FNA-3-1/2	1
4	FNA-4	1
5	FNA-5	10
6	FNA-6	1
6 1/4	FNA-6-1/4	1
7	FNA-7	1
8	FNA-8	1
10	FNA-10	10
12	FNA-12	1
15	FNA-15	5
20	FNA-20	1
25	FNA-25	1
30	FNA-30	1
FNM		
1/10	FNM-1/10	10
1/8	FNM-1/8	10
15/100	FNM-15/100	10
2/10	FNM-2/10	10
1/4	FNM-1/4	10
3/10	FNM-3/10	1
4/10	FNM-4/10	1
1/2	FNM-1/2	1
6/10	FNM-6/10	1
3/4	FNM-3/4	1
8/10	FNM-8/10	10
1	FNM-1	1
1 1/8	FNM-1-1/8	1
1 1/4	FNM-1-1/4	1
1 4/10	FNM-1-4/10	1
1 1/2	FNM-1-1/2	1
1 6/10	FNM-1-6/10	1
1 8/10	FNM-1-8/10	1
2	FNM-2	1
2 1/4	FNM-2-1/4	1
2 1/2	FNM-2-1/2	1
2 8/10	FNM-2-8/10	1
3	FNM-3	1
3 2/10	FNM-3-2/10	1
3 1/2	FNM-3-1/2	1
4	FNM-4	1
4 1/2	FNM-4-1/2	1
5	FNM-5	1
5 6/10	FNM-5-6/10	1
6	FNM-6	1
6 1/4	FNM-6-1/4	1
7	FNM-7	1
8	FNM-8	10
9	FNM-9	1
10	FNM-10	10
12	FNM-12	1
15	FNM-15	1
20	FNM-20	10
25	FNM-25	1
30	FNM-30	10
35	FNM-35	1
40	FNM-40	1

(Continued on following page)

Industrial Fuses (Bussmann fuses shown, we also offer **Littlefuse**)

Amps		Pkg. Qty.
FNQ		
1/10	FNQ-1/10	1
1/8	FNQ-1/8	1
15/100	FNQ-15/100	1
3/16	FNQ-3/16	1
2/10	FNQ-2/10	1
1/4	FNQ-1/4	1
3/10	FNQ-3/10	1
4/10	FNQ-4/10	1
1/2	FNQ-1/2	1
6/10	FNQ-6/10	1
8/10	FNQ-8/10	1
1	FNQ-1	1
1 1/8	FNQ-1-1/8	1
1 1/4	FNQ-1-1/4	1
1 3/10	FNQ-1-3/10	1
1 1/2	FNQ-1-1/2	1
1 6/10	FNQ-1-6/10	1
2	FNQ-2	1
2 1/4	FNQ-2-1/4	1
2 1/2	FNQ-2-1/2	1
2 8/10	FNQ-2-8/10	1
3	FNQ-3	1
3 2/10	FNQ-3-2/10	1
3 1/2	FNQ-3-1/2	1
4	FNQ-4	1
4 1/2	FNQ-4-1/2	1
5	FNQ-5	1
5 6/10	FNQ-5-6/10	1
6	FNQ-6	1
6 1/4	FNQ-6-1/4	1
7	FNQ-7	1
8	FNQ-8	10
9	FNQ-9	1
10	FNQ-10	1
12	FNQ-12	1
14	FNQ-14	1
15	FNQ-15	1
20	FNQ-20	1
25	FNQ-25	10
30	FNQ-30	1
FNQ-R		
1/4	FNQ-R-1/4	1
3/10	FNQ-R-3/10	1
4/10	FNQ-R-4/10	1
1/2	FNQ-R-1/2	10
6/10	FNQ-R-6/10	1
3/4	FNQ-R-3/4	1
8/10	FNQ-R-8/10	1
1	FNQ-R-1	10
1 1/8	FNQ-R-1-1/8	1
1 1/4	FNQ-R-1-1/4	1
1 4/10	FNQ-R-1-4/10	1
1 1/2	FNQ-R-1-1/2	1
1 6/10	FNQ-R-1-6/10	1
1 8/10	FNQ-R-1-8/10	1
2	FNQ-R-2	10
2 1/4	FNQ-R-2-1/4	1
2 1/2	FNQ-R-2-1/2	1
3	FNQ-R-3	10
3 2/10	FNQ-R-3-2/10	1
3 1/2	FNQ-R-3-1/2	1
4	FNQ-R-4	10
4 1/2	FNQ-R-4-1/2	1
5	FNQ-R-5	10

Amps		Pkg. Qty.
FNQ-R (Cont.)		
6	FNQ-R-6	10
6 1/4	FNQ-R-6-1/4	1
7	FNQ-R-7	1
7 1/2	FNQ-R-7-1/2	1
8	FNQ-R-8	10
9	FNQ-R-9	1
10	FNQ-R-10	10
12	FNQ-R-12	10
15	FNQ-R-15	10
17 1/2	FNQ-R-17-1/2	1
20	FNQ-R-20	10
25	FNQ-R-25	1
30	FNQ-R-30	10
FRN-R		
1/10	FRN-R1/10	1
1/8	FRN-R1/8	1
15/10	FRN-R15/100	1
2/10	FRN-R2/10	1
1/4	FRN-R1/4	1
3/10	FRN-R3/10	1
4/10	FRN-R4/10	10
1/2	FRN-R1/2	1
6/10	FRN-R6/10	1
8/10	FRN-R8/10	10
1	FRN-R1	1
1 1/8	FRN-R1-1/8	1
1 1/4	FRN-R1-1/4	1
1 4/10	FRN-R1-4/10	1
1 1/2	FRN-R1-1/2	10
1 6/10	FRN-R1-6/10	10
1 8/10	FRN-R1-8/10	10
2	FRN-R2	1
2 1/4	FRN-R2-1/4	1
2 1/2	FRN-R2-1/2	1
2 8/10	FRN-R2-8/10	10
3	FRN-R3	1
3 2/10	FRN-R3-2/10	1
3 1/2	FRN-R3-1/2	10
4	FRN-R4	1
4 1/2	FRN-R4-1/2	10
5	FRN-R5	1
5 6/10	FRN-R5-6/10	10
6	FRN-R6	1
6 1/4	FRN-R6-1/4	1
7	FRN-R7	1
7 1/2	FRN-R7-1/2	1
8	FRN-R8	1
9	FRN-R9	10
10	FRN-R10	10
12	FRN-R12	10
15	FRN-R15	10
17 1/2	FRN-R17-1/2	10
20	FRN-R20	10
25	FRN-R25	10
30	FRN-R30	1
35	FRN-R35	10
40	FRN-R40	1
45	FRN-R45	10
50	FRN-R50	10
60	FRN-R60	1
70	FRN-R70	1
75	FRN-R75	1
80	FRN-R80	1
85	FRN-R85	1

Amps		Pkg. Qty.
FRN-R (Cont.)		
90	FRN-R90	5
100	FRN-R100	1
110	FRN-R110	1
125	FRN-R125	1
150	FRN-R150	1
175	FRN-R175	1
200	FRN-R200	1
225	FRN-R225	1
250	FRN-R250	1
300	FRN-R300	1
350	FRN-R350	1
400	FRN-R400	1
450	FRN-R450	1
500	FRN-R500	1
600	FRN-R600	1
FRN-R ID™		
10	FRN-R10ID	1
15	FRN-R15ID	1
20	FRN-R20ID	1
25	FRN-R25ID	1
30	FRN-R30ID	1
40	FRN-R40ID	1
50	FRN-R50ID	1
60	FRN-R60ID	1
FRS-R		
1/10	FRS-R1/10	1
1/8	FRS-R1/8	1
15/100	FRS-R15/100	1
2/10	FRS-R2/10	1
1/4	FRS-R1/4	1
3/10	FRS-R3/10	1
4/10	FRS-R4/10	1
1/2	FRS-R1/2	1
6/10	FRS-R6/10	1
8/10	FRS-R8/10	1
1	FRS-R1	1
1 1/8	FRS-R1-1/8	1
1 1/4	FRS-R1-1/4	1
1 4/10	FRS-R1-4/10	1
1 1/2	FRS-R1-1/2	1
1 6/10	FRS-R1-6/10	1
1 8/10	FRS-R1-8/10	1
2	FRS-R2	1
2 1/4	FRS-R2-1/4	1
2 1/2	FRS-R2-1/2	1
2 8/10	FRS-R2-8/10	1
3	FRS-R3	1
3 2/10	FRS-R3-2/10	1
3 1/2	FRS-R3-1/2	1
4	FRS-R4	1
4 1/2	FRS-R4-1/2	1
5	FRS-5	1
5 6/10	FRS-R5-6/10	1
6	FRS-6	1
6 1/4	FRS-R6-1/4	1
7	FRS-R7	1
7 1/2	FRS-R7-1/2	1
8	FRS-R8	1
9	FRS-R9	1
10	FRS-R10	1
12	FRS-R12	1
15	FRS-R15	1
17 1/2	FRS-R17-1/2	1
20	FRS-R20	1

Amps		Pkg. Qty.
FRS-R (Cont.)		
25	FRS-R25	1
30	FRS-R30	1
35	FRS-R35	10
40	FRS-R40	10
45	FRS-R45	1
50	FRS-R50	10
60	FRS-R60	10
65	FRS-R65	1
70	FRS-R70	1
75	FRS-R75	1
80	FRS-R80	10
90	FRS-R90	1
100	FRS-R100	1
110	FRS-R110	1
125	FRS-R125	1
150	FRS-R150	1
175	FRS-R175	1
200	FRS-R200	1
225	FRS-R225	1
250	FRS-R250	1
300	FRS-R300	1
350	FRS-R350	1
400	FRS-R400	1
450	FRS-R450	1
500	FRS-R500	1
600	FRS-R600	1
FRS-R ID™		
6	FRS-R6ID	1
10	FRS-R10ID	1
12	FRS-R12ID	1
15	FRS-R15ID	1
20	FRS-R20ID	1
25	FRS-R25ID	1
30	FRS-R30ID	1
35	FRS-R35ID	1
40	FRS-R40ID	1
45	FRS-R45ID	1
50	FRS-R50ID	1
60	FRS-R60ID	1
FWA		
70	FWA-70B	1
80	FWA-80B	1
100	FWA-100B	1
125	FWA-125B	1
150	FWA-150B	1
200	FWA-200B	1
250	FWA-250B	1
300	FWA-300B	1
350	FWA-350B	1
400	FWA-400B	1
600	FWA-600A	1
FWA-F		
5	FWA-5A10F	1
10	FWA-10A10F	1
15	FWA-15A10F	1
20	FWA-20A10F	1
25	FWA-25A10F	1
30	FWA-30A10F	1
35	FWA-35A21F	1
40	FWA-40A21F	1
FWC-F		
8	FWC-8A10F	1
10	FWC-10A10F	1
12	FWC-12A10F	1

Amps		Pkg. Qty.
FWC-F (Cont.)		
16	FWC-16A10F	1
20	FWC-20A10F	1
25	FWC-25A10F	1
32	FWC-32A10F	1
FWH		
35	FWH-35A	1
35	FWH-35B	1
40	FWH-40B	1
50	FWH-50B	1
60	FWH-60B	1
70	FWH-70B	1
80	FWH-80A	1
80	FWH-80B	1
100	FWH-100B	1
125	FWH-125B	1
150	FWH-150A	1
150	FWH-150B	1
175	FWH-175A	1
175	FWH-175B	1
200	FWH-200B	1
250	FWH-250A	1
400	FWH-400A	1
600	FWH-600A	1
FWH-F		
0.50	FWH-.500A6F	1
1	FWH-001A6F	1
2	FWH-002A6F	1
5	FWH-005A6F	1
10	FWH-10A14F	1
20	FWH-20A14F	1
30	FWH-30A14F	1
FWP		
30	FWP-30B	1
40	FWP-40B	1
50	FWP-50A	1
50	FWP-50B	1
60	FWP-60B	1
70	FWP-70B	1
80	FWP-80B	1
90	FWP-90A	1
90	FWP-90B	1
100	FWP-100B	1
125	FWP-125A	1
150	FWP-150A	1
175	FWP-175A	1
200	FWP-200A	1
300	FWP-300A	1
350	FWP-350A	1
FWP-F		
10	FWP-10A14F	1
15	FWP-15A14F	1
20	FWP-20A14F	1
25	FWP-25A14F	1
25	FWP-25A14FI	1
30	FWP-30A14F	1
32	FWP-32A14F	1
40	FWP-40A14F	1
40	FWP-40A22FI	1
50	FWP-50A14F	1
50	FWP-50A22F	1
80	FWP-80A22F	1
80	FWP-80A22FI	1
100	FWP-100A22F	1

(Continued on following page)

Industrial Fuses

Industrial Fuses (Bussmann fuses shown, we also offer **Littlefuse**)

Amps		Pkg. Qty.
FWX		
35	FWX-35A	1
40	FWX-40A	1
50	FWX-50A	1
60	FWX-60A	1
90	FWX-90A	1
100	FWX-100A	1
175	FWX-175A	1
200	FWX-200A	1
250	FWX-250A	1
400	FWX-400A	1
600	FWX-600A	1
FWX-F		
2	FWX-2A14F	1
10	FWX-10A14F	1
12	FWX-125A	1
12	FWX-12A14F	1
25	FWX-25A14F	1
30	FWX-30A14F	1
GBA		
2	GBA-2	1
3	GBA-3	1
5	GBA-5	1
10	GBA-10	1
JJS		
1	JJS-1	1
3	JJS-3	1
6	JJS-6	10
10	JJS-10	1
15	JJS-15	10
20	JJS-20	10
25	JJS-25	10
30	JJS-30	10
35	JJS-35	10
40	JJS-40	10
45	JJS-45	1
50	JJS-50	1
60	JJS-60	1
70	JJS-70	1
80	JJS-80	1
90	JJS-90	1
100	JJS-100	1
110	JJS-110	1
125	JJS-125	1
150	JJS-150	1
175	JJS-175	1
200	JJS-200	1
250	JJS-250	1
350	JJS-350	1
400	JJS-400	1
500	JJS-500	1
600	JJS-600	1
JJN		
6	JJN-6	10
10	JJN-10	1
15	JJN-15	1
30	JJN-30	1
40	JJN-40	1
50	JJN-50	1
60	JJN-60	1
70	JJN-70	1
80	JJN-80	1
90	JJN-90	1
100	JJN-100	1
110	JJN-110	1

Amps		Pkg. Qty.
JJN (Cont.)		
125	JJN-125	1
150	JJN-150	1
175	JJN-175	1
200	JJN-200	1
225	JJN-225	1
250	JJN-250	1
300	JJN-300	1
350	JJN-350	1
400	JJN-400	1
450	JJN-450	1
500	JJN-500	1
600	JJN-600	1
800	JJN-800	1
1000	JJN-1000	1
1200	JJN-1200	1
JKS		
3	JKS-3	1
4	JKS-4	1
6	JKS-6	10
10	JKS-10	1
12	JKS-12	10
15	JKS-15	10
20	JKS-20	10
25	JKS-25	10
30	JKS-30	10
35	JKS-35	10
40	JKS-40	1
45	JKS-45	1
50	JKS-50	1
60	JKS-60	1
70	JKS-70	1
80	JKS-80	1
90	JKS-90	1
100	JKS-100	1
110	JKS-110	1
125	JKS-125	1
150	JKS-150	1
175	JKS-175	1
200	JKS-200	1
225	JKS-225	1
300	JKS-300	1
KAB		
2	KAB-2	1
3	KAB-3	1
4	KAB-4	1
5	KAB-5	1
15	KAB-15	1
20	KAB-20	1
25	KAB-25	1
30	KAB-30	1
KAC		
25	KAC-25	1
35	KAC-35	1
60	KAC-60	1
80	KAC-80	1
150	KAC-150	1
175	KAC-175	1
300	KAC-300	1
KAX		
5	KAX-5	1
10	KAX-10	1
12	KAX-12	1
15	KAX-15	1
20	KAX-20	1

Amps		Pkg. Qty.
KBC		
3	KBC-3	1
15	KBC-15	1
400	KBC-400	1
KLM		
3/10	KLM-3/10	1
1	KLM-1/2	1
1 1/2	KLM-1-1/2	1
2	KLM-2	1
3	KLM-3	1
5	KLM-5	1
10	KLM-10	1
12	KLM-12	1
15	KLM-15	1
20	KLM-20	1
25	KLM-25	1
30	KLM-30	1
KLU		
601	KLU-601	1
650	KLU-650	1
800	KLU-800	1
1000	KLU-1000	1
1200	KLU-1200	1
KRP-C		
601	KRP-C-601SP	1
650	KRP-C-650SP	1
700	KRP-C-700SP	1
750	KRP-C-750SP	1
800	KRP-C-800SP	1
1000	KRP-C-1000SP	1
1200	KRP-C-1200SP	1
1600	KRP-C-1600SP	1
2000	KRP-C-2000SP	1
2500	KRP-C-2500SP	1
3000	KRP-C-3000SP	1
5000	KRP-C-5000SP	1
KRP-CL		
400	KRP-CL-400	1
KTK		
1/10	KTK-1/10	10
1/8	KTK-1/8	1
2/10	KTK-2/10	1
1/4	KTK-1/4	1
3/10	KTK-3/10	1
4/10	KTK-4/10	1
1/2	KTK-1/2	1
6/10	KTK-6/10	1
3/4	KTK-3/4	1
1	KTK-1	1
1 1/4	KTK-1-1/4	1
1 1/2	KTK-1-1/2	1
2	KTK-2	1
2 1/2	KTK-2-1/2	1
3	KTK-3	1
3 1/2	KTK-3-1/2	1
4	KTK-4	1
5	KTK-5	10
6	KTK-6	1
7	KTK-7	1
7 1/2	KTK-7-1/2	1
8	KTK-8	1
9	KTK-9	1
10	KTK-10	10
12	KTK-12	1
15	KTK-15	10

Amps		Pkg. Qty.
KTK (Cont.)		
20	KTK-20	10
25	KTK-25	1
30	KTK-30	10
35	KTK-35	1
40	KTK-40	10
45	KTK-45	1
50	KTK-50	1
KTK-R		
1/10	KTK-R1/10	1
1/8	KTK-R1/8	1
2/10	KTK-R2/10	1
1/4	KTK-R1/4	1
3/10	KTK-R3/10	1
4/10	KTK-R4/10	1
1/2	KTK-R1/2	1
6/10	KTK-R6/10	1
3/4	KTK-R3/4	1
1	KTK-R-1	10
1 1/2	KTK-R1-1/2	1
2	KTK-R2	10
2 1/2	KTK-R2-1/2	1
3	KTK-R3	1
3 1/2	KTK-R3-1/2	1
4	KTK-R4	1
5	KTK-R5	1
6	KTK-R6	1
7	KTK-R7	1
8	KTK-R8	1
9	KTK-R9	1
10	KTK-R10	10
12	KTK-R12	1
15	KTK-R15	10
20	KTK-R20	10
25	KTK-R25	10
30	KTK-R30	10
KTS		
6	KTS-6	1
30	KTS-30	1
60	KTS-60	1
70	KTS-70	1
80	KTS-80	1
100	KTS-100	1
150	KTS-150	1
200	KTS-200	1
350	KTS-350	1
400	KTS-400	1
KTN		
1	KTN-1	1
2	KTN-2	1
3	KTN-3	1
4	KTN-4	1
5	KTN-5	1
6	KTN-6	1
8	KTN-8	1
10	KTN-10	1
15	KTN-15	1
20	KTN-20	1
25	KTN-25	1
30	KTN-30	1
40	KTN-40	1
45	KTN-45	1
60	KTN-60	1
90	KTN-90	1
100	KTN-100	1

Amps		Pkg. Qty.
KTN (Cont.)		
110	KTN-110	1
175	KTN-175	1
200	KTN-200	1
250	KTN-250	1
400	KTN-400	1
KTU		
700	KTU-700	1
800	KTU-800	1
1000	KTU-1000	1
1500	KTU-1500	1
2000	KTU-2000	1
3000	KTU-3000	1
LKN		
5	LKN-5	1
6	LKN-6	1
10	LKN-10	1
15	LKN-15	1
20	LKN-20	1
25	LKN-25	1
30	LKN-30	1
40	LKN-40	1
50	LKN-50	1
60	LKN-60	1
70	LKN-70	1
80	LKN-80	1
80	LKN-80B	1
100	LKN-100	10
110	LKN-110	1
125	LKN-125	1
150	LKN-150	10
200	LKN-200	10
250	LKN-250	1
300	LKN-300	1
350	LKN-350	1
400	LKN-400	1
LKS		
3	LKS-3	1
6	LKS-6	1
10	LKS-10	1
15	LKS-15	1
20	LKS-20	1
25	LKS-25	1
30	LKS-30	1
35	LKS-35	1
40	LKS-40	1
45	LKS-45	1
50	LKS-50	1
60	LKS-60	1
70	LKS-70	1
100	LKS-100	10
150	LKS-150	10
200	LKS-200	10
250	LKS-250	1
300	LKS-300	1
400	LKS-400	1
600	LKS-600	1
LP-CC		
1/2	LP-CC-1/2	1
6/10	LP-CC-6/10	1
8/10	LP-CC-8/10	1
1	LP-CC-1	1
1 1/8	LP-CC-1-1/8	1
1 1/4	LP-CC-1-1/4	1

(Continued on following page)

Industrial Fuses (Bussmann fuses shown, we also offer **Littelfuse**)

Amps		Pkg. Qty.
LP-CC	(Cont.)	
1 4/10	LP-CC-1-4/10	1
1 1/2	LP-CC-1-1/2	1
1 6/10	LP-CC-1-6/10	1
1 8/10	LP-CC-1-8/10	1
2	LP-CC-2	1
2 1/4	LP-CC-2-1/4	1
2 1/2	LP-CC-2-1/2	1
2 8/10	LP-CC-2-8/10	1
3	LP-CC-3	1
3 2/10	LP-CC-3-2/10	1
3 1/2	LP-CC-3-1/2	1
4	LP-CC-4	1
4 1/2	LP-CC-4-1/2	1
5	LP-CC-5	1
5 6/10	LP-CC-5-6/10	1
6	LP-CC-6	1
6 1/4	LP-CC-6-1/4	1
7	LP-CC-7	1
7 1/2	LP-CC-7-1/2	1
8	LP-CC-8	1
9	LP-CC-9	1
10	LP-CC-10	1
12	LP-CC-12	1
15	LP-CC-15	1
20	LP-CC-20	1
25	LP-CC-25	1
30	LP-CC-30	1
LPJ-SP		
1	LPJ-1SP	10
1 1/4	LPJ-1-1/4SP	10
1 6/10	LPJ-1-6/10SP	10
1 8/10	LPJ-1-8/10SP	10
2	LPJ-2SP	10
2 1/4	LPJ-2-1/4SP	10
2 1/2	LPJ-2-1/2SP	10
2 8/10	LPJ-2-8/10SP	10
3	LPJ-3SP	10
3 1/2	LPJ-3-1/2SP	10
4	LPJ-4SP	10
4 1/2	LPJ-4-1/2SP	10
5	LPJ-5SP	10
6	LPJ-6SP	10
7	LPJ-7SP	10
8	LPJ-8SP	10
10	LPJ-10SP	10
12	LPJ-12SP	10
15	LPJ-15SP	10
17 1/2	LPJ-17-1/2SP	10
20	LPJ-20SP	10
25	LPJ-25SP	10
30	LPJ-30SP	10
35	LPJ-35SP	10
40	LPJ-40SP	10
45	LPJ-45SP	10
50	LPJ-50SP	10
60	LPJ-60SP	10
70	LPJ-70SP	10
80	LPJ-80SP	10
90	LPJ-90SP	10
100	LPJ-100SP	10
110	LPJ-110SP	10
125	LPJ-125SP	10
150	LPJ-150SP	10
175	LPJ-175SP	10

Amps		Pkg. Qty.
LPJ-SP	(Cont.)	
200	LPJ-200SP	1
225	LPJ-225SP	1
250	LPJ-250SP	1
300	LPJ-300SP	1
350	LPJ-350SP	1
400	LPJ-400SP	1
450	LPJ-450SP	1
LPJ-SPI		
6	LPJ-6SPI	1
10	LPJ-10SPI	1
15	LPJ-15SPI	1
17 1/2	LPJ-17-1/2SPI	1
20	LPJ-20SPI	1
25	LPJ-25SPI	1
30	LPJ-30SPI	1
40	LPJ-40SPI	1
45	LPJ-45SPI	1
50	LPJ-50SPI	1
60	LPJ-60SPI	1
70	LPJ-70SPI	1
80	LPJ-80SPI	1
90	LPJ-90SPI	1
100	LPJ-100SPI	1
200	LPJ-200SPI	1
225	LPJ-225SPI	1
355	LPJ-35SPI	1
400	LPJ-400SPI	1
LPNK-SP		
1/2	LPNK-1/2SP	1
1	LPNK-1SP	1
2	LPNK-2SP	1
2 1/2	LPNK-2-1/2SP	1
2 8/10	LPNK-2-8/10SP	1
3	LPNK-3SP	1
5	LPNK-5SP	1
5 6/10	LPNK-5-6/10SP	1
6	LPNK-6SP	1
8	LPNK-8SP	1
10	LPNK-10SP	1
12	LPNK-12SP	1
15	LPNK-15SP	1
20	LPNK-20SP	1
25	LPNK-25SP	1
30	LPNK-30SP	1
35	LPNK-35SP	1
40	LPNK-40SP	1
45	LPNK-45SP	1
50	LPNK-50SP	1
60	LPNK-60SP	1
70	LPNK-70SP	1
80	LPNK-80SP	1
90	LPNK-90SP	1
100	LPNK-100SP	1
125	LPNK-125SP	1
150	LPNK-150SP	1
200	LPNK-200SP	1
225	LPNK-225SP	1
250	LPNK-250SP	1
300	LPNK-300SP	1
350	LPNK-350SP	1
400	LPNK-400SP	1
600	LPNK-600SP	1

Amps		Pkg. Qty.
LPNK-SPI		
35	LPNK-35SPI	1
40	LPNK-40SPI	1
60	LPNK-60SPI	1
100	LPNK-100SPI	1
300	LPNK-300SPI	1
350	LPNK-350SPI	1
LPSK-SP		
1 1/4	LPSK-1-1/4SP	1
2	LPSK-2SP	1
2 1/2	LPSK-2-1/2SP	1
3	LPSK-3SP	1
4	LPSK-4SP	1
5	LPSK-5SP	1
6	LPSK-6SP	1
6 1/4	LPSK-6-1/4SP	1
10	LPSK-10SP	1
12	LPSK-12SP	1
15	LPSK-15SP	1
17 1/2	LPSK-17-1/2SP	1
20	LPSK-20SP	1
25	LPSK-25SP	1
30	LPSK-30SP	1
35	LPSK-35SP	1
40	LPSK-40SP	1
45	LPSK-45SP	1
50	LPSK-50SP	1
60	LPSK-60SP	1
70	LPSK-70SP	1
80	LPSK-80SP	1
90	LPSK-90SP	1
100	LPSK-100SP	1
125	LPSK-125SP	1
150	LPSK-150SP	1
175	LPSK-175SP	1
200	LPSK-200SP	1
225	LPSK-225SP	1
300	LPSK-300SP	1
350	LPSK-350SP	1
400	LPSK-400SP	1
500	LPSK-500SP	1
600	LPSK-600SP	1
LPSK-SPI		
7	LPSK-7SPI	1
15	LPSK-15SPI	1
20	LPSK-20SPI	1
30	LPSK-30SPI	1
40	LPSK-40SPI	1
100	LPSK-100SPI	1
110	LPSK-110SPI	1
150	LPSK-150SPI	1
200	LPSK-200SPI	1
600	LPSK-600SPI	1
MIC		
1	MIC-1	1
3	MIC-3	1
5	MIC-5	1
10	MIC-10	1
15	MIC-15	1
20	MIC-20	1
30	MIC-30	1
NITD		
2	NITD2	1
4	NITD4	1
6	NITD6	1

Amps		Pkg. Qty.
NITD	(Cont.)	
10	NITD10	1
20	NITD20	1
25	NITD25	1
32	NITD32	1
NON		
1/8	NON-1/8	1
1/2	NON-1/2	1
3/4	NON-3/4	1
8/10	NON-8/10	1
1	NON-1	1
1 1/4	NON-1-1/4	1
1 1/2	NON-1-1/2	1
1 6/10	NON-1-6/10	1
6/10	NON-2	1
2 1/2	NON-2-1/2	1
3	NON-3	1
3 2/10	NON-3-2/10	1
4	NON-4	1
5	NON-5	1
6	NON-6	1
6 1/4	NON-6-1/4	1
7	NON-7	1
8	NON-8	1
9	NON-9	1
10	NON-10	1
12	NON-12	1
15	NON-15	1
20	NON-20	1
25	NON-25	1
30	NON-30	1
35	NON-35	1
40	NON-40	1
45	NON-45	1
50	NON-50	1
60	NON-60	1
65	NON-65	1
70	NON-70	1
75	NON-75	1
80	NON-80	1
90	NON-90	1
100	NON-100	1
110	NON-110	1
125	NON-125	1
150	NON-150	1
175	NON-175	1
225	NON-225	1
200	NON-200	1
250	NON-250	1
300	NON-300	1
350	NON-350	1
400	NON-400	1
450	NON-450	1
500	NON-500	1
600	NON-600	1
NOS		
1	NOS-1	1
2	NOS-2	1
3	NOS-3	1
4	NOS-4	1
5	NOS-5	1
6	NOS-6	1
7	NOS-7	1
8	NOS-8	1
9	NOS-9	1

Amps		Pkg. Qty.
NOS	(Cont.)	
10	NOS-10	1
12	NOS-12	1
15	NOS-15	1
20	NOS-20	1
25	NOS-25	1
30	NOS-30	1
35	NOS-35	1
40	NOS-40	1
45	NOS-45	1
50	NOS-50	1
60	NOS-60	1
70	NOS-70	1
75	NOS-75	1
80	NOS-80	1
90	NOS-90	1
100	NOS-100	1
110	NOS-110	1
125	NOS-125	1
150	NOS-150	1
175	NOS-175	1
200	NOS-200	1
225	NOS-225	1
250	NOS-250	1
300	NOS-300	1
350	NOS-350	1
400	NOS-400	1
450	NOS-450	1
500	NOS-500	1
600	NOS-600	1
PON		
15	PON15	1
20	PON20	1
25	PON25	1
30	PON30	1
35	PON35	1
40	PON40	1
45	PON45	1
50	PON50	1
60	PON60	1
SC		
1/2	SC-1/2	1
1	SC-1	1
1 1/2	SC-1-1/2	1
2	SC-2	1
2 1/2	SC-2-1/2	1
3	SC-3	1
4	SC-4	1
5	SC-5	1
6	SC-6	1
7	SC-7	1
8	SC-8	1
10	SC-10	1
12	SC-12	1
15	SC-15	1
20	SC-20	1
25	SC-25	1
30	SC-30	1
35	SC-35	1
40	SC-40	1
45	SC-45	1
50	SC-50	1
60	SC-60	1

Glass Fuse Holders, Fuse Testers, Fuse Pullers & Glass Fuse Kit

Glass Inline Fuse Holders

Protect your precious electronics with this inline fuse holder. The cap seals out moisture to protect the circuit from the harsh environment. Simply splice this into your wiring. Fuses/circuit breakers sold separately. Fuse holders can be purchased individually. **HEB-AA** is UL recognized.

A  B  C  D  E  F 

Wire Size (AWG)	Maximum Volts	Amps	For Fuse Sizes	Connection	Waterproof Ratings	
AGC, 312, 313, GDL, GGC, MDL						
16	32	20	1/4" x 5/8" to 1/4" x 1 1/4"	Wire Leads	N/A	**(A)**GFH
12	32	30	1/4" x 1 1/4"	Wire Leads	N/A	**(B)**GFH-12
18-12	32	30	1/4" x 7/8" to 1/4" x 1 1/4"	Crimp On	N/A	**(C)**GAFH-2
Harsh-Environment						
18-12	32	30	1/4" x 1 1/4"	Crimp On	Waterproof	**(D)**HFB
16-12	250	20	1/4" x 1 1/4"	Crimp On	Water-Resistant	**(E)**HFA
High-Voltage / FNM, FNQ, KLM, KTK, BAF						
12-8	600	30	13/32" x 1 1/2"	Crimp On	Submersible	**(F)**HEB-AA

Panel-Mount Fuse Holder

A  B  C 

Use these panel-mount fuse holders with 1/4" x 1 1/4" glass fuses. Max panel thickness of 0.312" and 0.505" hole diameter.

	Amps	Volts	Connection	Fuse Size	
(A)	15	250	3/16" Quick Connects	1/4" X 1-1/4"	HTB-26I
(B)	15	250	1/4" Quick Connects	1/4" X 1-1/4"	HKP-HH
(C)	30	250	Solder	1/4" X 1-1/4"	HKP

Replacement cap for HKP-HH and HKP #FHP-CAP

Fuse Testers and Pullers

Glass Fuse and Ferrule Fuse Tester



Part # FT-2

Features:
- Test glass fuses and ferrule fuses, up to 24 volt, up to 1 7/8" length
- Green light shines when fuse is good
- Not for use with fuses in fuse panel



Part # FT-3

Features:
- Test automotive, glass tube and ferrule fuses, up to 1 1/4" length
- Adjustable probe for appropriate fuse length
- Replaceable battery
- Not for use with fuses in fuse panel

Fuse Pullers



Part # FP-2

Removes:
- **13/32" to 13/16"** diameter fuses



Part # FP-3

Removes:
- **1" to 1 3/4"** diameter fuses



Part # FP-4

Removes:
- **1 3/4" to 2 1/2"** diameter fuses



Part # FP-6

Removes:
- **0-60A T-Tron** fuses



Part # BK2/FP-A3

Removes
- This 3-way fuse puller removes glass tube and ATC blade fuses



Part # FUSEPULL-M

Removes:
- **1/2" to 1"** diameter fuses

Features:
- 7 1/2" long, with a fully insulated no-slip handle
- 0 to 100 amps at 250 volts and 600 volts, amperage ranges are marked on the handle



Part # FUSEPULL-L

Removes:
- **2 1/2"** diameter fuses

Features:
- 7 1/2" long, with a fully insulated no-slip handle
- 31 to 600 amps at 250 volts and 31 to 400 amps at 600 volts, amperage ranges marked on the handle

Glass Fuse Kit

Glass fuse kit includes 180 pieces. 13 different sizes in a small plastic box, 11"w x 6 3/4"d x 1 3/4"h.



Part # GF-KIT

Kit Contains	Description	Qty.
AGC-2	2 Amp AGC Glass Fuse	15
AGC-3	3 Amp AGC Glass Fuse	15
AGC-5	5 Amp AGC Glass Fuse	15
AGC-7-1/2	7 1/2 Amp AGC Glass Fuse	15
AGC-10	10 Amp AGC Glass Fuse	15
AGC-15	15 Amp AGC Glass Fuse	15
AGC-20	20 Amp AGC Glass Fuse	15

(Cont.)	Description	Qty.
AGC-25	25 Amp AGC Glass Fuse	15
AGC-30	30 Amp AGC Glass Fuse	15
GFA-250	250 Amp GFA Glass Fuse	15
SFE-9	9 Amp SFE Glass Fuse	15
SFE-14	14 Amp SFE Glass Fuse	15
SFE-30	30 Amp SFE Glass Fuse	15

Automotive Fuses



Amps	Color		Pkg. Qty.
ATC/ATO			
Fuse Types: ATC, ATO, AF, 257			
1	Black	ATO-1	25
2	Gray	ATO-2	25
3	Violet	ATO-3	25
4	Pink	ATO-4	25
5	Tan	ATO-5	25
7.5	Brown	ATO-7-1/2	25
10	Red	ATO-10	25
15	Blue	ATO-15	25
20	Yellow	ATO-20	25
25	Clear	ATO-25	25
30	Green	ATO-30	25
35	Blue/Grn	ATO-35	25
40	Amber	ATO-40	25



ATC ID™			
Fuse Types: ATC, ATO, AF, 257			
3	Violet	ATC-3ID	1
5	Tan	ATC-5ID	1
7.5	Brown	ATC-7-1/2ID	1
10	Red	ATC-10ID	1
15	Tan	ATC-15ID	1
20	Blue	ATC-20ID	1
25	Clear	ATC-25ID	1
30	Green	ATC-30ID	1
40	Orange	ATC-40ID	1



Mini/ATM			
Fuse Types: ATM, AF2, 297			
1	Black	MINI-1	25
2	Gray	MINI-2	25
3	Violet	MINI-3	25
4	Pink	MINI-4	25
5	Tan	MINI-5	25
7.5	Brown	MINI-7-1/2	25
10	Red	MINI-10	25
15	Blue	MINI-15	25
20	Yellow	MINI-20	25
25	Clear	MINI-25	25
30	Green	MINI-30	25



Mini/ATM ID™			
Fuse Types: ATM, AF2, 297			
3	Violet	MINI-3ID	1
5	Tan	MINI-5ID	1
7.5	Brown	MINI-7-1/2ID	1
10	Red	MINI-10ID	1
15	Blue	MINI-15ID	1
20	Yellow	MINI-20ID	1
25	Clear	MINI-25ID	1
30	Green	MINI-30ID	1



Amps	Color		Pkg. Qty.
Low-Profile Mini			
Fuse Types: APS, ATT			
2	Gray	MINI-2LP	10
3	Violet	MINI-3LP	10
4	Pink	MINI-4LP	10
5	Tan	MINI-5LP	10
7.5	Brown	MINI-7.5LP	10
10	Red	MINI-10LP	10
15	Blue	MINI-15LP	10
20	Yellow	MINI-20LP	10
25	Clear	MINI-25LP	10
30	Green	MINI-30LP	10



Micro			
Fuse Types: ATR			
5	Tan	MICRO-5	5
7.5	Brown	MICRO-7.5	5
10	Red	MICRO-10	5
15	Blue	MICRO-15	5
20	Yellow	MICRO-20	5
25	Clear	MICRO-25	5
30	Green	MICRO-30	5



Micro 3-Leg			
Fuse Types: ATL, ANK			
5	Tan	MICRO3-5	5
7.5	Brown	MICRO3-7.5	5
10	Red	MICRO3-10	5
15	Blue	MICRO3-15	5



Maxi			
Fuse Types: AF3, APX, 299			
20	Yellow	ATO-MAX-20	1
25	Gray	ATO-MAX-25	1
30	Green	ATO-MAX-30	1
35	Brown	ATO-MAX-35	1
40	Orange	ATO-MAX-40	1
50	Red	ATO-MAX-50	1
60	Blue	ATO-MAX-60	1
70	Tan	ATO-MAX-70	1
80	Clear	ATO-MAX-80	1



Maxi ID™			
Fuse Types: AF3, APX, 299			
20	Yellow	MAX-20ID	1
30	Green	MAX-30ID	1
40	Orange	MAX-40ID	1
50	Red	MAX-50ID	1



Amps	Color		Pkg. Qty.
Maxi ID™	(Cont.)		
Fuse Types: AF3, APX, 299			
60	Blue	MAX-60ID	1
70	Tan	MAX-70ID	1
80	Clear	MAX-80ID	1
100	Violet	MAX-100ID	1



AMG			
80	Red	AMG-80	1
100	Yellow	AMG-100	1
125	Green	AMG-125	1
150	Tan	AMG-150	1
175	White	AMG-175	1
200	Blue	AMG-200	1
225	Gray	AMG-225	1
250	Purple	AMG-250	1
300	White	AMG-300	1
400	Purple	AMG-400	1
450	Gold	AMG-450	1
500	-------	AMG-500	1



AMI			
30	Orange	AMI-030	1
40	Lt/Green	AMI-040	1
50	Red	AMI-050	1
60	Yellow	AMI-060	1
70	Brown	AMI-070	1
80	White	AMI-080	1
100	Blue	AMI-100	1
125	Pink	AMI-125	1
175	-----	AMI-175	1
200	-----	AMI-200	1



FLB			
20	-----	FLB-20	1
30	Pink	FLB-30	1
40	Green	FLB-40	1
50	Red	FLB-50	1
60	Yellow	FLB-60	1
70	Brown	FLB-70	1
80	Black	FLB-80	1
100	Blue	FLB-100	1
120	Gray	FLB-120	1
140	Maroon	FLB-140	1



Amps	Color		Pkg. Qty.
FLD			
30	Pink	FLD-30	1
40	Green	FLD-40	1
50	Red	FLD-50	1
60	Yellow	FLD-60	1
70	Brown	FLD-70	1
80	Black	FLD-80	1
100	Blue	FLD-100	1
120	Gray	FLD-120	1
140	Maroon	FLD-140	1



FLF			
20	Blue	FLF-20	1
30	Pink	FLF-30	1
40	Green	FLF-40	1
50	Red	FLF-50	1
60	Yellow	FLF-60	1



FLG			
50	Red	FLG-50	1
60	Yellow	FLG-60	1
80	Black	FLG-80	1



FLM			
30	Pink	FLM-30	1
40	Green	FLM-40	1
50	Red	FLM-50	1
60	Yellow	FLM-60	1
70	Brown	FLM-70	1
80	Black	FLM-80	1
100	Blue	FLM-100	1
120	Gray	FLM-120	1
140	Maroon	FLM-140	1



FLN			
25	Brown	FLN-25	1
30	Green	FLN-30	1



FLS			
30	Pink	FLS-30	1
40	Green	FLS-40	1

(Continued on following page)

Automotive Fuses, Fuse Holders and Fuse Taps

Automotive Fuses (Continued from previous page)



Amps	Color		Pkg. Qty.
FMX			
20	Blue	FMX-20	1
25	White	FMX-25	1
30	Pink	FMX-30	1
40	Green	FMX-40	1
50	Red	FMX-50	1
60	Yellow	FMX-60	1



FMX-ID™			
20	Blue	FMX-20ID	1
30	Pink	FMX-30ID	1
40	Green	FMX-40ID	1
50	Red	FMX-50ID	1
60	Yellow	FMX-60ID	1



Amps	Color		Pkg. Qty.
FMM			
15	Gray	FMM-15	1
20	Blue	FMM-20	1
25	White	FMM-25	1
30	Pink	FMM-30	1
40	Green	FMM-40	1



Low-Profile FMX			
20	Blue	FMX-20-LP	1
25	White	FMX-25-LP	1
30	Pink	FMX-30-LP	1
40	Green	FMX-40-LP	1
50	Red	FMX-50-LP	1
60	Yellow	FMX-60-LP	1



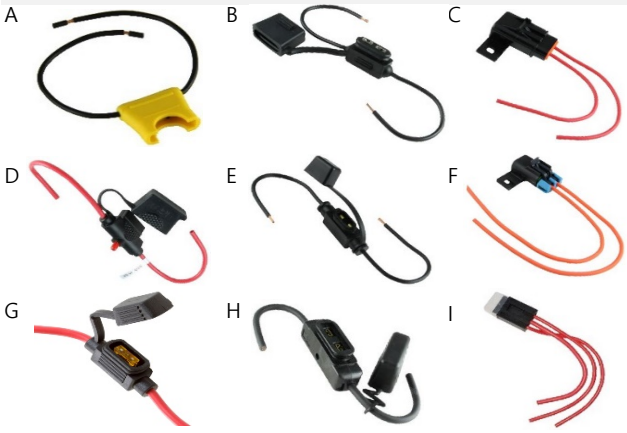
Amps	Color		Pkg. Qty.
MPF			
40,30,30	Pink	MPF-433X	1
40,40,40	Green	MPF-444X	1
50,30,30	Red	MPF-533X	1
50,30,40	Blue	MPF-534X	1
60,30,30	Yellow	MPF-633X	1
MPF2			
30,20,40	Yellow	MPF2-324X	1
40,30,30	Pink	MPF2-433X	1
40,40,40	Green	MPF2-444X	1
50,30,30	Red	MPF2-533X	1
50,30,40	Blue	MPF2-534X	1
50,30,50	Black	MPF2-535X	1
50,50,50	Maroon	MPF2-555X	1



Fuse Holders

Protect your precious electronics with this inline 32 volt fuse holder. The cap seals out moisture to protect the circuit from the harsh environment. Simply splice this into your wiring. Fuses/circuit breakers sold separately. Fuse holders can be purchased individually.

Inline Fuse Holders - 32 VDC



Wire Size (AWG)	Without Cap	With Cap	Mounting Bracket With Cap	LED Indicator With Cap
ATC/ATO				
16	**(A)**FH-ATO	**(B)**FH-ATO-W	**(C)**FH-ATO-16WP	**(D)**ATC-FHID
12	**(A)**FH-ATO-12	**(B)**FH-ATO-12W	**(C)**FH-ATO-12WP	**(D)**FH-ATO-12-LED
Mini/ATM				
18	-------	**(E)**FH-ATOM-18W	-------	-------
16	-------	**(E)**FH-ATOM-16W	**(F)**FH-ATOM-16WP	**(D)**ATM-FHID
12	-------	**(E)**FH-ATOM-12W	**(F)**FH-ATOM-12WP	-------
Mini/ATM Low-Profile				
18	-------	**(G)**FH-LPM-18W	-------	-------
Maxi, 299, AF3, APX, Max				
6	-------	**(H)**MAXI-H	-------	**(D)**MAX-FHID
Micro3, ATL				
14		**(I)**FH-MICRO3-14W*		

* Also has a 12 gauge ground

Maxi Fuse Holder

Two screw posts allow you to connect your wire with a fork/ring terminal. Max 60 amps. Mounting hole in holder. Fuses sold separately.



Part # MAXI-BLOCK

AMG Fuse Holder

Has two posts to connect your wiring to. Supports 8-2 gauge wire. 300 amps. AMG fuses sold separately.



Part # HMEG

Water Resistant AMG Fuse Holder

Fuse holder base and cover are securely sealed to create water resistant protection. 500 amps. AMG fuses sold separately.



Part # CH-880014

ANN/ANL Fuse Holder

Commonly found on fork lifts, fuse block supports ANN and ANL fuses. 800 amps. Fuses sold separately.



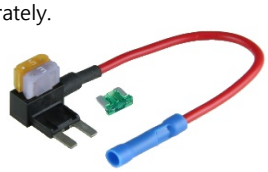
Part # SFR

Add-A-Fuse Fuse Taps

This fuse holder allows you to replace one fuse with two fuses which allows you to protect an additional circuit. The primary circuit protects the existing circuit wired into the panel. The auxiliary fuse protects the 16 gauge wire that comes off this unit that is butt spliced (included) to another wire. The maximum combined current for both circuits is 30 amps. The maximum for the primary circuit is 25 amps and the maximum for the auxiliary circuit is 10 amps. Fuse/circuit breakers sold separately.



ATC/ATO



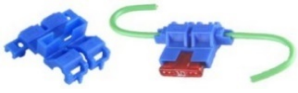
Mini/ATM Low-Profile



Micro3/ATL

Fuse Type		Pkg. Qty.
ATC/ATO	FH-ATO-10A	1
Mini/ATM	FH-ATOM-10A	1
Mini/ATM Low-Profile	FH-ATMLP-10A	1
Micro/ATR	FH-MICRO-10A	1
Micro3/ATL	FH-MICRO3-10A	1

Easy-Install Inline Fuse Tap



Part #ATO-TAP

Rather than splicing, simply hand squeeze this tap onto your wire and add an ATC / ATO fuse to protect your electronics. Fuses/circuit breakers sold separately.

Add a Circuit Fuse Taps

These fuse taps fit over the fuse to create a non-fused circuit.

A 

B 

Fuse Type		Pkg. Qty.
(A)ATC/ATO	ATC-TAP	25
(B) Mini/ATM	ATM-TAP	10

Fuse Panels

Surface-Mount Fuse Panels

Commonly used to add new electronics in mobile applications, these surface-mount fuse panels are cost effective and make the installation process easy.

The **standard**, **standard with cover**, and the **LED with cover** have a common feed that provides power to all of the circuits with just one wire from battery. Maximum 60 amps per panel and maximum 30 amps per circuit.

The **compact with cover** fuse panels offer a smaller footprint. Maximum 15 amps per circuit. The maximum amps per panel are: 30 amps for 4 position, 45 amps for 6 position, 60 amps for 8 position, and 90 amps for 10 position. The compact fuse panels have a IPX4 splash-proof rating.

Fuses/circuit breakers sold separately.







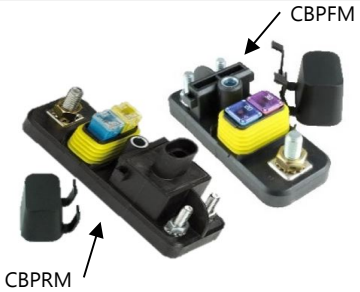


	ATC/ATO			Mini/ATM			Micro/ATR	Mini Low Profile/APS
Positions	**Standard**	**LED w/Cover**	**Compact w/Cover**	**Standard w/Cover**	**LED w/Cover**	**Compact w/Cover**	**Compact w/Cover**	**Standard w/Cover**
4	15600-04-20	FB-ATO-4-LED	FBC-ATO-4	FB-ATM-4	FB-ATM-4-LED	FBC-ATM-4	FBC-MICRO-4	-------
6	FB-ATO-6	FB-ATO-6-LED	FBC-ATO-6	FB-ATM-6	FB-ATM-6-LED	FBC-ATM-6	FBC-MICRO-6	-------
8	FB-ATO-8	-------	FBC-ATO-8	-------	-------	FBC-ATM-8	FBC-MICRO-8	-------
10	FB-ATO-10	FB-ATO-10-LED	FBC-ATO-10	FB-ATM-10	FB-ATM-10-LED	FBC-ATM-10	FBC-MICRO-10	FB-MINI-LP-10
14	FB-ATO-14	-------	-------	-------	-------	-------	-------	-------

High Amperage 2 Position Low-Profile FMX Fuse Panel

High amperage, two position fuse block. Made for high vibration rough duty applications. Waterproof. One common feed powers two fuse protected circuits. Measures 3.75" x 1.5" x 1.625". Uses FMX 20 to 60 amp fuses.

Fuses sold separately.



Description	FMX Fuse Positions	Pigtails
Power Fuse Panel	Two positions for separate circuits	CBPFM
Power Relay Panel	Two positions, one protects relay and the other is a single circuit in-line fuse	CBPRM

20 Position Mini/ATM Fuse Panel

For large scale electrical installations in mobile applications, these surface mount fuse panels give you space for 20 circuits. IP66 rated housing and cover provide a weather-tight enclosure for harsh environments. Measures 3.4" x 4" x 2.4", including the cover. Fuses/circuit breakers sold separately.

Preassembled pigtails for OEM mini/ATM fuse panels can be purchased in any color or wire size in 6" lengths and simply inserted into the back of the panel on the RTMF-DC. Any circuit not being used should be plugged with Part #12010300 cavity plug to ensure weather proofing.



RTMF-DC

Description	Pigtails
20 Position fuse block with no cover	RTMF
20 Position fuse block with shallow cover	RTMF-SC
20 Position fuse block with deep cover	RTMF-DC

Preassembled Pigtails for OEM Mini/ATM Fuse Panels (RTMF-DC)

Wire Size (AWG)	Amperage	Wire Color	Length	Pigtails	Terminals Only	Tools
22	10	Any	6"	280TS-21PIG	12110846	12155975
18	15	Any	6"	280TS-17PIG	12110847	12155975
16	20	Any	6"	280TS-15PIG	12129409	12155975
14	25	Any	6"	280TS-13PIG	12110845	15155975
12	30	Any	6"	280TS-11PIG	12110853	15155975



Automotive Fuse Kits & All-in-One Fuse Kits

Automotive Fuse Kits

ATC/ATO Fuse Kit

ATO/ATC fuses kit includes 180 pieces. 5 different sizes in a 7" x 3 3/4" plastic box.



Part #
ATO-KIT

Kit Contains	Description	Qty.
ATO-1	1 Amp Black ATC/ATO Fuses	15
ATO-2	2 Amp Gray ATC/ATO Fuses	15
ATO-3	3 Amp Violet ATC/ATO Fuses	15
ATO-5	5 Amp Tan ATC/ATO Fuses	15
ATO-7-1/2	7.5 Amp Brown ATC/ATO Fuses	15
ATO-10	10 Amp Red ATC/ATO Fuses	15
ATO-15	15 Amp Blue ATC/ATO Fuses	15
ATO-20	20 Amp Yellow ATC/ATO Fuses	15
ATO-25	25 Amp Clear ATC/ATO Fuses	15
ATO-30	30 Amp Green ATC/ATO Fuses	15
ATO-40	40 Amp Amber ATC/ATO Fuses	15
ATO-A	Adapter	15

Micro Fuse Kit

Space-saving micro-fuse link kit includes 136 pieces total. 16 different sizes, and a fuse puller in a plastic box.



Part #
MICRO FUSE KIT

Kit Contains	Description	Qty.
MICRO-5	5 Amp Tan ATR Fuses	10
MICRO-7.5	7.5 Amp Brown ATR Fuses	10
MICRO-10	10 Amp Red ATR Fuses	10
MICRO-15	15 Amp Blue ATR Fuses	10
MICRO-20	20 Amp Yellow ATR Fuses	10
MICRO-25	25 Amp Clear ATR Fuses	10
MICRO-30	30 Amp Green ATR Fuses	10
MICRO3-5	5 Amp Tan ATL Fuses	10
MICRO3-7.5	7.5 Amp Brown ATL Fuses	10
MICRO3-10	10 Amp Red ATL Fuses	10
MICRO3-15	15 Amp Blue ATL Fuses	10
FMM-15	15 Amp Gray FMM Fuses	5
FMM-20	20 Amp Blue FMM Fuses	5
FMM-25	25 Amp White FMM Fuses	5
FMM-30	30 Amp Pink FMM Fuses	5
FMM-40	40 Amp Green FMM Fuses	5

Fuse Link Kit

Fuse link kit includes 24 pieces total. 13 different sizes in a 11" x 6 3/4" x 1 3/4" plastic box.



Part #
FUSE LINK KIT

Kit Contains	Description	Qty.
FLF-20	20 Amp Blue FLF Fuses	2
FMX-20	20 Amp Blue FMX Fuses	2
FLF-30	30 Amp Pink FLF Fuses	2
FLS-30	30 Amp Pink FLS Fuses	2
FMX-30	30 Amp Pink FMX Fuses	2
FLF-40	40 Amp Green FLF Fuses	2
FLS-40	40 Amp Green FLS Fuses	2
FMX-40	40 Amp Green FMX Fuses	2
FLF-50	50 Amp Red FLF Fuses	2
FMX-50	50 Amp Red FMX Fuses	2
FLF-60	60 Amp Yellow FLF Fuses	2
FLB-80	80 Amp Black FLB Fuses	1
FLB-100	100 Amp Blue FLB Fuses	1

Mini Low-Profile Fuse Kit

Mini Low-Profile fuse kit includes 50 fuses. 10 different sizes in a 7" x 3 3/4" plastic box.



Part #
MINI LP KIT

Kit Contains	Description	Qty.
MINI-2LP	2 Amp Gray/APS Fuse	5
MINI-3LP	3 Amp Violet/APS Fuse	5
MINI-4LP	4 Amp Pink/APS Fuse	5
MINI-5LP	5 Amp Tan/APS Fuse	5
MINI-7.5LP	7.5 Amp Brown/APS Fuse	5
MINI-10LP	10 Amp Red/APS Fuse	5
MINI-15LP	15 Amp Blue/APS Fuse	5
MINI-20LP	20 Amp Yellow/APS Fuse	5
MINI-25LP	25 Amp Clear/APS Fuse	5
MINI-30LP	30 Amp Green/APS Fuse	5

Maxi Fuse Kit

Maxi fuse kit includes 25 pieces. 5 different sizes in a 7" x 3 3/4" plastic box.



Part #
MAXI-KIT

Kit Contains	Description	Qty.
ATO-MAX-20	20 Amp Yellow Maxi Fuses	5
ATO-MAX-30	30 Amp Green Maxi Fuses	5
ATO-MAX-40	40 Amp Orange Maxi Fuses	5
ATO-MAX-50	50 Amp Red Maxi Fuses	5
ATO-MAX-60	60 Amp Blue Maxi Fuses	5

Mini-ATM Fuse Kit

Mini-ATM fuse kit includes 80 pieces. 7 different sizes in a 7" x 3 3/4" plastic box.



Part #
MINI-ATO-KIT

Kit Contains	Description	Qty.
MINI-3	3 Amp Violet Mini/ATM Fuses	10
MINI-5	5 Amp Tan Mini/ATM Fuses	10
MINI-10	10 Amp Red Mini/ATM Fuses	10
MINI-15	15 Amp Blue Mini/ATM Fuses	10
MINI-20	20 Amp Yellow Mini/ATM Fuses	10
MINI-25	25 Amp Clear Mini/ATM Fuses	10
MINI-30	30 Amp Green Mini/ATM Fuses	10
ATO-AM	Fuse Tape for Mini Blade Fuses	10

All-in-One Automotive Fuse Kits



FUSE KIT 5



FUSE KIT 10



These automotive fuse kits come with a caddy that easily allows you to access all of the most common fuses you may need in one single carrier. The caddies have secure latches and clear trays for easy identification.

FUSE KIT 5 includes the five trays in the first column.

FUSE KIT 10 includes all 10 trays in both columns.

ATC/ATO Fuse Tray - Included in FUSE KIT 5 & 10
Contains: ATO-3, 4, 5, 7-1/2, 10, 15, 20, 25, 30, 35, & 40.

Mini-ATM Fuse Tray - Included in FUSE KIT 5 & 10
Contains: Mini ATM-2, 3, 4, 5, 7-1/2, 10, 15, 20, 25, & 30.

Mini Low-Profile Fuse Tray - Included in FUSE KIT 5 & 10
Contains: Low-Profile APS-2, 3, 4, 5, 7-1/2, 10, 15, 20, 25, & 30.

Maxi Fuse Tray - Included in FUSE KIT 5 & 10
Contains: Maxi ATO-20, 30, 40, 50, 60, 70, 80, & 100.

FMX Fuse Tray - Included in FUSE KIT 5 & 10
Contains: Maxi FMX-20, 30, 40, 50, & 60.

FLF and FLS Fuse Tray - Included in FUSE KIT 10
Contains: FLF-20, 30, 40, 50, & 60. Mini FLS-30, & 40.

FMM and FMX Low-Profile Fuse Tray - Included in FUSE KIT 10
Contains: FMM-15, 20, 25, 30, & 40. Low-Profile FMX-20, 25, 30, 40, 50, & 60.

Micro Fuse Tray - Included in FUSE KIT 10
Contains: Micro ATR-5, 7.5, 10, 15, 20, 25, & 30. 3-Leg ATL-5, 7.5, 10, & 15.

FLB, FLD, and FLM Fuse Tray - Included in FUSE KIT 10
Contains: Bolt-Mount FLB-80, 140. FLD-40 & 80. FLM-30, 60, 80, 100, & 120.

AMG and AMI Fuse Tray - Included in FUSE KIT 10
Contains: Stud-Mount AMG-80, 100, 125, 150, 175, 200, 225, 250, & 300. AMI-40, 50, & 80.

High Amp Circuit Breakers

These circuit breakers offer high amperage protection. Also can be used as an on/off switch. The **surface mount** circuit breakers are waterproof.

The **extra lug clearance** circuit breakers offer extra clearance between the stud and body.

These type III circuit breakers reset with a push of a button. Sold individually.

Surface Mount





	Standard			Extra Lug Clearance		
Amps	Volts	Stud Size		Volts	Stud Size	
25	6-42	1/4-28	CB185-25	6-48	M6 (1/4")	CB285-25
30	6-42	1/4-28	CB185-30	6-48	M6 (1/4")	CB285-30
35	6-42	1/4-28	CB185-35	6-48	M6 (1/4")	CB285-35
40	6-42	1/4-28	CB185-40	6-48	M6 (1/4")	CB285-40
50	6-42	1/4-28	CB185-50	6-48	M6 (1/4")	CB285-50
60	6-42	1/4-28	CB185-60	6-48	M6 (1/4")	CB285-60
70	6-42	1/4-28	CB185-70	6-48	M6 (1/4")	CB285-70
80	6-42	1/4-28	CB185-80	6-48	M6 (1/4")	CB285-80
90	6-42	1/4-28	CB185-90	6-48	M6 (1/4")	CB285-90
100	6-42	1/4-28	CB185-100	6-48	M6 (1/4")	CB285-100
110	6-42	1/4-28	CB185-110	6-48	M6 (1/4")	CB285-110
120	6-42	1/4-28	CB185-120	6-48	M6 (1/4")	CB285-120
135	6-42	1/4-28	CB185-135	6-48	M6 (1/4")	CB285-135
150	6-42	1/4-28	CB185-150	6-48	M6 (1/4")	CB285-150
180	6-42	3/8-16	CB185-180	-----	-------	-------
200	6-42	3/8-16	CB185-200	-----	-------	-------
250	6-42	3/8-16	CB185-250	-----	-------	-------

Panel Mount





	Standard			Commercial		
Amps	Volts	Stud Size		Volts	Stud Size	
25	6-42	1/4-28	CB185P-25	6-48	M6 (1/4")	CB285P-25S
30	6-42	1/4-28	CB185P-30	6-48	M6 (1/4")	CB285P-30S
35	6-42	1/4-28	CB185P-35	6-48	M6 (1/4")	CB285P-35S
40	6-42	1/4-28	CB185P-40	6-48	M6 (1/4")	CB285P-40S
50	6-42	1/4-28	CB185P-50	6-48	M6 (1/4")	CB285P-50S
60	6-42	1/4-28	CB185P-60	6-48	M6 (1/4")	CB285P-60S
70	6-42	1/4-28	CB185P-70	6-48	M6 (1/4")	CB285P-70S
80	6-42	1/4-28	CB185P-80	6-48	M6 (1/4")	CB285P-80S
90	6-42	1/4-28	CB185P-90	6-48	M6 (1/4")	CB285P-90S
100	6-42	1/4-28	CB185P-100	6-48	M6 (1/4")	CB285P-100S
110	6-42	1/4-28	CB185P-110	6-48	M6 (1/4")	CB285P-110S
120	6-42	1/4-28	CB185P-120	6-48	M6 (1/4")	CB285P-120S
135	6-42	1/4-28	CB185P-135	6-48	M6 (1/4")	CB285P-135S
150	6-42	1/4-28	CB185P-150	6-48	M6 (1/4")	CB285P-150S

Corrosive Environment Circuit Breakers

Created for the marine industry, the corrosive-environment circuit breakers offer low voltage and high amperage protection in the most demanding environments. Weatherproof.

These type III circuit breakers reset with a push of a button. Sold individually.

Surface Mount



Amps	Volts	Stud Size	
25	6-48	5/16-18	CB-187F-25
30	6-48	5/16-18	CB-187F-30
35	6-48	5/16-18	CB-187F-35
40	6-48	5/16-18	CB-187F-40
50	6-48	5/16-18	CB-187F-50
60	6-48	5/16-18	CB-187F-60
70	6-48	5/16-18	CB-187F-70
80	6-48	5/16-18	CB-187F-80
-----	-------	-------	-------
100	6-48	5/16-18	CB-187F-100
110	6-48	5/16-18	CB-187F-110
120	6-48	5/16-18	CB-187F-120
135	6-48	5/16-18	CB-187F-135
150	6-48	5/16-18	CB-187F-150
200	6-48	5/16-18	CB-187F-200

Panel Mount



Amps	Volts	Stud Size	
25	6-48	5/16-18	CB-187P-25
30	6-48	5/16-18	CB-187P-30
35	6-48	5/16-18	CB-187P-35
40	6-48	5/16-18	CB-187P-40
50	6-48	5/16-18	CB-187P-50
60	6-48	5/16-18	CB-187P-60
70	6-48	5/16-18	CB-187P-70
80	6-48	5/16-18	CB-187P-80
90	6-48	5/16-18	CB-187P-90
100	6-48	5/16-18	CB-187P-100
110	6-48	5/16-18	CB-187P-110
120	6-48	5/16-18	CB-187P-120
135	6-48	5/16-18	CB-187P-135
150	6-48	5/16-18	CB-187P-150
200	6-48	5/16-18	CB-187P-200

Circuit Breakers

Automotive Circuit Breakers

ATC/ATO

The metallic (silver) circuit breakers are suitable replacements for ATO, ATC, AF, 257, and APR circuit breakers and fuses. The type II and type III circuit breakers are thin, allowing them to fit in tighter spaces. Sold individually.

Auto-Reset

These type I circuit breakers will automatically reset after overload. 6-12 volts.



Amps		Amps		Amps	
6	211-6	15	211-15	30	211-30
8	211-8	20	211-20	40	211-40
10	211-10	25	211-25		

Manual-Reset Ultra Thin

These type III circuit breakers reset with a push of a button. 12-24 volts.



Amps		Amps		Amps	
7.5	CB-223-7-1/2	15	CB-223-15	25	CB-223-25
10	CB-223-10	20	CB-223-20	30	CB-223-30

Power-Off Reset Ultra Thin

These type II circuit breakers will reset after power is turned off and back on. 12 volts.



Amps		Amps		Amps	
10	CB-222-10	20	CB-222-20	30	CB-222-30
15	CB-222-15	25	CB-222-25		

Low-Profile Manual-Reset

These type III circuit breakers reset with a push of a button. 12-24 volts.



Amps	Color		Amps	Color	
5	Tan	CB-227-5	15	Blue	CB-227-15
6	Green	CB-227-6	20	Yellow	CB-227-20
7.5	Brown	CB-227-7-1/2	25	White	CB-227-25
10	Red	CB-227-10	30	Green	CB-227-30

Mini/ATM

The gold **auto-reset,** type I and **manual-reset**, type III circuit breakers are suitable replacements for Mini, ATM, AF2, 297, and APM circuit breakers and fuses. Sold individually.

Auto-Reset



The type I circuit breakers will automatically reset after overload. 12 volts.

Amps		Amps	
7.5	211M-7-1/2	20	211M-20
10	211M-10	25	211M-25
15	211M-15	30	211M-30

Manual-Reset



The type III circuit breakers reset with a push of a button. 12-24 volts.

Amps	Color		Amps	Color	
5	Tan	211MR-5	20	Yellow	211MR-20
7.5	Brown	211MR-7.5	25	White	211MR-25
10	Red	211MR-10	30	Green	211MR-30
15	Blue	211MR-15			

Mini Low-Profile Manual-Reset Ultra Thin

The mini low-profile manual-reset, type III are suitable replacements for Mini Low-Profile, APS, and ATT circuit breakers and fuses. Reset with a push of a button. 12-48 volts. Sold individually.



Amps	Color	
5	Tan	211MRLP-5
7.5	Brown	211MRLP-7.5
10	Red	211MRLP-10
15	Blue	211MRLP-15

Maxi

These metallic (silver) circuit breakers are suitable replacements for Maxi, Max, AF3, 299, and APX circuit breakers and fuses. 12 volts. Sold individually. The **auto-reset**, type I circuit breakers will automatically reset after overload. The **power-off reset**, type II circuit breakers will reset after power is turned off and back on.



Auto-Reset

Amps		Amps		Amps	
10	211MAXI-10	25	211MAXI-25	40	211MAXI-40
15	211MAXI-15	30	211MAXI-30	50	211MAXI-50
20	211MAXI-20	35	211MAXI-35		

Power-Off Reset

Amps		Amps	
10	212MAXI-10	25	212MAXI-25
15	212MAXI-15	30	212MAXI-30
20	212MAXI-20		

Mack Plug In



Blades are 1" apart to fit Mack breaker format. These type II circuit breakers will reset after power is turned off and back on. 6-12 volts. Sold individually.

Amps		Amps	
10	CB-MK-10	25	CB-MK-25
15	CB-MK-15	30	CB-MK-30
20	CB-MK-20		

Circuit Breakers to Replace 1/4"X1-1/4" Glass Fuses



These circuit breakers are suitable replacements for 1/4" X 1-1/4" AGC, MDL, GDL, GGC, 312, and 313 glass fuses. These type II circuit breakers will reset after power is turned off and back on. 6-12 volts. Sold Individually.

Amps		Amps	
6	CBF-6	25	CBF-25
10	CBF-10	30	CBF-30
15	CBF-15	35	CBF-35
20	CBF-20	40	CBF-40

Low-Profile Circuit Breakers to Replace 1/4"X1-1/4" Glass Fuses



The 6-12 volt circuit breakers are suitable replacements for 1/4" X 1-1/4" AGC, MDL, GDL, GGC, 312, and 313 glass fuses. The low profile allows them to fit in tight spaces. These type II circuit breakers will reset after power is turned off and back on. Sold Individually.

Amps		Amps	
10	FO-CB-10	25	FO-CB-25
15	FO-CB-15	30	FO-CB-30
20	FO-CB-20	40	FO-CB-40

(Continued on following page)

Mount for Stud Style Circuit Breakers



These mounts allow you to easily mount stud style circuit breakers (CB-10 thru CB-50). Mounts two circuit breakers with the studs up (turtle).

Sold Individually.

Number of Circuits It Will Hold	Manufacturer	
2	Cole Hersee	CH-30090-2
2	Pollak	PLK-52-240P
8	Cole Hersee	CH-30090-8
8	Pollak	PLK-52-243P

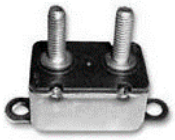
Automotive Circuit Breakers (Continued from previous page)

Stud Style

These metallic (silver) stud style circuit breakers allow you to easily attach your wire to these circuit breakers. **Standard** body measures 1.3" lg. X 0.8" wd. X 0.6" ht. and has two 10-32 threaded studs. **Narrow-profile** body measures 1.1" lg. X 0.4" wd. X 0.6" ht. and has two 10-32 threaded studs. The narrow profile allows you to fit more in tight spaces. These type I circuit breakers will automatically reset after overload. Sold individually.

Metal Housings





	No Bracket				Crosswise Bracket			Lengthwise Bracket	
Amps	Standard	Economy	Cole Hersee	Cole Hersee/Sealed	Standard	Economy	Cole Hersee	Standard	Cole Hersee
6-12 Volts									
8	CBC-8	-------	-------	-------	CBC-8B	-------	-------	-------	-------
10	CBC-10	CB-10	CH-30056-10	-------	CBC-10B	CBP-10	CH-30128-10	CBC-10HB	CH-30055-10
15	CBC-15	CB-15	CH-30056-15	CH-30137-15	CBC-15B	CBP-15	CH-30128-15	CBC-15HB	CH-30055-15
20	CBC-20	CB-20	CH-30056-20	CH-30137-20	CBC-20B	CBP-20	CH-30128-20	CBC-20HB	CH-30055-20
25	CBC-25	CB-25	CH-30056-25		CBC-25B	-------	-------	CBC-25HB	CH-30055-25
30	CBC-30	CB-30	CH-30056-30	CH-30137-30	CBC-30B	CBP-30	CH-30128-30	CBC-30HB	CH-30055-30
35	CBC-35	-------	-------	-------	CBC-35B	-------	-------	-------	-------
40	CBC-40	CB-40	CH-30056-40	-------	CBC-40B	CBP-40	CH-30128-40	CBC-40HB	CH-30055-40
50	CBC-50	CB-50	CH-30056-50	-------	CBC-50B	CBP-50	-------	CBC-50HB	CH-30055-50
24 Volts									
10	-------	-------	CH-30171-10	-------	-------	-------	-------	-------	-------
15	-------	-------	CH-30171-15	-------	-------	-------	-------	-------	CH-30172-15
20	-------	-------	CH-30171-20	-------	-------	-------	-------	-------	CH-30172-20
30	-------	-------	-------	-------	-------	-------	-------	-------	CH-30172-30

Non-Corrosive Plastic Housings




	Crosswise Bracket		Lengthwise Bracket	
Amps	Standard	Economy	Standard	Economy
15	CBP-15BA	-------	CBP-15B	-------
20	CBP-20BA	-------	CBP-20B	-------
25	CBP-25BA	-------	CBP-25B	-------
30	CBP-30BA	-------	CBP-30B	-------
35	-------	-------	CBP-35B	-------
40	CBP-40BA	-------	CBP-40B	-------
50	CBP-50BA	-------	CBP-50B	-------

Narrow Profile Metal Housings




	Narrow-No Bracket		Narrow-With Bracket	
Amps	Standard	Economy	Standard	Economy
6	CBS-6	-------	-------	-------
10	CBS-10	CBS-10-CEC	CBS-MP10	-------
15	CBS-15	CBS-15-CEC	CBS-MP15	-------
20	CBS-20	CBS-20-CEC	CBS-MP20	-------
25	CBS-25	CBS-25-CEC	CBS-MP25	-------
30	CBS-30	CBS-30-CEC	CBS-MP30	-------
40	CBS-40	CBS-40-CEC	CBS-MP40	-------

Insulated Stud Style with Lead Wires

These stud style circuit breakers have a PVC coated body and leads, for weather protection. Has 10" wire loop and that you cut, strip and splice into a circuit. These type I circuit breakers will automatically reset after overload.




Lengthwise Bracket

Amps	Wire Lead Gauge	
20	15	CH-30062-20
30	13	CH-30062-30

No Bracket, Snap-In

Amps	Wire Lead Gauge	
10	17	CH-30063-10
20	15	CH-30063-20
30	13	CH-30063-30

Switches

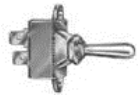
Low Voltage Automotive Switches (We stock **Cole Hersee** and **Pollak**)

SPST On/Off



Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
15	12	Screw (2)	1/2"	Toggle		Indicator Plate	2102
50	12	Screw (2)	1/2"	Toggle		Indicator Plate	2150
50	12	Blade (2)	1/2"	Toggle		Indicator Plate	2250
15	12	Screw (2)	1/2"	Push/Pull		Ivory Knob	1811
75	6-28	Screw (2)	5/8"	Push/Pull		High Amperage	1820 SWITCH
10	12	12" Leads	5/8"	Push/Pull		PVC Coating	CH-M-606
25	12	Screw (2)	15/32"	Toggle	Cole Hersee	"O" Ring Seal in Stem	CH-5520
25	12	Screw (2)	15/32"	Toggle	Cole Hersee		CH-5582
20	12	Screw (2)	15/32"	Toggle	Pollak		PLK-34-571P
25	12	Blade (2)	15/32"	Toggle	Cole Hersee	"O" Ring Seal in Stem, Weatherproof	CH-55014-05
25	12	Blade (2)	15/32"	Toggle	Cole Hersee		CH-55014
20	12	Blade (2)	15/32"	Toggle	Pollak		PLK-34-571QP
25	12	Blade (3)	1.45" x .83"	Rocker	Cole Hersee	Red Pilot Light	CH-58328-04
25	12	8" Leads	15/32"	Toggle	Cole Hersee	Plasticized Housing, Weatherproof "O" Ring Seal in Stem	CH-5582-10
20	12	8" Leads	15/32"	Toggle	Pollak	Plasticized Housing, with 8" Coated Leads	PLK-34-571C
20	12	Blade (3)	1/2"	Toggle		Amber Pilot Light in Handle	2012A
20	12	Blade (3)	1/2"	Toggle		Red Pilot Light in Handle	2012R
20	12	Blade (2)	1/2"	Rocker		Red Pilot Light	2033
20	12	Blade (3)	1/2" x 1"	Rocker		Amber Pilot Light	ROCK/PILOT-A
20	12	Blade (3)	1/2" x 1"	Rocker		Blue Pilot Light	ROCK/PILOT-B
20	12	Blade (3)	1/2" x 1"	Rocker		Green Pilot Light	ROCK/PILOT-G
20	12	Blade (3)	1/2" x 1"	Rocker		Red Pilot Light	ROCK/PILOT-R
-------		-------	-------	-------		Easy Snap-On Housing, Surface Mounting	MTG/HOUSE

SPST Momentary



Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
20	6-12	Blade (2)	15/32"	Toggle		Momentary On/Off, Heavy duty	CH-551001
10	12	Screw (2)	5/8"	Push Button		On/Momentary Off, Weather Proof, Sealed Case, "O" Ring Seal in Stem,	CH-90002
10	12	Screw (2)	5/8"	Push Button		Identical to Above, Plus Sealed and Silver Contacts, Plasticized	CH-90002-01
50	12		5/8"	Push Button		Off/Momentary On, Plastic Push Button, Rubber Cap	90031
25	12	Screw (2)	15/32"	Toggle	Cole Hersee	Off/Momentary On, "O" Ring in Stem	CH-55020
20	12	Screw (2)	15/32"	Toggle	Pollak	Off/Momentary On, Extra Heavy Duty	PLK-34-570P
25	12	8"Wires (2)	15/32"	Toggle	Cole Hersee	Off/Momentary On, Extra Heavy Duty Weather Sealed "O" Ring in Stem, All Dipped in PVC Coating	CH-55020-04
35	12	Screw (2)	5/8"	Push Button	Cole Hersee	Off/Momentary On, Weather Resistant, Plastic Push Button, Rubber Cap	CH-90030
35	12	Screw (2)	5/8"	Push Button	Cole Hersee	Off/Momentary On, Marine Construction, Plastic Push Button, Rubber Cap	CH-M-626-02
70	12	Screw (2)	5/8"	Push Button	Cole Hersee	Off/Momentary On, Weather Resistant, Plastic Push Button, Rubber Cap	PLK-24-360P

(Continued on following page)

Low Voltage Automotive Switches (Continued from previous page) (We stock **Cole Hersee** and **Pollak**)

SPDT Single Power Source to One of Two Circuits

Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
50	12	Screw (3)	1/2"	Toggle	-------	On/Off/On, Chrome Handle, Silver Contacts	2159
50	12	Screw (3)	1/2"	Toggle	-------	Momentary On/Off/Momentary On, Chrome Handle, Silver Contacts	2160
25	12	Screw (3)	15/32"	Toggle	Cole Hersee	On/On, Chrome Button/Face Nut	CH-5584
20	12	Screw (3)	15/32"	Toggle	Pollak	On/On, Chrome Button/Face Nut	PLK-34-572P
25	12	Blade (3)	15/32"	Toggle	Cole Hersee	On/Off/On, Extra Heavy Duty	CH-55016
20	12	Blade (3)	15/32"	Toggle	Pollak	On/Off/On, Extra Heavy Duty	PLK-34-573QP
25	12	Blade (3)	15/32"	Toggle	Cole Hersee	On/On, Chrome Button/Face Nut	CH-55015
20	12	Blade (3)	15/32"	Toggle	Pollak	On/On, Chrome Button/Face Nut	PLK-34-572QP
30	6-12	Screw (3)	15/32"	Toggle	Cole Hersee	On/Off/On, Extra Heavy Duty Silver Contacts, Die Cast Housing	CH-551842
25	12	Blade (4)	1.45" x 0.83"	Rocker	Cole Hersee	On/Off/On, 2 Red Dual Pilot Lights Weather Resistant, Silver Contacts, Brass Blade Terminals	CH-58327-06

SPDT Momentary

Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
25	12	Screw (3)	15/32"	Toggle		On/Off/Momentary On,	CH-55088
25	12	Blade (3)	15/32"	Toggle	Cole Hersee	Momentary On/Off/Momentary On, Silver Contacts, Face Nut	CH-55033-01
20	12	Blade (3)	15/32"	Toggle	Pollak	Momentary On/Off/Momentary On, Face Nut	PLK-34-575QP
25	12	Screw (3)	15/32"	Toggle	Cole Hersee	Momentary On/Off/Momentary On, Face Nut, "O" Ring Seal in Stem	CH-55021-04
15	24						
10	36						
25	12	8"Wires (2)	15/32"	Toggle	Cole Hersee	Momentary On/Off/Momentary On, Face Nut, "O" Ring Seal in Stem, 8" Leads, All Dipped in PVC Coating	CH-55021-07

DPST Two Separate Circuits Turned On/Off at One Time

Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
25	12	Screw (4)	15/32"	Toggle	Cole Hersee	On/Off, Heavy Duty, Silver Contacts	CH-5588
20	12	Screw (4)	15/32"	Toggle	Pollak	On/Off, Heavy Duty, Silver Contacts	PLK-34-574P
25	12	Blade (4)	15/32"	Toggle	Cole Hersee	On/Off, Heavy Duty, Silver Contacts	CH-55017
20	12	Blade (4)	15/32"	Toggle	Pollak	On/Off, Heavy Duty, Silver Contacts	PLK-34-574QP

DPDT Two Power Sources Used to Power One of Two Pairs of Circuits

Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
25	12	Screw (6)	15/32"	Toggle	Cole Hersee	On/On	CH-5590
25	12	Blade (6)	15/32"	Toggle	Cole Hersee	On/On	CH-55018
20	12	Blade (6)	15/32"	Toggle	Pollak	On/On	PLK-34-576QP
25	12	Screw (6)	15/32"	Toggle	Cole Hersee	On/Off/On	CH-5592
20	12	Screw (6)	15/32"	Toggle	Pollak	On/Off/On	PLK-34-577P
25	12	Blade (6)	15/32"	Toggle	Cole Hersee	On/Off/On	CH-55019
20	12	Blade (6)	15/32"	Toggle	Pollak	On/Off/On	PLK-34-577QP
25	12	Blade (6)	15/32"	Toggle	Cole Hersee	On/Off/On, Long Handle	CH-55057

DPDT Momentary

Amps	Volts	Terminals	Mounting Hole	Switch Type	Mfg.	Features	
25	12	Screw (6)	15/32"	Toggle	Cole Hersee	Momentary On/Off/Momentary On	CH-55054
20	12	Screw (6)	15/32"	Toggle	Pollak	Momentary On/Off/Momentary On	PLK-34-580P
25	12	Blade (6)	15/32"	Toggle	Cole Hersee	Momentary On/Off/Momentary On	CH-55065-03
20	12	Blade (6)	15/32"	Toggle	Pollak	Momentary On/Off/Momentary On	PLK-34-580QP

Pigtails

Terminals		
Pigtail to Fit CH-7762		CH-30155

Switches & Solenoids

Solenoids, 12 Volt (We stock **Cole Hersee** and **Pollak**)

Continuous Duty - SPST, Normally Open, One Circuit: Off/On

	Amps	Volts	Bracket Mounting Holes	Mfg.	Features	
	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads	CH-24059
	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads	CH-24213
	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads	CH-24063
	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Large studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads.	CH-24115
	85	12	Curved Bracket, 5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads.	CH-24082
	110	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Use as heavy current remote battery isolator. Very little heat due to coil de-energizing.	CH-24200
	225	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Large studs have copper 5/16"-24 threads. Heavy duty.	CH-24812

Continuous Duty - DPST, Normally Open Contacts

	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads	CH-24401
	85	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Studs have copper 5/16"-24 threads. Coil, ignition, and ground terminals have steel 10-32 threads. Grounded	CH-24106

Intermittent Duty - SPST, One Circuit: Off/On

	750/100	12	5/16" x 19/32" on 2 13/64" Center	Cole Hersee	Contacts and terminals are copper. Small ignition and ground terminals have 10-32 Threads. Large terminals have 5/16"-24 threads. Phenolic/Plated Steel Housing.	CH-24022

Miscellaneous Switches

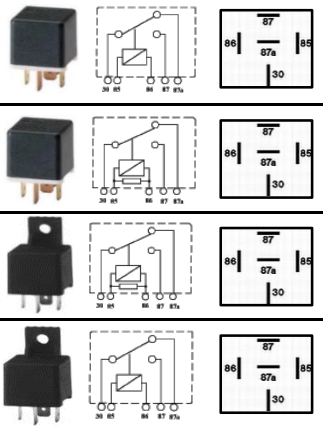
	Amps	Volts	Terminals	Mounting Hole	Mfg.	Switch Type	Features	
	15	12	Screw (4)	1/2" - 20, 1.25" Long	Cole Hersee	Rotary	Silver Contacts, Spring Return to Off from Both Directions, Plated Steel Case	CH-90005-01
	-------	-------	-------	-------	Cole Hersee	-------	Rubber Boot for Toggle Switch with Brass Nut, O-Ring Seal on Nut, Covers Toggle for 15/32"-32 Thread	CH-81264
	-------	-------	-------	-------	Pollak	-------	Rubber Boot for Toggle Switch with Brass Nut, O-Ring Seal on Nut, Covers Toggle for 15/32"-32 Thread	PLK-25-370P
	5	12	-------	0.800-0.850" Diameter	Cole Hersee	Plunger	Compact Push-Button Switch for Momentary Grounding, Normally On/ Push to Momentary Off/Spring to On, Molded Plastic, Plunger 9/16" Long	CH-9075
	5	12	-------	45/64" Body Diameter	Cole Hersee	Plunger	Momentary Door Switch, Off With Plunger Depressed/Spring to On, With Faceplate, Plated Steel Case, Plunger 7/16"	CH-9087
	5	12	-------	Mounting Center 2 1/16"	-------	Push Button	Fog Horn and Siren Switch, Momentary On/Off, Surface Mount Only, 1 5/8" Diameter	3930
	20	12	Screw (2)	3/4" Diameter	Cole Hersee	Rotary	Master Disconnect Switch, On/Off, Copper Contacts, Plated Steel Case	CH-2484
	20	12	Screw (2)	3/4" Diameter	Cole Hersee	Rotary	Master Disconnect Switch, On/Off, Silver Contacts, Plated Steel Case	CH-2484-16
	20	12	Screw (2)	3/4" Diameter	Cole Hersee	Rotary	Master Disconnect Switch, On/Off, Silver Laminated Contacts, Plated Steel Case	CH-M-284
	10	12-24	-------	-------	Cole Hersee	Ignition	3 Position Key Switch, Off/Ign-Acc/Start Removal Key with Boot	CH-95060-03
	10	12-48	-------	-------	Cole Hersee	Ignition	4 Position Key Switch, Acc/Off/Ign-Acc/Start Spring Return to Off, Removal Key with Boot	CH-95060-23

Relays

Automotive relays are switches that use electrical current rather than a mechanical switch, to open and close circuits. Five 1/4" tabs mate with sockets or relay blocks. Max inrush current of 150 amps.

SPDT (Single Pole Double Throw)

Volts	Amps	Hella #	Descriptions	
12	40	87401		RLY30
24	20	87115	Resistor, High Temperature	24V-RLY20
12	40	87423	Resistor	RLY40
12	50	87429	Potted with Resistor	RLY50
12	30	49400	Resistor, Mounting Bracket	RLY30MB
12	40	87420	Resistor, Mounting Bracket	RLY40MB
12	20/40	87499	Mounting Bracket	87499



Relay Block



Description	
Mini 5 Terminal Harness Connector with Lock, Interlocking Bodies Can Be Put in Series, Fits All Relays Here	RLYB

Relay Block Terminals

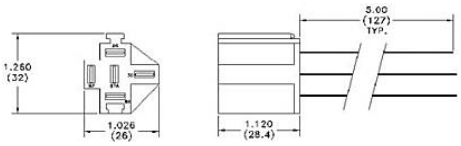
Wire Size (AWG)	
Metri-Pack 630, Unsealed	
22-18	12015869
16-14	12015870
12-10	12084590



Prewired Relay Sockets

Description	
Fits All Relays Above, 5" Leads 2 14 Gauge (coil) Wires: (1) Blue and (1) Yellow 3 12 Gauge (Contact) Wires: (1) White, (1) Black and (1) Red	PT-RELAY





Switch Kit

Kit Contains

Contains	Description	Qty.	(Cont.)	Description	Qty.
1820	On-Off (SPST) Push/Pull	3	2012R	On-Off (SPST) Toggle Pilot Light	5
2102	On-Off (SPST) Toggle	5	2012A	On-Off (SPST) Toggle Pilot Light	5
2150	On-Off (SPST) Toggle	3	ROCK/PILOT-R	On-Off (SPST) Rocker Pilot Light	5
2159	On-Off-On (SPDT) Toggle	3	ROCK/PILOT-A	On-Off (SPST) Rocker Pilot Light	5
2160	Mom On-Off-Mom On (SPDT) Toggle	3	MTG/HOUSE	Housing	10
90031	Off-Mom On (SPST) Push Button	3	1811	On-Off (SPST) Push/Pull	3
2033	Red On-Off (SPST) Rocker Pilot Light	3			

This kit contains 11 different switches, a total of 56 pieces. It also includes a snap-on housing. Comes in a large metal box, 18"w x 12"d x 3"h.

Part # SWITCH KIT



Warning Light and Buzzer

Voltage	Size	
12	1 7/8" L x 1" W x 1 11/32" H	CH-4112-RC000

This universal warning light and buzzer can be used with any electrical switch. Red lens and long-life LED bulb. 11/16" diameter mounting stem, 17/32" long.



Flashlights

LED Flashlights - 2 D Batteries

This LED flashlight is 10 times brighter than our incandescent flashlight and has an indestructible bulb. The batteries also last four times longer than with a standard incandescent bulb. Buy 96 and have your information imprinted on the flashlights free.

Color	Feature	Part Number
Yellow Body with Black Trim	Magnetic Base	FL-LED



Upgrade-to-LED Flashlight Bulbs

Converts any standard flashlight to a LED flashlight with this LED bulb. The LED bulb will make your flashlight 10 times as bright and last 5 times longer. They are shock and vibration resistant. 2-3 VDC.

Description	Part Number
LED bulbs for standard flashlights	LED-BULB



Mini LED Flashlights - 3 AAA Batteries

Body color	LEDs	Features	Part Number
Black	14		FL-14L-B
Silver	32		FL-32L
Black	10	Laser Pointer	FL-10/5/LASER



Incandescent Flashlights - 2 D Batteries

Trim color	Features	Part Number
Yellow body		
Blue Trim	Magnetic Base	FL-M
Black Trim	Spare Bulb in Holder	FL-Yellow



Duracell Batteries

	Pkg. Qty.		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
AAAA-ALK	2	AA-ALK	4	C-ALK	12	9V-ALK	1	6V-ALK-SCREW	1
AAA-ALK	4			D-ALK	12			6V-LANTERN	1

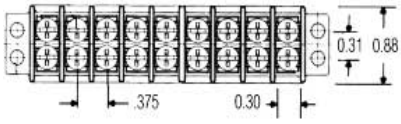


Terminal Blocks & Truck Terminal Blocks

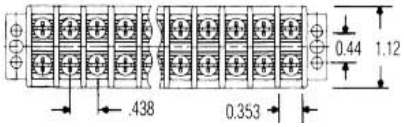
Double Row Terminal Blocks - Surface Mounted

Small and medium have a rating of 30 amp, 300 volts. They have #6-32 screws and six mounting screws. The large have a rating of 30 amp, 600 volts. They have #8-32 screws and eight mounting screws. 14-22 gauge wire range. UL listed and CSA certified. Screws are zinc-plated steel unless noted below.

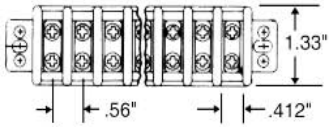
(A)



(B)



(C)



	(A) Small				(B) Medium				(C) Large			
Number of Poles	Overall Length	Zinc-Plated Steel Screws	Nickel-Plated Brass Screws	SS Screws	Overall Length	Zinc-Plated Steel Screws	Nickel-Plated Brass Screws	SS Screws	Overall Length	Zinc-Plated Steel Screws	Nickel-Plated Brass Screws	SS Screws
2	1.40"	TB-102	-------	-------	1.63"	TB-202	-------	-------	2.13"	TB-302	-------	-------
3	1.78"	TB-103	-------	-------	2.07"	TB-203	-------	-------	2.69"	TB-303	-------	-------
4	2.16"	TB-104	-------	-------	2.51"	TB-204	TB-204B	TB-204ST	3.25"	TB-304	TB-304B	-------
5	2.53"	TB-105	-------	-------	2.94"	TB-205	-------	-------	3.81"	TB-305	-------	-------
6	2.90"	TB-106	TB-106B	-------	3.38"	TB-206	TB-206B	-------	4.37"	TB-306	TB-306B	-------
7	3.28"	TB-107	-------	-------	3.82"	TB-207	-------	-------	4.94"	TB-307	-------	-------
8	3.66"	TB-108	-------	-------	4.25"	TB-208	TB-208B	TB-208ST	5.50"	TB-308	TB-308B	-------
9	-----	-------	-------	-------	4.69"	TB-209	-------	-------	6.06"	TB-309	-------	-------
10	4.40"	TB-110	-------	-------	5.13"	TB-210	TB-210B	-------	6.62"	TB-310	TB-310B	-------
11	-----	-------	-------	-------	5.13"	TB-211	-------	-------	7.18"	TB-311	-------	-------
12	5.16"	TB-112	TB-112B	-------	6.00"	TB-212	TB-212B	-------	7.75"	TB-312	TB-312B	-------
14	5.90"	TB-114	TB-114B	-------	6.87"	TB-214	TB-214B	-------	8.87"	TB-314	-------	-------
15	6.28"	-------	-------	-------	7.31"	-------	TB-215B	-------	-----	-------	-------	-------
18	7.40"	TB-118	-------	-------	8.62"	TB-218	-------	-------	11.12"	TB-318	-------	-------
20	8.16"	TB-120	TB-120B	-------	9.50"	-------	TB-220B	-------	12.24"	TB-320	TB-320B	-------
22	8.90"	TB-122	-------	-------	10.37"	TB-222	-------	-------	-----	-------	-------	-------
24	-----	-------	-------	-------	-----	-------	-------	-------	14.49"	TB-324	-------	-------

Terminal Block Jumpers

Forks



Rings



Flat Slip-on



Use forks, rings and flat slip-ons to connect two circuits together.

Stud Size	Forks	Rings	Flat Slip-ons
Small	OJ2	OJ4	J101
Medium	OJ3	OJ7	J201
Large	OJ11	OJ6	J301

Truck Terminal Blocks

		Description	Color	
		Surface Mount		
(A)		(A) Insulated Mounting Bracket, 250 amps, 3/8-16 Thread Stud with Nut	Black	TB-1-38
		Insulated Mounting Bracket, 250 amps, 3/8-16 Thread Stud with Nut	Red	JB3816-3
(B)		**Thru Wall**		
		(B) Insulated Mounting Bracket, 250 amps, 3/8-16 Thread Stud with Nut	Red	LF-C1925
(C)		(C) Insulated Mounting Bracket, 250 amps, 2.6" Overall Height, 3/8-16 Thread Stud with Nut	Black	TB-1-38-THRU

Truck Multi-Terminal Blocks



Terminal block contacts are 10-32 threads and a 1/4" mounting hole.

Number of Terminals	Overall Length	
3	3 3/4"	TB-3
4	4 1/2"	TB-4
5	5 1/4"	TB-5

Number of Terminals	Overall Length	
6	6"	TB-6
7	5 1/4"	TB-7
8	7 1/2"	TB-8

Tape

Electrical Tape 102
Hook and Loop Tape 103
Duct Tape 105
Special Uses Tape 104-106

Heat-Shrink Tubing

Standard (2-1) 108
Heavy Duty Adhesive-Lined (3-1) 108
Harsh-Environment
Adhesive-Lined (3 to 1) 109
Adhesive-Lined for Odd Shapes (4-1) 109
Color Coded Adhesive-Lined (3-1) 109
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Cable Ties

Standard Cable Ties 112
Thomas & Betts Cable Ties 112
Hellermann Tyton Cable Ties 113
Specialty Cable Ties 113
Cable Tie Mounts, Kits & Tools 114

Clamps

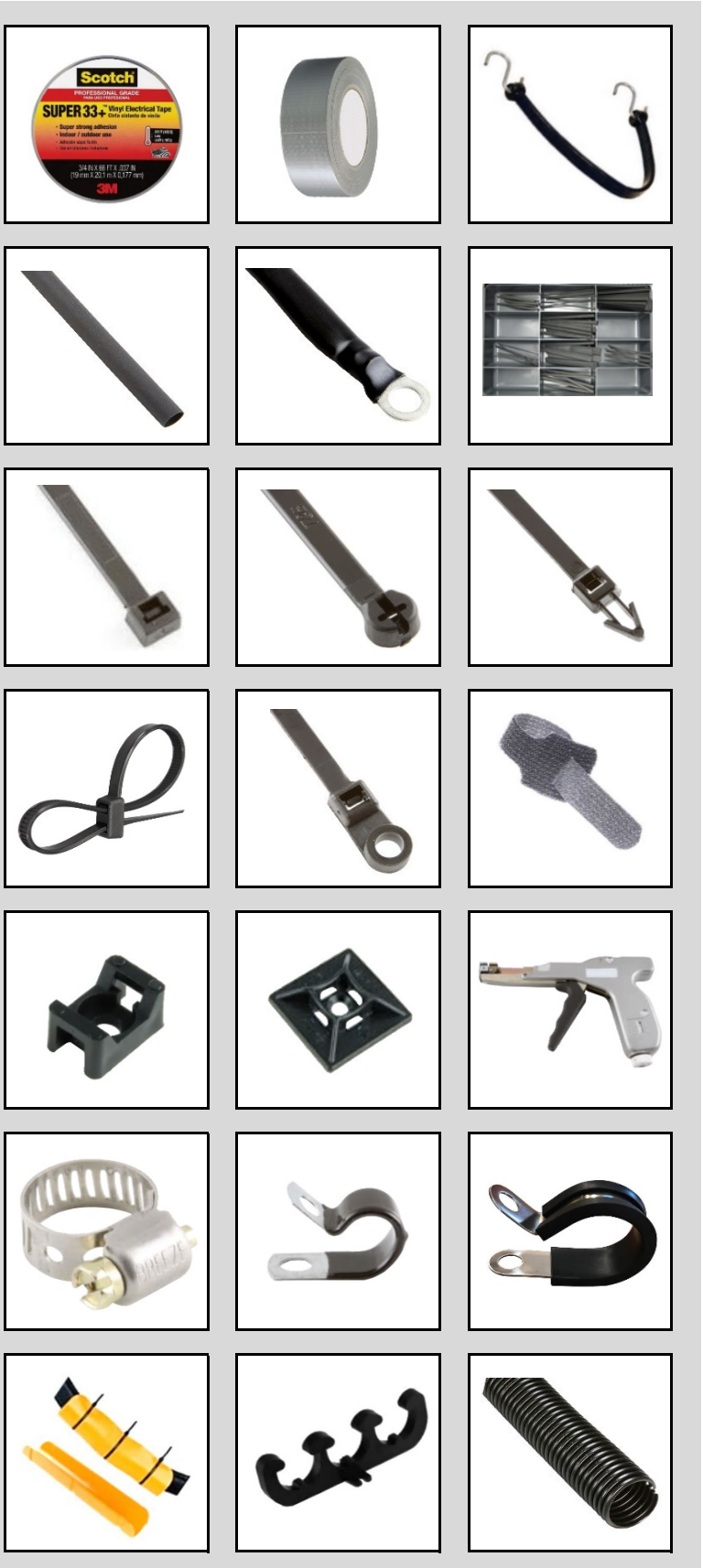
Hose Clamps, Protectors,
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Cable Management

Spiral Bundling
Wrap-Around Sleeving 116
Convoluted Nylon Sleeving 116
Mesh Sleeving 116

DIN Rail

DIN Rail 116



Electrical Tape

Electrical Tape

Our economical **ET-66UL** electrical tapes offer all of the benefits of more expensive tapes, but without the name brand.

Our **Scotch Super 33+**, **Super 88**, and **35** electrical tapes are the most popular and trusted tapes on the market. **Scotch Super 33+** tape handles 90% of applications and installations in both hot and cold environments. Often used in harsh environments and on critical equipment, **Scotch Super 88** is thicker than standard electrical tape allowing it to last longer and better handle abrasion. **Scotch 22** tapes are thicker for strength and resistance to abrasion. Use **Scotch 35** to color-code electrical installations and repairs. UL listed.

The **Temflex 165 and 175** are good quality tapes that resist a variety of weather conditions. **Temflex 165** gives great protection without being to bulky. Comes in several colors **Temflex 175** can be easily molded in extreme cold weather application.

A



B



C



D



E



F



G



Color	Width	Length	
(A)Economical, 7 Mil			
Black	3/4"	66'	ET-66UL
White	3/4"	66'	ET-66UL-W
3M Temflex™ 1700, Economical, 7 Mil			
Black	3/4"	108'	3M-17081
(B)3M Temflex™ 165, Multi-Purpose, 6 Mil			
Black	3/4"	60'	165-TAPE
Blue	3/4"	60'	165-TAPE-BL
Brown	3/4"	60'	165-TAPE-BR
Gray	3/4"	60'	165-TAPE-GRAY
Green	3/4"	60'	165-TAPE-GR
Orange	3/4"	60'	165-TAPE-OR
Purple	3/4"	60'	165-TAPE-PR
Red	3/4"	60'	165-TAPE-R
White	3/4"	60'	165-TAPE-W
Yellow	3/4"	60'	165-TAPE-Y
(C)3M Temflex™ 175, High-Performance, 7 Mil			
Black	3/4"	60'	175-TAPE
(D)3M Scotch Super 33+, All Weather, 7 Mil			
Black	3/4"	20'	3M-15328
Black	3/4"	44'	ST-33S
Black	3/4"	76'	ST-33
Black	3/4"	108'	3M-17073
Black	1"	108'	3M-17074
Black	1 1/2"	108'	3M-17082
(E)3M Scotch Super 88, Heavy-Duty, 8.5 Mil			
Black	3/4"	44'	3M-15659
Black	3/4"	66'	ST-88
Black	3/4"	108'	3M-15660
Black	1"	108'	3M-17078
Black	1 1/2"	44'	3M-15662
Black	1 1/2"	108'	3M-17079
Black	2"	108'	3M-15661

Color	Width	Length	
(F)3M Scotch 22, Extra Heavy-Duty, 10 Mil			
Black	1/2"	108'	3M-17156
Black	3/4"	108'	3M-15646
Black	1"	108'	3M-17075
Black	1 1/2"	108'	3M-17076
Black	2"	108'	3M-17077
(G)3M Scotch 35 Color Coding, All Weather, 7 Mil			
Blue	1/2"	20'	3M-15653
Blue	3/4"	66'	ST-35-BLUE
Brown	1/2"	20'	3M-15658
Brown	3/4"	66'	ST-35-BROWN
Gray	1/2"	20'	3M-15657
Gray	3/4"	66'	ST-35-GRAY
Green	1/2"	20'	3M-15655
Green	3/4"	66'	ST-35-GRN
Orange	1/2"	20'	3M-15656
Orange	3/4"	66'	ST-35-ORANGE
Pink	3/4"	66'	ST-35-PINK
Red	1/2"	20'	3M-15651
Red	3/4"	66'	ST-35-RED
Violet	1/2"	20'	3M-16565
Violet	3/4"	66'	ST-35-VIOLET
White	1/2"	20'	3M-15652
White	3/4"	66'	ST-35-WHITE
Yellow	1/2"	20'	3M-15654
Yellow	3/4"	66'	ST-35-YELLOW
3M Scotch 35 Color Coding Multi-Packs, All Weather, 7 Mil			
Multi Color*	1/2"	(8) 20'	3M-16749
*1 each: White, Orange, Blue, Yellow, Brown, Red, Purple, Green			
Multi Color**	1/2"	(5) 20'	3M-17072
**1 each: Red, Blue, White, Green, Yellow			

Corrosion Protection Tape, Insulating and Splicing Tape & Hook and Loop

Corrosion Protection Tape

Use corrosion protection tape to help resistance to impact, abrasions and punctures. **1100 Temflex** and **1200 Temflex** tapes resist corrosion on conduits, joints and fittings. **Scotchrap 50** and **Scotchrap 51** tapes resist corrosion on metal piping.

3M Scotchrap pipe primer, part #3M-16484 prepares metal surfaces for tape. For use with **Scotchrap 50 and 51**, also **1100 Temflex** tapes.

A 

B 

C 

D 

E 

Color	Width	Length	
(A)3M 1100 Temflex, Thick General Purpose, 10 Mil			
Black	2"	100'	3M-15546
Black	2"	100'	3M-15547*
(B)3M 1200 Temflex, Thicker General Purpose, 20 Mil			
Black	2"	100'	3M-12770*
(C)3M 50, All Weather, 10 Mil			
Black	1"	100'	3M-15678
Black	1"	100'	3M-14962
Black	2"	100'	50-TAPE
Black	2"	100'	3M-14961*
Black	2"	100'	3M-15679
Black	2"	100'	3M-15664
Black	3"	100'	3M-15639

*Printed

Color	Width	Length	
(D)3M Scotchrap 50, Thick All Weather, 10 M (Cont.)			
Black	4"	100'	3M-14963*
Black	4"	100'	3M-15665
Black	6"	100'	3M-15773
(E)3M Scotchrap 51, Thicker All Weather, 20 Mil			
Black	1"	100'	3M-16485*
Black	1"	100'	3M-16489
Black	2"	100'	3M-16486*
Black	2"	100'	3M-16490
Black	4"	100'	3M-16487*
Black	4"	100'	3M-16491
Black	6"	100'	3M-16488*
Black	6"	100'	3M-16492

Insulating and Splicing Tapes

Scotch 130C insulating tape is rubber, linerless and is designed for use in splicing and terminating wire and cables. **Scotch 23** is self fusing and also a high voltage splicing tape. **Scotch varnished cambric tape 2510** and **2520** is primed with oil and coated with yellow electrical insulating varnish. Has excellent dielectric strength, and great resistance to moisture, corrosion, abrasion and acids.

A 

B 

C 

D 

E 

F 

Color	Width	Length	
(A)3M Scotch 130C, High Voltage Super-Duty, 30 Mil			
Black	3/4"	30'	130C
Black	1"	30'	130C-1
Black	1 1/2"	30'	3M-16461
Black	2"	30'	3M-16471
(B)3M Scotch 23, Similar to 130C, Peel Off Liner, 30 Mil			
Black	1"	30'	23-130
(C)3M Temflex 2155, Peel Off Liner, Low Voltage, 30 Mil			
Black	1 1/2"	22'	3M-16590
(D)3M Scotch 2242, High Voltage, Mid-Grade, General Purpose, 30 Mil			
Black	3/4"	15'	3M-15334
Black	2"	15'	3M-16504

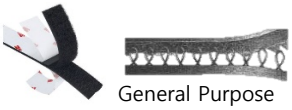
Color	Width	Length	
(E)3M Scotch Varnished Cambric Tape 2510, No Adhesive, 7 Mil			
Yellow	3/4"	60'	3M-16462
Yellow	3/4"	108'	3M-15666
Yellow	1"	60'	VCT-1x108
Yellow	1"	108'	3M-15667
Yellow	1 1/2"	108'	3M-15668
Yellow	2"	108'	3M-15669
(F)3M Scotch Varnished Cambric Tape 2520, Adhesive, 8 Mil			
Yellow	3/4"	60'	2520-TAPE
Yellow	3/4"	108'	3M-15313
Yellow	1"	108'	3M-15311
Yellow	1 1/2"	108'	3M-15310
Yellow	2"	108'	3M-15312

Hook and Loop

General purpose hook and loop has rubber adhesive. Pull the straps apart by hand. The hook side has tiny stiff hooks and the loop side is covered with pliable loops.

Heavy duty hook and loop has a pressure sensitive adhesive. It has dual lock reclosable fasteners, that are constructed of nylon stems with a mushroom shaped tops. This construction offers five times the strength of general purpose Velcro.

Both styles are black, have a temperature range of -20°F to 120°F, and are 1" wide.


General Purpose


Heavy Duty

Orientation	General Purpose	Heavy Duty	Pkg. Qty.
Hook	V-HOOK	V-HD/HOOK	Per foot
Loop	V-LOOP	V-HD/LOOP	Per foot

Sealing and Insulating & Special Uses Tape

Sealing and Insulating Tape

Scotch 06147 and **06149** protects against moisture, vibration, grime, and abrasion. Has a self-fusing rubber-based thin insulating mastic compound laminated to a PVC backing. **Scotch 2200** mastic is resistant to abrasions, acids, UV, and moisture. **Scotch-Seal 2229** has an excellent moisture and environmental seal. Seals high voltage cables. Use **Scotchfil** as build-up compound on irregular surfaces to provide a smooth, waterproof taping surface.

A



B



C



D



E



F



Color	Width	Length	
(A)3M Scotch Mastic 06147, Vinyl, 45 Mil			
Black	2 1/2"	10'	6147
(B)3M Scotch Mastic 06149, Vinyl, 45 Mil			
Black	2 1/2"	2 1/2"	3M-12852
(C)3M Scotch Mastic 2200, All Weather, 125 Mil			
Black	6 1/2"	4 1/2"	2200 MASTIC PAD
(D)3M Scotch Mastic 2228, Rubber, Self Fusing, 65 Mil			
Black	1"	10'	3M-16602
Black	2"	10'	3M-15640

Color	Width	Length	
(E)3M Scotch-Seal Mastic 2229, Rubber, Soft and Pliable125 Mil			
Black	1"	10'	3M-16559
Black	1 1/2"	30'	3M-16587
Black	2 1/2"	3 3/4"	3M-12851
Black	3 3/4"	10'	3M-16458
Black	3 3/4"	3 3/4"	3M-16588
Black	3 3/4"	6 1/2"	3M-16589
(F)3M Scotchfil, 125 Mil			
Black	1 1/2"	60'	SCTCH INS PUTTY

Special Uses Tape

Scotch High Temperature Glass Tape

Glass Tape has a woven insulation, resistant to high temperatures and has great mechanical strength.

Scotch Glass Cloth 27



Color	Width	Length	
Scotch Glass Tape 27, High Temperature 266°F, 7 Mil			
White	1/2"	66'	ET-2712
White	3/4"	66'	ET-2734

Scotch Glass Cloth 69



Color	Width	Length	
Scotch Glass Cloth 69, Super High Temperature 356°F, 7 Mil			
White	1/2"	66'	69-TAPE
White	3/4"	66'	3M-15641

Friction Tape



Friction tape offers good protection against abrasion and penetration of cables, splices, and wire. **Cotton** tape has a fabric feel and 1500 volt dielectric strength. **45 series** tape has rubber base adhesive for maximum elasticity and moisture resistance. **Temflex Cotton 1755** is a high grade friction tape with good abrasion protection for splices and connectors.

Width	Length	Color	
Cotton Friction, 45 Series, 15 Mil			
3/4"	60'	Black	F-TAPE
3M Temflex Cotton Friction, 1755, 13 Mil			
3/4"	60'	Black	3M-12779

Width	Length	Color	
3M Temflex Cotton Friction, 1755, 13 Mil			(Cont.)
3/4"	82 1/2'	Black	3M-16584
1 1/2"	82 1/2'	Black	3M-16585
2"	108"	Black	3M-12785

Masking Tape



Tough tape for everyday jobs. Sticks to many surfaces and removes cleanly. Masking tape has a thick crepe paper back, resists paint bleed and tears easily.

Width	Length	Color	
Scotch General Purpose Masking 234, Rubber Adhesive, 5.9 Mil			
3/4"	108'	Natural	3M-10023
2"	108'	Natural	3M-10183

Width	Length	Color	
Scotch High Performance Masking 232, 6.3 Mil			
1"	108'	Natural	3M-10010
2"	108'	Natural	3M-10181

Teflon Pipe Thread Seal Tape, 4 Mil



Teflon tape creates leak proof joints and applies easily. Mil spec approved.

Width	Length	Color	
1/4"	43'	White	TEF-520-1/4
1/2"	43'	White	TEF-520
3/4"	43'	White	TEF-520-3/4

(Continued on following page)

Special Uses Tape **(Continued from previous page)**

Duct Tape

Use duct tape for sealing, holding, bundling, identifying, and color-coding. **Classic duct** tape handles just about any job. Super sticky, this tape will stand the test of time, even in wet environments.



Width	Length	Color	
Classic Duct, Super Adhesive 11 Mil			
2"	180'	Silver	DT-60
2"	180'	Black	DT-60 BLACK
3M Value Duct 1900, 5.8 Mil			
1.88"	150'	Silver	3M-12408
2.83"	150'	Silver	3M-12409
3M General Use Duct 2929, 6 Mil			
1.88"	150'	Silver	3M-12412
3M Extra Heavy Duty Duct 6969, 10.7 Mil			
1.88"	180'	Silver	3M-13824
2.83"	180'	Silver	3M-11123
3M Multi-Purpose Duct 3900, For Color-Coding, 7.7 Mil			
1.88"	180'	Black	3M-10761
1.88"	180'	Blue	3M-10760
1.88"	180'	Yellow	3M-10756

Width	Length	Color	
3M Multi-Purpose Duct 3900, For Color-Coding, 7.7 Mil (Cont.)			
1.88"	180'	White	3M-10757
1.88"	180'	Olive	3M-10759
1.88"	180'	Red	3M-10758
1.88"	180'	Silver	3M-13826
3M Heavy Duty Duct 3939, High Tack Adhesive, 9 Mil			
0.94"	180'	Silver	3M-11118
1.88"	180'	Silver	3M-13825
2.83"	180'	Silver	3M-11119
3.77″	180'	Silver	3M-11120
3M Performance Plus Duct 8979, 12.1 Mil			
1.88″	180'	Black	3M-11833
1.88″	180'	Slate Blue	3M-10790
1.88"	180'	Slate Blue	3M-11830
2.83"	180'	Slate Blue	3M-10791

Premium Carton Sealing Tape, Ultra Clear, 2.6 Mil

Package sealing tape has 20 lb. tensile strength to handle heavy-duty carton sealing needs.



Width	Length	Color	
2"	330'	Clear	CST

Shrink Tubing in a Tape Form

Cold shrink and **silicone extreme temperature** tape requires no heat, sets in seconds and cures in hours. Stretches 2-3 times its length and bonds to itself to form one solid piece of shrink tube. Ideal for odd shapes, repair jobs, mid-points of long cable and explosive environments.

Silicone extreme temperature can handle up to 600 PSI in high pressure applications.



Width	Length	Color	
Cold Shrink, Rubber, -60°F to 500°F			
1"	10'	Black	S-TAPE-BK
1"	10'	White	S-TAPE-W
Silicone Extreme Temperature, No Heat, Up to 400°F			
1"	10'	Black	XS-TAPE-BK
1"	10'	Blue	XS-TAPE-BL
1"	10'	Clear	XS-TAPE-CL

Width	Length	Color	
Silicone Extreme Temperature, No Heat, Up to 400°F (Cont.)			
1"	10'	Gray	XS-TAPE-GY
1"	10'	Green	XS-TAPE-GR
1"	10'	Orange	XS-TAPE-O
1"	10'	Red	XS-TAPE-R
1"	10'	White	XS-TAPE-W
1"	10'	Yellow	XS-TAPE-Y

Brush-On Electrical Tape

Liquid spreadable tape comes in a 4oz can with a brush in the top. Protects, waterproofs, and seals.

Part # L-TAPE



Reflective Tape - Conspicuity Tape

Conspicuity tape has a prismatic design, to mark the sides and rear of vehicles for greater visibility. This tape has pressure-sensitive adhesive back and paper liner.

DOT-C2 approved. Durable, impact and solvent resistant.



Color	Print Pattern	Width	Length	
Silver/Red	7"/11"	2"	150'	GR-41160

Spray Cleaners

Contact cleaner removes oils, light grease, particulates, and silicones. It is fast drying, non-corrosive and non-flammable, safe for plastics, metals, electrical components, and live circuits. Odorless. 11oz spray can.

Part # 3M-CONTACT



Electronic degreaser removes oils, silicones, grease and light soiling. It is fast drying, non-corrosive and non-flammable, safe for most metals and most plastics. It is odorless and comes in a 12oz spray can.

Part # 3M-DEGREASER



Rubber Straps

The high density nylon rubber straps are ultraviolet resistant. The hooks are made of galvanized steel for extra strength.

Strap Length	Maximum Stretch	
10"	14"	RS-10
15"	22"	RS-15
21"	31"	RS-21
31"	46"	RS-31
41"	61"	RS-41



3M VHB Tape

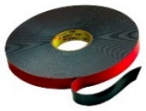
3M VHB Heavy Duty Bonding Tape

VHB tapes are double-sided tapes made from high performance acrylic adhesives.

General Purpose

Modified Adhesive on Both Sides of a Soft Foam

Uses: Excellent for a wide variety of surfaces. Powder coated paints and plastics, metal and glass. For interior and exterior.
Also for textured surfaces, or when sealing is needed.



Color	Width	Length	Thickness	3M Model #	
Black	1/4"	108'	25 mil	5925	3M-10780
Black	1/2"	108'	25 mil	5925	3M-10778
Black	1/2"	108'	45 mil	5952	3M-10795
Black	3/4"	108'	45 mil	5952	3M-11272
Black	1"	108'	25 mil	5925	3M-10776
Black	1"	108'	45 mil	5952	3M-10777
Black	1"	108'	62 mil	5962	3M-11062

Firm Adhesive on One Side, Soft Adhesive on Other Side of Medium Foam.

Uses: Can replace rivets, welds and screws. Metal, glass and some plastics.



Color	Width	Length	Thickness	3M Model #	
White	1/2"	108'	45 mil	4622	3M-10611
White	1"	108'	45 mil	4622	3M-10609

Specialty

Firm Adhesive on Both Sides of a Firm Foam

Uses: Strong tape for glass and metal. Use where high stresses are involved.



Color	Width	Length	Thickness	3M Model #	
White	1"	108'	120 mil	4959	3M-10955
White	1"	216'	25 mil	4930	3M-10414

Soft Adhesive on Both Sides of a Firm Foam

Uses: Great for HSE plastics. Use where high stresses are involved.



Color	Width	Length	Thickness	3M Model #	
White	3/4"	108'	45 mil	4945	3M-10396
White	3/4"	108'	45 mil	4945	3M-10877
White	1"	108'	45 mil	4945	3M-10397

Soft Adhesive on Both Sides of a Medium Foam

Uses: Excellent adhesion to a wide range of high surface energy materials and most plastics.



Color	Width	Length	Thickness	3M Model #	
Gray	1/2"	108'	45 mil	4941	3M-10888
Gray	1/2"	108'	45 mil	4941	3M-11064
Gray	1/2"	108'	90 mil	4991	3M-11063
Gray	1/2"	216'	25 mil	4936	3M-10902
Gray	1/2"	216'	25 mil	4936	3M-10614
Gray	3/4"	108'	45 mil	4941	3M-10874
Gray	3/4"	216'	25 mil	4936	3M-10597
Gray	1"	108'	45 mil	4941	3M-10875
Gray	1"	108'	45 mil	4941	3M-10890
Gray	1"	108'	90 mil	4991	3M-10773
Gray	1"	216'	25 mil	4936	3M-10596
Gray	1"	216'	25 mil	4936	3M-10612

Clear Firm Foam Adhesive

Uses: High energy materials where a clear adhesive is required.



Color	Width	Length	Thickness	3M Model #	
Clear	1/2"	108'	45 mil	4910	3M-11106
Clear	1/2"	216'	20 mil	4905	3M-11211
Clear	3/4"	108'	45 mil	4910	3M-11107
Clear	3/4"	216'	20 mil	4905	3M-11212
Clear	1"	108'	45 mil	4910	3M-11108

Low Temperature Adhesive on Both Sides of Firm Foam

Uses: Low temperature areas.

Color	Width	Length	Thickness	3M Model #	
White	1"	108'	45 mil	4951	3M-10918

High Temperature Firm Foam Adhesive

Uses: High temperature resistance. Bond metals prior to powder coating.



Color	Width	Length	Thickness	3M Model #	
Dark Gray	1/2"	108'	45 mil	4611	3M-10781
Dark Gray	1/2"	108'	45 mil	4611	3M-10784
Dark Gray	3/4"	108'	45 mil	4611	3M-10772
Dark Gray	1"	108'	45 mil	4611	3M-10774

3M™ Ear Protection

Earplugs

E-A-R™ Push-Ins™ Earplugs Part #3M-17327

Constructed of 3M™ E-A-Rform™ foam, these earplugs feature a no roll-down design and a blue stem for a quick and easy fit. Poly bag keeps earplugs clean before use. Noise Reduction Rating (NRR) 28 dB. CSA Class AL. Sold in packages of 25.



E-A-Rsoft™ Yellow Neon Blasts™ Earplugs Part #3M-17324

3M™ E-A-Rsoft™ Yellow Neon Blasts™ earplugs seal the ear canal with soft, slow-recovery foam for excellent noise reduction and comfort. Poly bag keeps earplugs clean before use. Noise Reduction Rating (NRR) 33 dB. CSA Class AL. Sold in packages of 50.



Tri-Flange™ Earplugs Part #3M-17366

3M™ Tri-Flange™ cloth corded reusable earplugs features a proven, triple-flange design and pliable, premolded material to provide clean and comfortable hearing protection. Cloth cord connects earplugs. Noise Reduction Rating (NRR) 26 dB CSA Class AL. Sold in packages of 5.



Earmuffs

Peltor™ Optime™ 95 Earmuffs Part #3M-17341

3M™ Peltor™ Optime™ 95 over-the-head earmuffs feature a stainless steel headband for consistent force and effective hearing protection. Earmuffs provide hearing protection against high-frequency noise up to 95 dBA. Noise Reduction Rating (NRR) 21 dB. Sold individually.



Peltor™ Optime™ 105 Earmuffs Part #3M-17349

3M™ Peltor™ Optime™ 105 over-the-head earmuffs feature double-shell technology to provide effective hearing protection for noise exposures up to 105dBA. Noise Reduction Rating (NRR) 30 dB, highest available in over-the-head style earmuffs. Sold individually.



Cap-Mount Peltor™ Optime™ 95 Earmuffs Part #3M-17344

3M™ Peltor™ Optime™ 95 cap-mount earmuffs feature a universal mounting attachment that fits most hard hats. Stainless steel construction resists bending and warping. Earcup pivot points tilt for optimum comfort and efficiency. Color-coding for compliance sighting. Noise Reduction Rating (NRR) 21 dB. CSA Class B. Sold individually.



Eye Protection

3M™ Safety Glasses

Nuvo™ Protective Eyewear Part #3M-17188

3M™ Nuvo™ protective eyewear has clear anti-fog polycarbonate lenses, that absorbs 99% of UV rays and a gray frame. Retro styling gives them a nostalgic look. The bar over the brow and side shields offer added protection, while the soft bridge cushions protect the nose. Sold individually.



Peltor™ Sport SecureFit™ 400 Glasses Part #3M-30732

3M™ Peltor™ Sport SecureFit™ glasses are great for use with hearing protection. High impact-resistant lenses with anti-fog coating and absorb 99% UV rays. They are flexible and lightweight for a secure and comfortable fit. Sold individually.



Virtua™ Sport CCS Protective Eyewear Part #3M-17176

3M™ Virtua™ Sport CCS protective eyewear has anti-fog polycarbonate lenses, that absorbs 99% of UV rays. They have an athletic-looking style and wraparound lenses which provide extended eye protection. The temples are designed to hold the cords of earplugs to keep them in place. Sold individually.



Shark Industries Safety Glasses and Goggles

21st Century Protective Glasses Part #SH-14324

21st Century Protective Glasses have orange flat folding side-shields. They have a snug secure fit and the scratch resistant polycarbonate lenses provide UV and impact protection. Sold individually.



Box Style Stationary Acetylene Goggles Part #SH-14308

Box style stationary acetylene goggles are made of a soft vinyl that forms to your head. The 2" x 4 1/4" goggles have a #5 lens and pit resistant cover. Can be worn over regular eyeglasses or with a magnifying lens. Sold individually.



Box Style Flip-Up Acetylene Goggles Part #SH-14309

Box style flip-up acetylene goggles are made of a soft vinyl. The 2" x 4 1/4" goggles have a #5 lens and vents to prevent fogging. Can be worn over regular eyeglasses or with a magnifying lens. Sold individually. Sold individually.



Heat Shrink Tubing

Standard Heat Shrink Tubing (2 to 1)



Polyolefin is the most popular style of shrink tubing. With a 2 to 1 shrink ratio, it heats evenly, doesn't bubble or split, and is self-extinguishing. It also offers greater flexibility. Maximum temperature of 275°F.

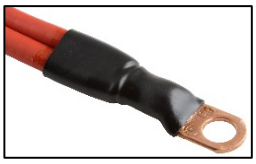
Meets UL 224, CSA 198.1 and MIL-I-23053/5.

Color	4-ft. Lengths	100-ft. Spools
3/64" ID Before Shrink, 1/64" ID After Shrink		
Black	X221-3/64	X221-3/64-SPL
Clear	X221-3/64-C	X221-3/64-C-SPL
Green	X221-3/64-GRN	X221-3/64-GN-SP
Red	X221-3/64-R	X221-3/64-R-SPL
White	X221-3/64-W	X221-3/64-W-SP
Yellow	X221-3/64-Y	X221-3/64-Y-SPL
1/16" ID Before Shrink, 1/32" ID After Shrink		
Black	X221-1/16	X221-1/16-SPL
Blue	X221-1/16-BLUE	X221-1/16-BL-SP
Clear	X221-1/16-C	X221-1/16-C-SPL
Green	X221-1/16-GRN	X221-1/16-GN-SP
Red	X221-1/16-R	X221-1/16-R-SPL
White	X221-1/16-W	X221-1/16-W-SPL
Yellow	X221-1/16-Y	X221-1/16-Y-SPL
3/32" ID Before Shrink, 3/64" ID After Shrink		
Black	X221-3/32	X221-3/32-SPL
Blue	X221-3/32-BLUE	X221-3/32BLU-SP
Clear	X221-3/32-C	X221-3/32-C-SPL
Red	X221-3/32-R	X221-3/32-R-SPL
White	X221-3/32-W	X221-3/32-W-SPL
Yellow	X221-3/32-Y	X221-3/32-Y-SPL
1/8" ID Before Shrink, 1/16" ID After Shrink		
Black	X221-1/8	X221-1/8-SPL
Blue	X221-1/8-BLUE	X221-1/8BLUE-SP
Clear	X221-1/8-C	X221-1/8-C-SPL
Green	X221-1/8-GRN	X221-1/8-GRN-SP
Orange	X221-1/8-OR	X221-1/8-OR-SPL
Red	X221-1/8-R	X221-1/8-R-SPL
White	X221-1/8-W	X221-1/8-W-SPL
Yellow	X221-1/8-Y	X221-1/8-Y-SP
3/16" ID Before Shrink, 3/32" ID After Shrink		
Black	X221-3/16	X221-3/16-SPL
Blue	X221-3/16-BLUE	X221-3/16BLUE-S
Clear	X221-3/16-C	X221-3/16-C-SPL

Color	4-ft. Lengths	100-ft. Spools
3/16" ID Before Shrink, 3/32" After Shrink		
(Cont.)		
Green	X221-3/16-GRN	X221-3/16-GN-SP
Orange	X221-3/16-OR	X221-3/16-OR-SP
Red	X221-3/16-R	X221-3/16-R-SPL
White	X221-3/16-W	X221-3/16-W-SPL
Yellow	X221-3/16-Y	X221-3/16-Y-SPL
1/4" ID Before Shrink, 1/8" After Shrink		
Black	X221-1/4	X221-1/4-SPL
Blue	X221-1/4-BLUE	X221-1/4BLUE-SP
Clear	X221-1/4-C	X221-1/4-C-SPL
Green	X221-1/4-GRN	X221-1/4-GRN-SP
Gray	X221-1/4-GY	X221-1/4-GY-SPL
Red	X221-1/4-R	X221-1/4-R-SPL
White	X221-1/4-W	X221-1/4-W-SPL
Yellow	X221-1/4-Y	X221-1/4-Y-SPL
5/16" ID Before Shrink, 5/32" ID After Shrink		
Black	X221-5/16	X221-5/16-SPL
3/8" ID Before Shrink, 3/16" ID After Shrink		
Black	X221-3/8	X221-3/8-SPL
Blue	X221-3/8-BLUE	X221-3/8BLUE-SP
Clear	X221-3/8-C	X221-3/8-C-SPL
Green	X221-3/8-GRN	X221-3/8-GRN-SP
Red	X221-3/8-R	X221-3/8-R-SPL
White	X221-3/8-W	X221-3/8-W-SPL
Yellow	X221-3/8-Y	X221-3/8-Y-SPL
1/2" ID Before Shrink, 1/4" ID After Shrink		
Black	X221-1/2	X221-1/2-SPL
Blue	X221-1/2-BLUE	X221-1/2BLUE-SP
Clear	X221-1/2-C	X221-1/2-C-SPL
Green	X221-1/2-GRN	X221-1/2-GRN-SP
Red	X221-1/2-R	X221-1/2-R-SPL
White	X221-1/2-W	X221-1/2-W-SPL
Yellow	X221-1/2-Y	X221-1/2-Y-SPL

Color	4-ft. Lengths	100-ft. Spools
5/8" ID Before Shrink, 5/16" ID After Shrink		
Black	X221-5/8	X221-5/8-SPL
Red	X221-5/8-R	X221-5/8-R-SPL
White	X221-5/8-W	X221-5/8-W-SPL
3/4" ID Before Shrink, 3/8" ID After Shrink		
Black	X221-3/4	X221-3/4-SPL
Blue	X221-3/4-BLUE	X221-3/4BLUE-SP
Clear	X221-3/4-C	X221-3/4-C-SPL
Green	X221-3/4-GRN	X221-3/4-GRN-SP
Red	X221-3/4-R	X221-3/4-R-SPL
White	X221-3/4-W	X221-3/4-W-SPL
Yellow	X221-3/4-Y	X221-3/4-Y-SPL
1" ID Before Shrink, 1/2" ID After Shrink		
Black	X221-1	X221-1-SPL
Blue	X221-1-BLUE	X221-1-BLUE-SPL
Clear	X221-1-C	X221-1-C-SPL
Green	X221-1-GRN	X221-1-GRN-SPL
Red	X221-1-R	X221-1-R-SPL
White	X221-1-W	X221-1-W-SPL
Yellow	X221-1-Y	X221-1-Y-SPL
1 1/4" ID Before Shrink, 5/8" ID After Shrink		
Black	X221-1-1/4	X221-1-1/4-SPL
1 1/2" ID Before Shrink, 3/4" ID After Shrink		
Black	X221-1-1/2	X221-1-1/2-SPL
Blue	X221-1-1/2-BLUE	X221-1-1/2BL-SP
Clear	X221-1-1/2-C	X221-1-1/2-C-SP
2" ID Before Shrink, 1" ID After Shrink		
Black	X221-2	X221-2-SPL
Clear	X221-2-C	X221-2-C-SPL
Red	X221-2-RED	X221-2-RED-SPL
White	X221-2-W	X221-2-W-SPL
3" ID Before Shrink, 1 1/2" ID After Shrink		
Black	X221-3	X221-3-SPL
4" ID Before Shrink, 2" ID After Shrink		
Black	X221-4	X221-4-SPL

Heavy Duty Adhesive-Lined Heat Shrink Tubing (3 to 1)



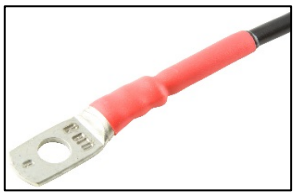
Use this heavy wall shrink tubing in the harshest of applications, including direct burial, submersible, corrosive, severe mechanical, and high voltage jobs. Adhesive lining allows the shrink tubing to attach itself to the wire or terminal it is encapsulating, giving it a watertight seal. The high shrink ratio (3 to 1) enables easy bridging and encapsulation of odd shaped connectors or applications. Polyolefin is the standard-bearer in the shrink tubing market. It heats evenly, doesn't bubble or split, and is self-extinguishing. Install with a butane torch or heat gun.

Maximum temperature of 230°F. Meets MIL-I-23053/15 Class 1, AMS-DTL-23053/15, UL 486D (rated for direct burial), UL 224, VW-1.

ID Before Shrink	ID After Shrink	Color	6" Lengths	4-ft. Lengths
5/16"	1/16"	Black	X700-3B	X700-3B-4
5/16"	1/16"	Red	X700-3R	X700-3R-4
3/8"	1/8"	Black	X700-3/8B	X700-3/8B-4
3/8"	1/8"	Black	X700-4B	X700-4B-4
3/8"	1/8"	Red	X700-4R	X700-4R-4
1/2"	3/16"	Black	X700-5B	X700-5B-4
1/2"	3/16"	Red	X700-5R	X700-5R-4

ID Before Shrink	ID After Shrink	Color	1-ft. Lengths	4-ft. Lengths
3/4"	1/4"	Black	X700-7B	X700-7B-4
3/4"	1/4"	Red	X700-7R	X700-7R-4
1 1/8"	5/16"	Black	X700-11B	X700-11B-4
1 1/8"	5/16"	Red	X700-11R	X700-11R-4
1 3/8"	1/2"	Black	X700-14B	X700-14B-4
1 1/2"	1/2"	Black	X700-15B	X700-15B-4
1 1/2"	1/2"	Red	X700-15R	X700-15R-4
2"	5/8"	Black	X700-20B	X700-20B-4
2"	5/8"	Red	X700-20R	X700-20R-4
3 3/4"	1 1/8"	Black	X700-35B	X700-35B-4
4 1/2"	1 1/2"	Black	X700-4.50B	X700-4.50B-4
5"	1 5/8"	Black	X700-5.00B	X700-5.00B-4
7"	2 3/8"	Black	X700-7.00B	X700-7.00B-4

Harsh-Environment Adhesive-Lined Heat Shrink Tubing (3 to 1)



Adhesive lining allows the shrink tubing to attach itself to the wire or terminal, giving it a watertight seal. Use this shrink tubing in applications that need shelter from the elements or contaminants. The high shrink ratio (3 to 1) enables easy bridging and encapsulation of odd shaped connectors or applications. The medium wall heats evenly, doesn't bubble or split, and is self-extinguishing. Install with a butane torch or heat gun. Maximum temperature of 230°F.

Meets MIL-I-23053/4 Class 3, AMS-DTL 23053, UL 224, VW-1, and CSA OFT Recognized.

Color	6" Lengths	1-ft. Lengths	4-ft. Lengths
1/8" ID Before Shrink, 1/32" ID After Shrink			
Black	X750-1/8	-------	X750-1/8-4
Blue	X752-1/8-BL	-------	X752-1/8-BL-4
Clear	X751-1/8-CLEAR	-------	X751-1/8CLEAR-4
Green	X752-1/8-GN	-------	X752-1/8-GN-4
Red	X750-1/8R	-------	X750-1/8R-4
White	X752-1/8-W	-------	X752-1/8-W-4
Yellow	X752-1/8-Y	-------	X752-1/8-Y-4
3/16" ID Before Shrink, 3/64" ID After Shrink			
Black	X750-3/16	-------	X750-3/16-4
Blue	X752-3/16-BL	-------	X752-3/16-BL-4
Clear	X751-3/16-CLEAR	-------	X751-3/16-CLR-4
Green	X752-3/16-GN	-------	X752-3/16-GN-4
Red	X750-3/16R	-------	X750-3/16R-4
White	X752-3/16-W	-------	X752-3/16-W-4
Yellow	X752-3/16-Y	-------	X752-3/16-Y-4
1/4" ID Before Shrink, 3/32" ID After Shrink			
Black	X750-1/4	-------	X750-1/4-4
Blue	-------	X752-1/4-BL	X752-1/4-BL-4
Clear	X751-1/4-CLEAR	-------	X751-1/4CLEAR-4
Green	-------	X752-1/4-GN	X752-1/4-GN-4
Red	X750-1/4R	-------	X750-1/4R-4
White	-------	X752-1/4-W	X752-1/4-W-4
Yellow	-------	X752-1/4-Y	X752-1/4-Y-4
3/8" ID Before Shrink, 1/8" ID After Shrink			
Black	X750-3/8	-------	X750-3/8-4
Blue	-------	X752-3/8-BL	X752-3/8-BL-4
Clear	X751-3/8-CLEAR	-------	X751-3/8CLEAR-4
Green	-------	X752-3/8-GN	X752-3/8-GN-4
Red	X750-3/8R	-------	X750-3/8R-4
White	-------	X752-3/8-W	X752-3/8-W-4
Yellow	-------	X752-3/8-Y	X752-3/8-Y-4

Color	6" Lengths	1-ft. Lengths	4-ft. Lengths
1/2" ID Before Shrink, 5/32" ID After Shrink			
Black	X750-1/2	-------	X750-1/2-4
Blue	-------	X752-1/2-BL	X752-1/2-BL-4
Clear	X751-1/2-CLEAR	-------	X751-1/2CLEAR-4
Green	-------	X752-1/2-GN	X752-1/2-GN-4
Red	X750-1/2R	-------	X750-1/2R-4
White	-------	X752-1/2-W	X752-1/2-W-4
Yellow	-------	X752-1/2-Y	X752-1/2-Y-4
3/4" ID Before Shrink, 1/4" ID After Shrink			
Black	X750-3/4	-------	X750-3/4-4
Blue	-------	X752-3/4-BL	X752-3/4-BL-4
Clear	X751-3/4-CLEAR	-------	X751-3/4CLEAR-4
Green	-------	X752-3/4-GN	X752-3/4-GN-4
Red	X750-3/4R	-------	X750-3/4R-4
White	-------	X752-3/4-W	X752-3/4-W-4
Yellow	-------	X752-3/4-Y	X752-3/4-Y-4
1" ID Before Shrink, 5/16" ID After Shrink			
Black	-------	X750-1	X750-1-4
Blue	-------	X752-1-BL	X752-1-BL-4
Clear	-------	X751-1-CLEAR	X751-1-CLEAR-4
Green	-------	X752-1-GN	X752-1-GN-4
Red	-------	X750-1R	X750-1R-4
White	-------	X752-1-W	X752-1-W-4
Yellow	-------	X752-1-Y	X752-1-Y-4
1 1/2" ID Before Shrink, 1/2" ID After Shrink			
Black	-------	X750-1-1/2	X750-1-1/2-4
Clear	-------	X751-1-1/2-CL	X751-1-1/2-CL-4
Red	-------	X750-1-1/2R	X750-1-1/2R-4

Adhesive-Lined Black Heat Shrink Tubing for Odd Shapes (4 to 1)



With a 4 to 1 shrink ratio, this shrink tubing can encapsulate just about any odd shape you may need to permanently seal off from the environment. Adhesive lining allows the shrink tubing to attach itself to the wire or terminal for a watertight seal. Use this shrink tubing in applications that need shelter from the elements or contaminants. This medium wall heats evenly, doesn't bubble or split, and is self-extinguishing. It also offers greater flexibility than PVC shrink tubing. Install with a butane torch or heat gun. Maximum temperature of 230°F.

Meets MIL-I-23053/4 Class 3, UL 224 600V, 125 Degree C, VW-1, CSA OFT Recognized.

ID Before Shrink	ID After Shrink	1-ft. Lengths	4-ft. Lengths
5/32"	1/32"	X450-5/32	X450-5/32-4
5/16"	1/16"	X450-5/16	X450-5/16-4
1/2"	1/8"	X450-1/2	X450-1/2-4
5/8"	5/32"	X450-5/8	X450-5/8-4
1"	1/4"	X450-1	X450-1-4
1 1/4"	5/16"	X450-1-1/4	X450-1-1/4-4
2"	1/2"	X450-2	X450-2-4

Color-Coded Adhesive-Lined Heat Shrink Tubing (3 to 1)



The translucent color tint is matched to the terminal it can encapsulate: red for 22-18 gauge terminals, blue 16-14 gauge terminals and yellow 12-10 gauge terminals. Wire gauges are imprinted on the exterior of the shrink tubing. The clarity allows you to see inside while installing or maintaining. Adhesive lining allows the shrink tubing to attach itself to the wire or terminal, giving it a watertight seal. The high shrink ratio (3 to 1) enables easy bridging and encapsulation of odd shaped connectors or applications. Maximum temperature of 230°F. Meets MIL-DTL-23053/4 and UL E157227.

ID Before Shrink	ID After Shrink	Color	6" Lengths	4-ft. Lengths
For 22-18 Ga. Terminals				
1/8"	1/32"	Clear Red	ST-RED	ST-RED-4
For 16-14 Ga. Terminals				
1/4"	5/64"	Clear Blue	ST-BLUE	ST-BLUE-4
For 12-10 Ga. Terminals				
3/8"	1/64"	Clear Yellow	ST-YELLOW	ST-YELLOW-4

Heat Shrink Tubing and Kits, Hose Clamp Kit & Hose Clamp Racks

Economy Heat Shrink Tubing (2 to 1)

This economical PVC shrink tubing is not as easy to install as polyolefin, but it does offer better resistance to chemicals and has a tougher outer layer. It also stands up better to direct sunlight. Offers a 2 to 1 shrink ratio and maximum temperature of 221°F. Meets MIL-I-23053/2,MIL-DTL-2 CLASS 2, UL 224 VW-1, and CSA OFT Recognized.

ID Before Shrink	ID After Shrink	Color	Part Number	Pkg. Qty.
3/64"	1/64"	Black	X105-3/64	100-ft. Spools
3/64"	1/64"	Clear	X105-3/64-C	100-ft. Spools
1/16"	1/32"	Black	X105-1/16	100-ft. Spools
1/16"	1/32"	Clear	X105-1/16-C	100-ft. Spools
3/32"	3/64"	Black	X105-3/32	100-ft. Spools
3/32"	3/64"	Clear	X105-3/32-C	100-ft. Spools
1/8"	1/16"	Black	X105-1/8	100-ft. Spools
1/8"	1/16"	Clear	X105-1/8-C	100-ft. Spools
1/8"	1/16"	Yellow	X105-1/8-Y	100-ft. Spools
3/16"	3/32"	Black	X105-3/16	100-ft. Spools
3/16"	3/32"	Clear	X105-3/16-C	100-ft. Spools
1/4"	1/8"	Black	X105-1/4	100-ft. Spools
5/16"	5/32"	Black	X105-5/16	100-ft. Spools
3/8"	3/16"	Black	X105-3/8	100-ft. Spools
3/8"	3/16"	Clear	X105-3/8-C	100-ft. Spools
1/2"	1/4"	Black	X105-1/2	100-ft. Spools
1/2"	1/4"	Clear	X105-1/2-C	100-ft. Spools
5/8"	5/16"	Black	X105-5/8	50-ft. Spools
3/4"	3/8"	Black	X105-3/4	50-ft. Spools
3/4"	3/8"	Clear	X105-3/4-C	50-ft. Spools
1"	1/2"	Black	X105-1	4-ft. Lengths
1 1/4"	5/8"	Black	X105-1-1/4	4-ft. Lengths
1 1/2"	3/4"	Black	X105-1-1/2	4-ft. Lengths
2"	1"	Black	X105-2	4-ft. Lengths
4"	2"	Black	X105-4	1-ft. Lengths

Shrink Tubing in a Tape Form



Cold shrink and silicone extreme temperature tape requires no heat, sets in seconds and cures in hours. Stretches 2-3 times its length and bonds to itself to form one solid piece of shrink tube. Ideal for odd shapes, repair jobs, mid-points of long cable and explosive environments.

Silicone extreme temperature can handle up to 600 PSI in high pressure applications.

See page #105 for the complete line of shrink tubing in a tape form.

Adhesive-Lined Shrink Tubing (3 to 1) Kit



Part Numbers
Black #HW/SHK-KIT
Red #HW/SHK-KIT-R

This kit contains 7 different (3 to 1) adhesive-lined shrink tubing sizes from 1/8" to 3/4", 65 pieces total. Comes in a large metal box, 18"w x 12"d x 3"h. Kit can be ordered in red or black adhesive-lined shrink tubing.

Adhesive lining allows the shrink tubing to attach itself to the wire or terminal, giving it a watertight seal. Use this shrink tubing in applications that need shelter from the elements or contaminants.

Black Kit Contains	Red Kit Contains	Description	Qty.
Medium Wall			
X750-1/8	X750-1/8R	1/8" Diameter Adhesive-Lined	10
X750-3/16	X750-3/16R	3/16" Diameter Adhesive-Lined	10
X750-1/4	X750-1/4R	1/4" Diameter Adhesive-Lined	10
Heavy Wall			
X700-3B	X700-3R	5/16" Dia. Heavy Duty Adhesive-Lined	10
X700-4B	X700-4R	13/32" Dia. Heavy Duty Adhesive-Lined	10
X700-5B	X700-5R	1/2" Dia. Heavy Duty Adhesive-Lined	10
X700-7B	X700-7R	3/4" Dia. Heavy Duty Adhesive-Lined	5

Standard Heat Shrink Tubing (2 to 1) Kit



Part #
SHRINK TUBE KIT

This kit contains 8 different black (2 to 1) standard shrink tubing sizes from 1/16" to 3/4", 32 feet total. Comes in a large metal box, 18"w x 12"d x 3"h.

Polyolefin is the most popular style of shrink tubing. It heats evenly and doesn't bubble or split.

Kit Contains	Description	Qty.
X221-1/16	1/16" Diameter Black Shrink Tubing	4 feet
X221-3/32	3/32" Diameter Black Shrink Tubing	4 feet
X221-1/8	1/8" Diameter Black Shrink Tubing	4 feet
X221-3/16	3/16" Diameter Black Shrink Tubing	4 feet
X221-1/4	1/4" Diameter Black Shrink Tubing	4 feet
X221-3/8	3/8" Diameter Black Shrink Tubing	4 feet
X221-1/2	1/2" Dia. Diameter Black Shrink Tubing	4 feet
X221-3/4	3/4" Diameter Black Shrink Tubing	4 feet

Worm-Drive Hose Clamp Kit



Full diameter coverage of nine different sizes of standard worm drive hose clamps. From 7/32" to 2 3/4". Includes rack.

Part # HC-KIT



Kit Contains	Qty.	Kit Contains	Qty.	Kit Contains	Qty.
4M-HC	30	12-HC	20	28-HC	20
6M-HC	30	20-HC	20	32-HC	20
10-HC	20	24-HC	20	36-HC	20

Hose Clamp Racks

These racks are free standing and designed not to tip. They also can be peg board mounted or wall mounted. Hose clamps are not included.

A 

B 

C 

	Overall Height	Overall Width	Part Number
(A)	16.75"	21.6"	HC-RACK
(B)	18"	14"	HC-RACK-M
(C)	22.75"	22.5"	HC-RACK-L

Worm-Drive Hose Clamps

The **standard** are the most popular style of hose clamps for industrial and automotive applications.

Use these **soft-touch** worm-drive hose clamps with soft hoses and tubes. An integral smooth inner liner covers up the fastening slots that can cut into soft hoses. There are no bumps under the housing to jeopardize the concentricity of the seal and no laminated coverings to disintegrate under heat, ultraviolet, or corrosive attacks.

The **regular** hose clamps have stainless steel bands and housings with carbon steel slotted hex screws. The **harsh environment** hose clamps are commonly used in marine and burial applications, the all stainless steel design allows these hose clamps to stand up to tough environments. No steel or spot welds to rust, corrode, or rupture. Meet SAE J1508.



Standard

Fits Hose OD	SAE #	Regular	Harsh Environ.	Pkg. Qty.
1/4"-5/8"	4 Mini	4M-HC	4M-HCS	10
7/16"-3/4"	6 Mini	6M-HC	6M-HCS	10
7/16"-3/4"	6	6-HC	6-HCS	10
1/2"-7/8"	8	8-HC	8-HCS	10
9/16"-1 1/16"	10	10-HC	10-HCS	10
11/16"-1 1/4"	12	12-HC	12-HCS	10
13/16"-1 1/2"	16	16-HC	16-HCS	10
13/16"-1 3/4	20	20-HC	20-HCS	10
1 1/16"-2"	24	24-HC	24-HCS	10
1 5/16"-2 1/4"	28	28-HC	28-HCS	10
1 9/16"-2 1/2"	32	32-HC	32-HCS	10
1 13/16"-2 3/4"	36	36-HC	36-HCS	10
2 1/16"-3"	40	40-HC	40-HCS	10
2 5/16"-3 1/4"	44	44-HC	-------	10

Fits Hose OD (Cont.)	SAE #	Regular	Harsh Environ.	Pkg. Qty.
2 9/16"-3 1/2"	48	48-HC	-------	10
2 13/16"-3 3/4"	52	52-HC	-------	10
3 1/16"-4"	56	56-HC	-------	10
3 5/16"-4 1/4"	60	60-HC	-------	10
3 9/16"-4 1/4"	64	64-HC	-------	10
1 7/8"-5"	72	72-HC	-------	10
2 1/2"-5 1/2"	80	80-HC	-------	10
3 1/8"-6"	88	88-HC	-------	10
3 5/8"-6 1/2"	96	96-HC	-------	10
4 1/8"-7"	104	104-HC	-------	10
5 5/8"-8 1/2"	128	128-HC	-------	10
7 1/8"-10"	152	152-HC	-------	10
9 3/8"-12 1/4"	188	188-HC	-------	10

Soft Touch

Fits Hose OD	SAE #	Regular	Harsh Environ.	Pkg. Qty.
1/4"-5/8"	4 Mini	4M-HCL	-------	10
7/16"-3/4"	6 Mini	-------	-------	10
7/16"-3/4"	6	6-HCL	6-HCLS	10
1/2"-7/8"	8	8-HCL	8-HCLS	10
9/16"-1 1/16"	10	10-HCL	10-HCLS	10
11/16"-1 1/4"	12	12-HCL	12-HCLS	10
13/16"-1 1/2"	16	16-HCL	16-HCLS	10
13/16"-1 3/4	20	20-HCL	20-HCLS	10
1 1/16"-2"	24	24-HCL	24-HCLS	10
1 5/16"-2 1/4"	28	28-HCL	28-HCLS	10
1 9/16"-2 1/2"	32	32-HCL	32-HCLS	10
1 13/16"-2 3/4"	36	36-HCL	36-HCLS	10
2 1/16"-3"	40	40-HCL	40-HCLS	10
2 5/16"-3 1/4"	44	44-HCL	-------	10

Constant-Tension Worm-Drive Hose Clamps

As fluid runs through your hose, thermal expansion and contraction will occur. These hose clamps will adjust right along with it, keeping the same tension on your hose. Commonly used in commercial vehicle truck/diesel engine agricultural off-road applications. The all stainless steel design allows these hose clamps to stand up to tough environments. Meet SAE J1508.



Fits Hose OD	SAE #		Pkg. Qty.
9/16"-1 1/16"	10	10-HCCT	10
11/16"-1 1/4"	12	12-HCCT	10
13/16"-1 1/2"	16	16-HCCT	10

Fits Hose OD	SAE #		Pkg. Qty.
3/4"-1 1/16"	175	175-HCCT	10
1 1/4"-2 1/8"	212	200-HCCT	10
1 3/4"-2 5/8"	262	250-HCCT	10

Fits Hose OD	SAE #		Pkg. Qty.
2 1/4"-3 1/8"	312	300-HCCT	10
2 3/4"-3 5/8"	362	350-HCCT	10
3 3/4"-4 5/8"	462	450-HCCT	10

No-Maintenance Constant-Tension T-Bolt Hose Clamps

No maintenance required - the large spring allows for greater thermal expansion and contraction than a standard hose clamp. Commonly used in charge air cooling systems, for maintaining tension on hoses that experience high temperature and pressure swings. Band is 3/4"wide. Meet SAE J1508.



Fits Hose OD	SAE Number		Pkg. Qty.
2 1/2"-2 3/4"	52	52-SLTB	10
3 1/16"-3 3/8"	70	70-SLTB	10

Fits Hose OD	SAE Number		Pkg. Qty.
3 9/16"-3 7/8"	86	86-SLTB	10
4 1/16"-4 3/8"	102	102-SLTB	10

Fits Hose OD	SAE Number		Pkg. Qty.
4 9/16"-4 7/8"	118	118-SLTB	10

Hose Protectors

Prevent failures in your hydraulic, air line and electrical cables by adding these heavy duty protectors where your hose may wear due to vibration, abrasion or puncture. Impervious to solvents, oils, grease, and gasoline. -40° to 400° F. Sold Individually.



For Hose Diameter	Length	Black	Orange	Yellow
1/4" - 1"	4"	HOSEPRO-4	HOSEPRO-4-O	HOSEPRO-4-Y
3/4" - 1 1/4"	6"	HOSEPRO-6	HOSEPRO-6-O	HOSEPRO-6-Y
1" - 1 1/2"	8"	HOSEPRO-8	HOSEPRO-8-O	HOSEPRO-8-Y

For Hose Diameter	Length	Black	Orange	Yellow
1 1/4" - 2 1/4"	10"	HOSEPRO-10	HOSEPRO-10-O	HOSEPRO-10-Y
1 1/2" - 2 1/2"	12"	HOSEPRO-12	HOSEPRO-12-O	HOSEPRO-12-Y

Hose Organizers

Simplify the routing and prevent damage to your hose lines with this rugged handler of unruly hoses. Simply snap the hose in the organizer. For the 3/4" sizes and larger, use the mounting tab to secure the organizer to any surface. Color is black. Sold individually.

For Hose Diameter	Number of Hoses	
3/16"	4	HL-316X4
1/4"	4	HL-14X4
3/8"	4	HL-38X4

For Hose Diameter	Number of Hoses	
1/2"	4	HL-12X4
3/4"	4	HL-34X4
1"	4	HL-1X4

For Hose Diameter	Number of Hoses	
1 1/8"	4	HL-118X4
1 3/8"	3	HL-138X3



3/4" x 1 3/8" with Mounting Tab

Hose Spacers

Hose Diameters			
1st Hose		2nd Hose	
3/4"	x	3/4"	HS-34-34
1"	x	1"	HS-1-1

Hose Diameters			
1st Hose		2nd Hose	
1 1/8"	x	1 1/8"	HS-118-118
1 3/8"	x	1 3/8"	HS-138-138

Simplify the routing and prevent damage to your hose lines. Simply cable tie your two lines into place in this spacer. Color is black. Sold individually.



Cable Ties & Thomas and Betts Cable Ties

Cable Ties



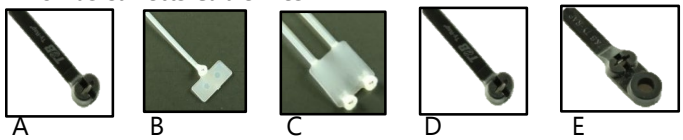
These American made cable ties are military spec #MIL-M-20693B. Choose UV black ties for outdoor applications. The UV black protection allows cable ties to last longer in the sun. UL listed. Made of nylon 6/6 and have operating temperature -40°F to 185°F

Heavy duty cable ties are wider, giving them greater strength for demanding applications.

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
Standard — White and UV Black						
4"	18 lbs.	White	.875"	0.1"	T18-4	100
4"	18 lbs.	UV Black	.875"	0.1"	T18-4B	100
5.5"	18 lbs.	White	1.25"	0.1"	T18-6	100
5.5"	18 lbs.	UV Black	1.25"	0.1"	T18-6B	100
5.7"	40 lbs.	White	1.63"	0.14"	T30-5	100
5.5"	40 lbs.	UV Black	1.63"	0.14"	T30-5B	100
8"	18 lbs.	White	2"	0.1"	T18-8	100
8"	18 lbs.	UV Black	2"	0.1"	T18-8B	100
8"	40 lbs.	White	2"	0.14"	T40-8	100
8"	40 lbs.	UV Black	2"	0.14"	T40-8B	100
8"	50 lbs.	White	2"	0.2"	T50-7	100
8"	50 lbs.	UV Black	2"	0.2"	T50-7B	100
11.5"	40 lbs.	White	3.2"	0.14"	T40-11	100
11.8"	50 lbs.	White	3"	0.2"	T50-11	100
11.8"	50 lbs.	UV Black	3"	0.2"	T50-11B	100
14.5"	40 lbs.	White	4"	0.14"	T30-14	100
14.5"	40 lbs.	UV Black	4"	0.14"	T30-14B	100
14.8"	50 lbs.	White	4"	0.2"	T50-14	100
14.8"	50 lbs.	UV Black	4"	0.2"	T50-14B	100
17"	50 lbs.	White	4.75"	0.2"	T50-17	100
Standard — Colors						
4"	18 lbs.	Blue	0.75"	0.1"	T18-4-BLUE	100
4"	18 lbs.	Green	0.75"	0.1"	T18-4-GN	100
4"	18 lbs.	Gray	0.75"	0.1"	T18-4-GY	100
4"	18 lbs.	Orange	0.75"	0.1"	T18-4-O	100
4"	18 lbs.	Red	0.75"	0.1"	T18-4-RED	100
4"	18 lbs.	Yellow	0.75"	0.1"	T18-4-Y	100
5.7"	40 lbs.	Blue	1.63"	0.14"	T30-5-BLUE	100
5.7"	40 lbs.	Brown	1.63"	0.14"	T30-5-BN	100
5.7"	40 lbs.	Green	1.63"	0.14"	T30-5-GN	100
5.7"	40 lbs.	Gray	1.63"	0.14"	T30-5-GY	100
5.7"	40 lbs.	Orange	1.63"	0.14"	T30-5-O	100
5.7"	40 lbs.	Purple	1.63"	0.14"	T30-5-PU	100

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
Standard Colors (Cont.)						
5.7"	40 lbs.	Red	1.63"	0.14"	T30-5-R	100
5.7"	40 lbs.	Yellow	1.63"	0.14"	T30-5-Y	100
8"	50 lbs.	Blue	2"	0.2"	T50-7-BLUE	100
8"	50 lbs.	Brown	2"	0.2"	T50-7-BN	100
8"	50 lbs.	Green	2"	0.2"	T50-7-GN	100
8"	50 lbs.	Orange	2"	0.2"	T50-7-O	100
8"	50 lbs.	Purple	2"	0.2"	T50-7-PU	100
8"	50 lbs.	Red	2"	0.2"	T50-7-RED	100
8"	50 lbs.	Yellow	2"	0.2"	T50-7-Y	100
8"	50 lbs.	Assortment	2"	0.2"	T50-7ASST	100
11.8"	50 lbs.	Blue	3"	0.2"	T50-11-BLUE	100
11.8"	50 lbs.	Green	3"	0.2"	T50-11-GN	100
11.8"	50 lbs.	Gray	3"	0.2"	T50-11-GY	100
11.8"	50 lbs.	Yellow	3"	0.2"	T50-11-Y	100
Heavy Duty						
9"	120 lbs.	White	2"	0.3"	T120-8	100
9"	120 lbs.	UV Black	2"	0.3"	T120-8B	100
15"	120 lbs.	White	4"	0.3"	T120-14	100
15"	120 lbs.	UV Black	4"	0.3"	T120-14B	100
15"	250 lbs.	UV Black	4"	0.5"	T250-14B	100
17.75"	120 lbs.	White	5"	0.3"	T120-18	100
17.75"	120 lbs.	UV Black	5"	0.3"	T120-18B	100
22"	250 lbs.	UV Black	6"	0.5"	T250-21B	100
24.5"	120 lbs.	White	7"	0.3"	T120-24	100
24.5"	120 lbs.	UV Black	7"	0.3"	T120-24B	100
25.2"	175 lbs.	White	7"	0.4"	T175-24	100
25.2"	175 lbs.	UV Black	7"	0.4"	T175-24B	100
32"	175 lbs.	White	9.4"	0.4"	T175-32	100
32"	175 lbs.	UV Black	9.4"	0.4"	T175-32B	100
36"	175 lbs.	White	10.7"	0.4"	T175-36	100
36.5"	175 lbs.	UV Black	10.4"	0.4"	T175-36B	100
48"	175 lbs.	White	14.4"	0.4"	T175-48	100
48"	175 lbs.	UV Black	14.4"	0.4"	T175-48B	100

Thomas & Betts Cable Ties



A B C D E

The Thomas & Betts Ty-Rap® brand you know and love offers a stainless steel lock embedded in the nylon head for extra durability. Operating temperature -40°F to 185°F, unless noted. UL Flame rating 94V-2.

Cable ties with UV black protection allow them to last longer in the sun.

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
(A)Standard						
3.6"	18 lbs.	White	0.63"	0.1"	TY-23M	100
3.6"	18 lbs.	UV Black	0.63"	0.1"	TY-23MB	100
5.5"	40 lbs.	White	1.13"	0.14"	TY-24M	100
5.5"	40 lbs.	UV Black	1.13"	0.14"	TY-24MB	100
7.3"	50 lbs.	White	1.75"	0.2"	TY-25M	100
7.3"	50 lbs.	UV Black	1.75"	0.2"	TY-25MB	100
8"	18 lbs.	White	2"	0.1"	TY-232M	100
8.2"	40 lbs.	White	2"	0.14"	TY-242M	100
11.1"	40 lbs.	White	3"	0.14"	TY-26M	100
11.1"	40 lbs.	UV Black	3"	0.14"	TY-26MB	100
11.4"	50 lbs.	White	3"	0.2"	TY-253M	100
11.4"	50 lbs.	UV Black	3"	0.2"	TY-253MB	100
13.4"	120 lbs.	White	3.5"	0.3"	TY-27M	100
13.4"	120 lbs.	UV Black	3.5"	0.3"	TY-27MB	100
14.2"	50 lbs.	White	4"	0.2"	TY-28M	100
14.2"	50 lbs.	UV Black	4"	0.2"	TY-28MB	100

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
(A)Standard (Cont.)						
18"	120 lbs.	UV Black	5"	0.3"	TY-275MB	100
30"	120 lbs.	White	9"	0.3"	TY-29M	100
Specialty						
(B)ID Tag						
4"	18lbs.	White	0.63"	0.09"	TY-53M	100
(C)Double ID Tag						
7.25"	50 lbs.	White	1.75"	0.19"	T50-7/2ID	100
(D) High Temperature (-50°F to 302°F)						
13.4"	120 lbs.	Blue	3.5"	0.3"	TYZ-27M	100
(E)Screw-Mount						

Length	Burst Strength	Color	Max. Bundle Dia.	Width	Hole Dia.		Pkg. Qty.
6"	40 lbs.	White	1.13"	0.14"	#8	TY-34M	100
7.8"	50 lbs.	White	1.75"	0.18"	#10	TY-35M	100
13.9"	120 lbs.	UV Black	3.5"	0.3"	1/4"	TY-37MB	100

Specialty Cable Ties



A B C D E F G H I J K L M

Are made of nylon. Choose UV black ties for outdoor applications. The UV black protection allows cable ties to last longer in the sun. The round shape head of the **hose clamp style** cable ties allows 360º compression for fuel, water, and air lines. **Snag free** has a head that sits low to avoid scraping things around it. **Push mount** cable ties will fit through panel wall thickness 0.04" to 0.14" and **winged push mount** through panel wall thickness up to 0.125". **Washer head** cable ties have a plastic washer to prevent the cable tie from pulling through a hole. UL listed.

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
(A)Double Loop						
7.5"	50 lbs.	White	1.75"	0.2"	T50-7DL	100
8"	50 lbs.	UV Black	1.5"	0.2"	T50-7DL-B	100
(B)Hose Clamp Style						
8"	60 lbs.	White	1.75"	0.2"	T60-8-RND	100
8"	60 lbs.	UV Black	1.75"	0.2"	T60-8B-RND	100
ID Tag						
(C)Parallel ID Tag						
4"	18 lbs.	White	0.875"	0.1"	T18-4XID	100
4"	18 lbs.	White	0.625"	0.1"	TY-53M	100
(D)Perpendicular ID Tag						
4.3"	18 lbs.	White	0.7"	0.1"	T18-4ID	100
(E)Perpendicular ID Tag						
7.5"	50 lbs.	White	1.75"	0.2"	T50-7ID	100
15"	50 lbs.	White	4"	0.2"	T50-14ID	100
(F)Double Tie ID Tag						
7.25"	50 lbs.	White	1.75"	0.2"	T50-7/2ID	100
Push Mount						
(G)Push Mount (Requires 1/4" predrilled hole)						
7.5"	50 lbs.	White	1.75"	0.2"	T50-7PM	100
7.5"	50 lbs.	UV Black	1.75"	0.2"	T50-7PM-B	100
(H)Winged Push Mount (Requires 1/4" predrilled hole)						
7.9"	50 lbs.	White	1.8"	0.2"	T50-7WPM	100
7.9"	50 lbs.	UV Black	1.8"	0.2"	T50-7WPM-B	100
(I)Snag Free						
16"	120 lbs.	White	4"	0.3"	T120-14LP-C	100

Length	Burst Strength	Color	Max. Bundle Dia.	Width		Pkg. Qty.
(J)Releasable						
7.5"	50 lbs.	UV Black	1.75"	0.2"	T50-7RB	100
11"	50 lbs.	White	3"	0.2"	T50-10RW	100
11"	50 lbs.	UV Black	3"	0.2"	T50-10RB	100
14.5"	50 lbs.	UV Black	4"	0.2"	T50-15RB	100
(K)High Temperature (-50°F to 302°F)						
13.4"	120 lbs.	Blue	3.5"	0.3"	TYZ-27M	100
(L)Washer Head						
9.6"	150 lbs.	Black	2.62"	0.22"	T100-9BH	100
15"	150 lbs.	Black	4.33"	0.22"	T100-14BH	100

Length	Burst Strength	Color	Max. Bundle Dia.	Width	Hole Dia.		Pkg. Qty.
(M)Screw Mount							
5.5"	30 lbs.	White	1"	0.14"	#4	T30-5H	100
5.9"	40 lbs.	UV Black	1.25"	0.14"	#4	T30-5HB	100
6"	40 lbs.	White	1.13"	0.14"	#8	TY-34M	100
7.8"	50 lbs.	White	1.75"	0.2"	#10	TY-35M	100
8"	50 lbs.	White	2"	0.2"	#10	T50-7H	100
8"	50 lbs.	UV Black	2"	0.2"	#10	T50-7HB	100
13.9"	120 lbs.	UV Black	3.5"	0.3"	1/4"	TY-37MB	100
14.5"	50 lbs.	White	4"	0.2"	#10	T50-14H	100
14.5"	50 lbs.	UV Black	4"	0.2"	#10	T50-14HB	100
15"	120 lbs.	White	4"	0.3"	1/4"	T120-14H	100
15"	120 lbs.	UV Black	4"	0.3"	1/4"	T120-14HB	100

Hellermann Tyton Cable Ties

The Hellermann Tyton cable ties are engineered and manufactured for maximum performance and quality. The T-series has inside serrations for a strong hold onto bundles. Use the **EVO®7** or the **EVO®9** tools to increase productivity and reduce operator injuries.

HellermannTyton



Burst Strength	Length	Max. Bundle Dia.	Width	Black	Natural	Pkg. Qty.
Standard						
18 lbs.	4"	0.9"	0.1"	T18R0C2	T18R9C2	100
18 lbs.	4"	0.9"	0.1"	T18R0M4	T18R9M4	1000
18 lbs.	8"	2.2"	0.1"	T18L0C2	T18L9C2	100
18 lbs.	8"	2.2"	0.1"	T18L0M4	T18L9M4	1000
30 lbs.	5.8"	1.4"	0.1"	T30R0C2	T30R9C2	100
30 lbs.	5.8"	1.4"	0.1"	T30R0M4	T30R9M4	1000
50 lbs.	8"	2"	0.2"	T50R0C2	T50R9C2	100
50 lbs.	8"	2"	0.2"	T50R0M4	T50R9M4	1000
50 lbs.	12"	3.2"	0.2"	T50I0C2	T50I9C2	100
50 lbs.	12"	3.2"	0.2"	T50I0M4	T50I9M4	1000
50 lbs.	15.4"	4.3"	0.2"	T50L0C2	T50L9C2	100
50 lbs.	15.4"	4.3"	0.2"	T50L0M4	T50L9M4	1000
Heavy Duty						
120 lbs.	8.9"	2.2"	0.3"	T120S0K2	T120S9K2	50
120 lbs.	8.9"	2.2"	0.3"	T120S0H4	T120S9H4	500
120 lbs.	15.2"	4.1"	0.3"	T120R0K2	T120R9K2	50
120 lbs.	15.2"	4.1"	0.3"	T120R0H4	T120R9H4	500

EVO®7

- **For Use with:** T18, T30, T40, T50 and T80 series
- Provides reliability and durability
- Lightweight and ergonomic design
- Tension dial offers 33 easy to read settings, with 1/4" increments
- Tension lock prevents operator from changing settings during use



Part #110-70083

EVO®9

- **For Use with:** T50, T80, T120, T150 and T250 series
- Provides clean, flush cuts for 50lb. to 250lb. cable ties
- Impact resistant housing
- Easy to adjust tension knob, 33 settings
- Advanced design reduces hand force and kickback, reducing injuries



Part #110-80000

Cable Tie Mounts, Hook and Loop Cable Ties & Cable Tie Kits

Adhesive-Backed Cable Tie Mounts



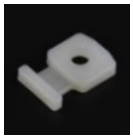
Attach cable ties to flat surfaces with these mounts. UV black mounts resist the sun's fatigue. **Adhesive backed** mounts are rated for 125°F. Our **super-stick** adhesive backed mounts have extra holding capacity for heavy duty jobs, and are rated for 185°F. Simply peel and stick. Sets in seconds. Made of nylon. Acrylic based adhesive.

	Adhesive Backed				Super-Stick Adhesive Backed			
Mounting Base Size	For Cable Tie Sizes	White	UV Black	Pkg. Qty.	For Cable Tie Sizes	White	UV Black	Pkg. Qty.
0.5" Square	18#	TRMP-XSM	TRMP-XSM-B	50	-------	-------	-------	----
0.75" Square	18, 30, 40, 50#	TRMP-SM	TRMP-SM-B	50	18, 30, 40#	TRMP-SM-ACRL	TRMP-SM-B-ACRL	25
1" Square	18, 30, 40, 50#	TRMP-2	TRMP-2-B	50	18, 30, 40, 50#	TRMP-2-ACRL	TRMP-2-B-ACRL	25
1.12" Square	18, 30, 40, 50#	TRMP	TRMP-B	50	18, 30, 40, 50#	TRMP-ACRL	TRMP-B-ACRL	25
1.5" Square	50, 120#	TRMP-HD	TRMP-HD-B	50	50, 120#	TRMP-HD-ACRL	TRMP-HD-B-ACRL	10
2" Square	120, 175#	TRMP-XHD	TRMP-XHDB	10	120, 175#	TRMP-XHD-ACRL	TRMP-XHDB-ACRL	10

Specialty Cable Tie Mounts


A


B


C


D

Mounting Base Size	For Cable Tie Sizes	Color	Screw Size		Pkg. Qty.
(A)Screw-In Saddle					
0.54" X 0.34"	18#	White	#4	SCM-S4	50
0.60" X 0.385"	30, 40, 50#	UV Black	#8	SCM-SB	50
0.60" X 0.385"	30, 40, 50#	White	#8	SCM-S	50
0.875" X 0.625"	120, 50#	White	#10	SCM	50
0.875" X 0.625"	120, 50#	UV Black	#10	SCM-B	50
0.86" X 0.62"	175#	UV Black	1/4"	SCM-1/4B	25

Mounting Base Size	For Cable Tie Sizes	Color	Screw Size		Pkg. Qty.
(B)Easy-Screw-In					
0.75" X 0.38"	30, 40, 50#	White	#8	SCB-8	100
0.75" X 0.38"	30, 40, 50#	White	#10	SCB-10	100
(C)Low-Profile Screw-In					
0.73" X 0.49"	30, 40, 50#	White	#6-8	LPM	50
(D)Push Mount					
0.28" X 0.62"	Up to 50#	White	1/4"	T50-1/4PM	50

Hook and Loop Cable Ties



These hook and loop ties are reusable and won't cut into your bundle. No jagged edge to catch on. Color is black.

Length	Max. Bundle Dia.	Width		Pkg. Qty.
6"	1.3"	0.5"	VT-6	10
8"	1.9"	0.5"	VT-8	10
11"	2.9"	0.5"	VT-11	10

Length	Max. Bundle Dia.	Width		Pkg. Qty.
15"	4.1"	0.75"	VT-15	10
18"	5.1"	0.75"	VT-18	10
24"	7"	0.75"	VT-24	10

Cable Tie Kits and Tools

White and UV Black Cable Tie Kits



Unsure of which cable tie will meet your needs? These kits contain 1,000 pieces. Each kit has six sizes of cable ties and two sizes of cable tie mounts. It is all contained in a large metal box, 18"w x 12"d x 3"h.

The sun won't fatigue our UV black cable ties.

Kit Contains	Description	Qty.
T120-14	15", 120 lb., White, Heavy Duty	50
T50-14-C	14.8", 50 lb., White, Standard	100
T50-11-C	11.8", 50 lb., White, Standard	100
T50-7-C	8", 50 lb., White, Standard	200

(Cont.)	Description	Qty.
T30-5-C	5.7", 40 lb., White, Standard	200
T18-4-C	4", 18 lb., White, Mini	300
TRMP	1.12", White, Mount	25
TRMP-SM	0.75", White, Mount	25

Part # TY-KIT

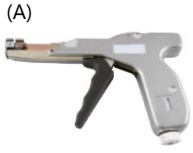
Part # TY-B KIT*

*Part # TY-B KIT Contains same items as above, but in UV black.

Cable Tie Bundling Tools

Cable tie tools are used for bundling cable ties. Tightens and cuts flush in one motion. Die cast construction. Durable and high volume tools. Easy to adjust.

(A)



(B)



(C) Dennison®



Key	Used with	Width Range	
(A)	18lb. To 50lb. Cable Ties	Up to 0.18"	TY-GUN
(B)	18lb. To 50lb. Cable Ties	0.094" to 0.344"	TY-GUN-E
(C)	18lb. To 50lb. Cable Ties	Up to 0.19"	TY-GUN-DENN

Vinyl Coated Clamps

An easy way to secure cables while reducing vibration. Made of galvanized steel with a vinyl cover. Fasteners not included.



Full Clamp Half Clamp

Clamp Diameter		Pkg. Qty.
1/2" Wd., 0.28" Hole Dia.		
Full Clamps		
1/8"	RC-1/8S	50
1/4"	RC-1/4	25
5/16"	RC-5/16	25
3/8"	RC-3/8S	25
1/2"	RC-1/2S	25
5/8"	RC-5/8S	25
3/4"	RC-3/4S	10
1 1/2"	RC-1-1/2S	25
Half Clamps		
1/4"	RCH-1/4	25
3/8"	RCH-3/8	25
1/2"	RCH-1/2	10
3/4"	RCH-3/4	10

Clamp Diameter		Pkg. Qty.
3/4" Wd., 0.41" Hole Dia.		
Full Clamps		
3/8"	RC-3/8	25
1/2"	RC-1/2	25
5/8"	RC-5/8	25
3/4"	RC-3/4	10
7/8"	RC-7/8	10
1"	RC-1	10
1 1/4"	RC-1-1/4	10
1 1/2"	RC-1-1/2	25
1 3/4"	RC-1-3/4	10
2"	RC-2	5
2 1/2"	RC-2-1/2	25
3"	RC-3	1

Nylon Cable Clamps

An easy and economical way to secure cables. Made entirely from nylon, so there's nothing to corrode or rust. Fasteners not included.



Clamp Diameter	Black	Pkg. Qty.	White	Pkg. Qty.
0.17" Fastener Hole Diameter				
1/8"	NYC-1/8B	50	NYC-1/8	100
3/16"	NYC-3/16B	50	NYC-3/16	100
1/4"	NYC-1/4B	50	NYC-1/4	100
5/16"	NYC-5/16B	50	NYC-5/16	50
3/8"	NYC-3/8B	50	NYC-3/8	100
1/2"	NYC-1/2B	50	NYC-1/2	100
0.20" Fastener Hole Diameter				
5/8"	NYC-5/8B	50	NYC-5/8	100
3/4"	NYC-3/4B	50	NYC-3/4	50
7/8"	NYC-7/8B	50	NYC-7/8	50
1"	NYC-1B	50	NYC-1	50
1 1/8"	-------	----	NYC-1-1/8	50
1 1/4"	NYC-1 1/4B	50	NYC-1-1/4	50

Vinyl Coated Clamp Kit

This kit contains 10 different vinyl coated galvanized steel clamps, 235 pieces, sizes 1/8" to 1 1/2" diameter. Comes in a large metal box, 18"w x 12"d x 3"h.

Part #RC-KIT



Kit Contains	Description	Qty.
RC-1/8S	1/8" Vinyl Coated Clamps	50
RC-1/4	1/4" Vinyl Coated Clamps	50
RC-5/16	5/16" Vinyl Coated Clamps	25
RC-3/8	3/8" Vinyl Coated Clamps	25
RC-1/2	1/2" Vinyl Coated Clamps	25
RC-5/8	5/8" Vinyl Coated Clamps	15
RC-3/4	3/4" Vinyl Coated Clamps	15
RC-1	1" Vinyl Coated Clamps	10
RC-1-1/4	1 1/4" Vinyl Coated Clamps	10
RC-1-1/2	1 1/2" Vinyl Coated Clamps	10

Nylon Cable Clamp Kit

This kit contains 10 different white nylon cable clamps, 300 pieces, sizes 1/8" to 1 1/8" diameter. Comes in a large metal box, 18"w x 12"d x 3"h.

Part #NYC-KIT



Kit Contains	Description	Qty.
NYC-1/8	1/8" White Nylon Cable Clamps	50
NYC-3/16	3/16" White Nylon Cable Clamps	50
NYC-1/4	1/4" White Nylon Cable Clamps	50
NYC-5/16	5/16" White Nylon Cable Clamps	25
NYC-3/8	3/8" White Nylon Cable Clamps	25
NYC-1/2	1/2" White Nylon Cable Clamps	25
NYC-5/8	5/8" White Nylon Cable Clamps	25
NYC-3/4	3/4" White Nylon Cable Clamps	25
NYC-1	1" White Nylon Cable Clamps	20
NYC-1-1/8	1 1/8" White Nylon Cable Clamp	20

Cushion Cable Clamps

The cushion will not cut into soft cable when vibration occurs, and it will keep a good hold. Also is more durable than a plastic clamp. Made of steel with a neoprene cushion cover. Fastener hole diameter is 0.26". Fasteners not included.



Clamp Diameter		Pkg. Qty.
1/8"	RCC-1/8	50
1/4"	RCC-1/4	50
3/8"	RCC-3/8	25
1/2"	RCC-1/2	25
5/8"	RCC-5/8	50
3/4"	RCC-3/4	25

Clamp Diameter		Pkg. Qty.
7/8"	RCC-7/8	25
1"	RCC-1	25
1 1/4"	RCC-1-1/4	10
1 1/2"	RCC-1-1/2	10
2"	RCC-2	5
2 1/2"	RCC-2-1/2	5

Cushion Cable Clamp Kit

This kit contains 10 different cushion clamps, 225 pieces, sizes 1/8" to 1 1/2" diameter. Made of fine-plated steel with a neoprene cushion cover. Comes in a large metal box, 18"w x 12"d x 3"h.

Part #RCC-KIT



Kit Contains	Description	Qty.
RCC-1/8	1/8" Cushion Clamps	50
RCC-1/4	1/4" Cushion Clamps	50
RCC-3/8	3/8" Cushion Clamps	25
RCC-1/2	1/2" Cushion Clamps	25
RCC-5/8	5/8" Cushion Clamps	15
RCC-3/4	3/4" Cushion Clamps	15
RCC-7/8	7/8" Cushion Clamps	15
RCC-1	1" Cushion Clamps	10
RCC-1-1/4	1 1/4" Cushion Clamps	10
RCC-1-1/2	1 1/2" Cushion Clamps	10

Frame Clips

Secures wires to frame of truck or angle iron. Heat treated steel coated in black zinc finish. Sold in packages of 50.

Small



Part # FCS

Medium



Part # FCM

Large



Part # FCL

Cable Management & Din Rails

Cable Management

Spiral Bundling Wrap-Around Sleeving



Bundle wire and tubes in this flexible, abrasion-resistant spiral wrap. Features the ability to access the bundle at any point along the way. Create bundles by wrapping this material on as you would with tape - easy to install and reusable. Use **UV black** style for outdoor applications to resist fatigue from the sun.

Diameter (At Rest)	Max. Diameter	UV Black	Pkg. Qty.	Clear	Pkg. Qty.
1/8"	1/2"	SW-1/8B	100	SW-1/8	100
1/4"	2"	SW-1/4B	100	SW-1/4	100
3/8"	3"	SW-3/8B	100	SW-3/8	100
1/2"	4"	SW-1/2B	100	SW-1/2	100
5/8"	4 1/2"	SW-5/8B	100	SW-5/8	100
3/4"	5"	SW-3/4B	100	SW-3/4	100
1"	7"	SW-1B	100	SW-1	100

Convoluted Nylon Sleeving



Bundle and protect wire and tubes with this nylon abrasion-resistant convoluted split loom. Black with grey stripe. Maximum temperature rating of -40°F to 320°F.

Diameter (At Rest)		Pkg. Qty.
Black		
1/4"	SL-1/4	100
3/8"	SL-3/8	100
1/2"	SL-1/2	100
5/8"	SL-5/8	100
3/4"	SL-3/4	100
1"	SL-1	100
1 1/8"	SL-1-1/8	50
1 1/4"	SL-1-1/4	50
1 1/2"	SL-1-1/2	50
2"	SL-2	50

Diameter (At Rest)		Pkg. Qty.
Dark Green		
3/8"	SL-3/8-DKG	100

Packard Corrugated Loom Clips

Type	Inside Conduit ID	Mfg. #	Pkg. Qty.
Outlet Fitting	0.500	8905793	25
Conduit Clip	0.413	8911378	25
Rosebud Clip	0.350	8911169	25

Mesh Sleeving

Resists gasoline, engine chemicals, and cleaning solvents. The diameter of the mesh sleeving expands for easy installation and a tight, secure bundle. Great flexibility and excellent cut and abrasion resistance. Black in color. Maximum temperature rating of 257°F.

Standard style cuts with a hot knife. The **no-fray** style makes it easy to install. Cutting this material to size is easy - simply use sharp scissors. **Flame-retardant** mesh sleeving is made from flame-retardant material to make it extra safe. The X-tracer signifies the flame-retardant material. Cut with a hot knife.

Standard



Flame-Retardant



Diameter (At Rest)	Max. Diameter	Standard	Pkg. Qty.	No-Fray	Pkg. Qty.	Flame-Retardant	Pkg. Qty.
1/8"	1/4"	EXPET-1/8	100	EXPETNF-1/8	50	EXPETFR-1/8	100
1/4"	3/4"	EXPET-1/4	100	EXPETNF-1/4	50	EXPETFR-1/4	100
3/8"	5/8"	EXPET-3/8	50	EXPETNF-3/8	25	EXPETFR-3/8	50
1/2"	3/4"	EXPET-1/2	50	EXPETNF-1/2	25	EXPETFR-1/2	25
3/4"	1 1/4"	EXPET-3/4	25	EXPETNF-3/4	25	EXPETFR-3/4	25
1"	1 1/2"	-------	----	EXPETNF-1	25	-------	----
1 1/4"	1 3/4"	EXPET-1-1/4	25	-------	----	EXPETFR-1-1/4	10
1 3/4"	2 1/4"	EXPET-1-3/4	10	EXPETNF-1-3/4	10	EXPETFR-1-3/4	10
2"	3"	EXPET-2	10	-------	----	EXPETFR-2	10
2 1/2"	4 1/2"	EXPET-2-1/2	5	-------	----	EXPETFR-2-1/2	5

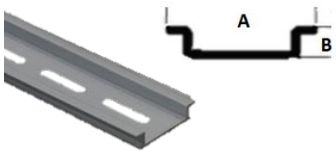
DIN Rails

Mount terminal blocks, power supplies, relays, and other control and distribution devices on walls and other flat surfaces and in enclosures.

DIN Rails

Rails conform to EN 60715 and EN 50022. Zinc plated steel.

OMEGA-3F



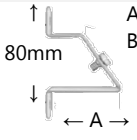
OMEGA-3AF



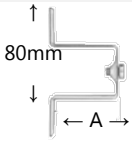
(A) Height	(B) Depth	Mounting Holes Diameter	Mounting Holes Center-to-Center	
35mm	7.5mm	0.25"	1"	OMEGA-3F
35mm	7.5mm	0.25"	1"	OMEGA-3F1
35mm	15mm	0.25"	1"	OMEGA-3AF

Brackets





Angled Bracket



Straight Bracket

Width	(A) Depth	Mounting Holes	Diameter of Holes	
Angled Brackets				
25mm	50mm	1	0.24"	ST
Straight Brackets				
20mm	25mm	1	0.24"	STS-25
20mm	50mm	1	0.24"	STS-50
20mm	70mm	1	0.24"	STS-70
20mm	90mm	1	0.24"	STS-90

Brackets provide extra mounting space behind the DIN rail to accommodate bulky items. They have two 0.26" diameter holes for surface mounting (screws not included). Steel with zinc plating.

Lights

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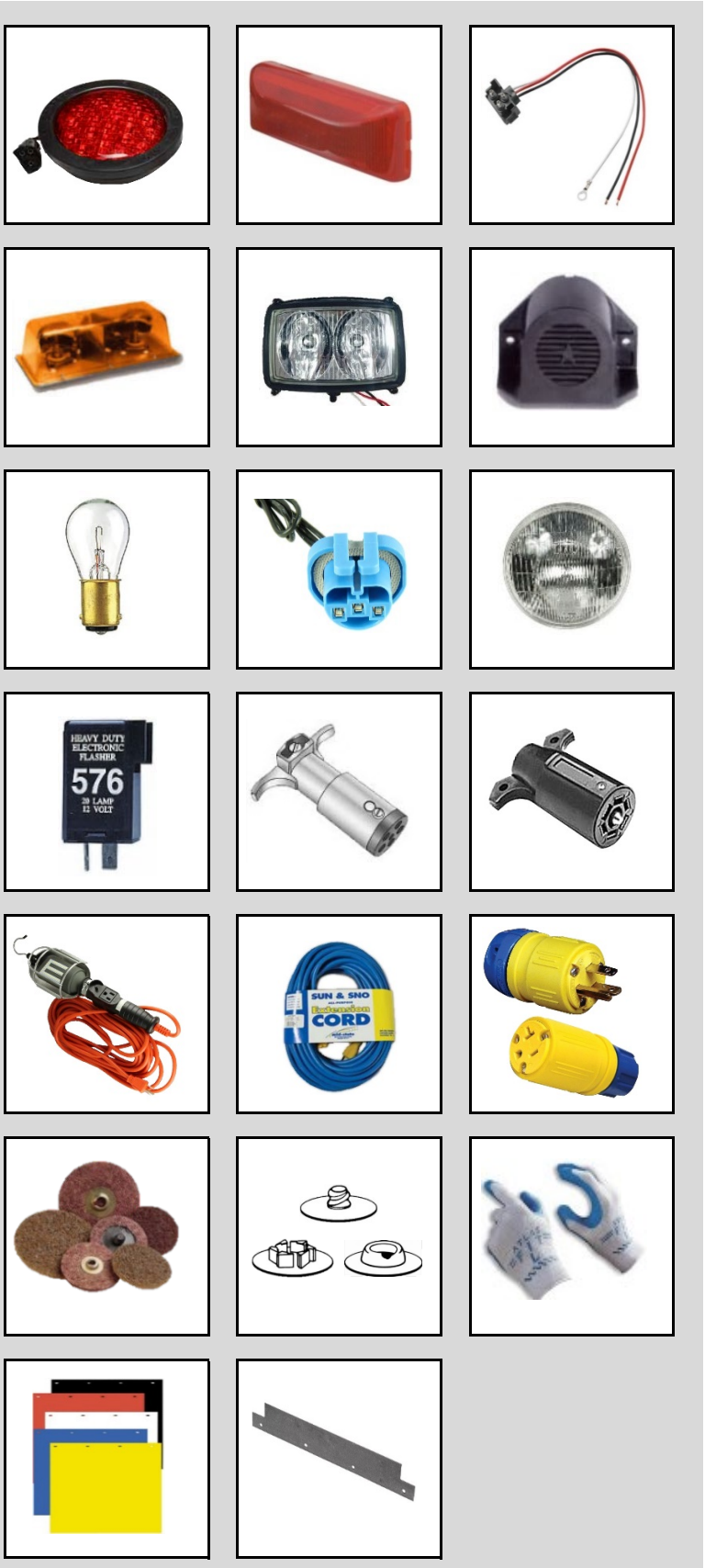
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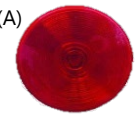
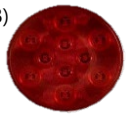


Stop/Tail/Turn Lights

4" Round Stop/Tail/Turn Lights

LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.

GR-55162 combines all standard stop/tail/turn and back-up functions into one industry standard size light. Provides high level protection against reverse voltage, over voltage and overheating. Standard 4-pin hard shell connector sold separately. 12 volt.

(A)  (B)  (C)  (D)  (E 

Color	Manufacturer	Manufacturer #	Feature	
(A) Incandescent				
Red	Optronics	ST45RB	-------	LT2-4040
Red	Grote	52922	-------	LT-4040R
Red	Optronics	ST46RB	Reflector	LT2-4044
Amber	Optronics	ST45AB	-------	LT2-4040A
Clear	Optronics	BU45CB	Back Up	LT2-4041C
White	UB Lights	SE4000W	Back Up	LT2-4041W
(B) LED				
Red	Truck Lite	44351R	6 Diodes, Pigtail Included	TL-44351R
Red	Optronics	STL43RB	10 Diodes	LT2-44002R
Red	A.L. Lightech	T01901304	Pigtail Included	ALL-4RKIT5
Clear	Optronics	BUL53CB	36 Diodes, Back Up	OPT-BUL-53CB
(C) LED Light Kit (Contains: light, grommet, and harness)				
Red	A.L. Lightech	019-01-325	Light Kit, Convex Lens	ALL-4RKIT1ELITE
Red	A.L. Lightech	T01901305	Light Kit	ALL-4RKIT1
LED Stop/Tail/Turn with Back-Up Light				
(D) Red	Optronics	STL201XRB	Back Up	STL201XRB
(E) Red	Grote	55162	Integrated Back Up	GR-55162
-------	Grote	66864*	4-Pin Hard Shell Connector	GR-66864

*This connector must be ordered with GR-55162

Accessories

Universal Grommet




90° 2-Wire Plug


90° 3-Wire Plug

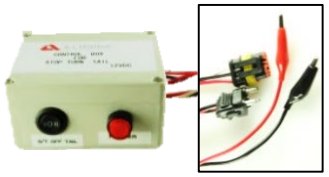
Universal Bracket




Metri-Pack to Wire Leads


Metri-Pack to Stop/Tail/Turn Plug

Power Tester Tool



Description	
Universal Grommet	LT-9127
Universal Bracket	LT-9238
Straight 2-Wire Plug, for Amber, Clear	LT-9123
Straight 3-Wire Plug, for Red	LT-9124
90° 2-Wire Plug	LT-9125
90° 3-Wire Plug, for Red	LT-9128
Metri-Pack to Stop/Tail/Turn Plug	TL-94706
Metri-Pack to Wire Lead	TL-94707
Power Tester Tool	ALL-PWR-TESTER

6" Oval Stop/Tail/Turn Lights

LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.

GR-54682 is DOT approved.

(A)  (B)  (C)  (D) 

(E)  (F)  (G) 

Color	Manufacturer	Manufacturer #	Feature	
(A) Incandescent				
Red	Optronics	ST70RB	-------	LT2-4070R
Amber	Optronics	ST70AB	-------	LT2-4070A
White	Truck Lite	60204C	Back Up	LT-4071W
White	Optronics	BU70CB	Back Up	LT2-4071W
Clear	UB Lights	SE2238C	Utility / Dome	LT2-4071C
(B) LED (10 Diodes)				
Red	Optronics	STL72RB	-------	LT2-64602R
Amber	Optronics	STL72AB	-------	LT2-64503A
(C) LED Light Kit (Contains: light, grommet, and harness)				
Red	A.L. Lightech	T01903305	Light Kit	ALL-6RKIT1
LED with Back-Up Light				
(D) Red	Grote	54682**	Back Up	GR-54682
(E) Red	Optronics	STL211XRB**	Back Up	STL211XRB**
** For Stop/Tail/Turn suggested plug LT-9124, for Back-up suggested plug LT-9123				
(F) Incandescent Mid Trailer Turn Lights				
Amber	Optronics	ST75AB	-------	LT2-4073A
(G) LED Mid Trailer Turn Lights				
Amber	Optronics	STL75AB	9 Diodes	OPT-STL-75AB

Accessories

Universal Bracket




90° 2-Wire Plug


90° 3-Wire Plug

Universal Grommet




Straight 3-Wire Plug


Metri-Pack to Stop/Tail/Turn Plug


Metri-Pack to Wire Leads

Description	
Universal Grommet	LT-9157
Universal Bracket	LT-9292
Straight 2-Wire Plug, for Amber, Clear	LT-9123
Straight 3-Wire Plug, for Red	LT-9124
90° 2-Wire Plug	LT-9125
90° 3-Wire Plug, for Red	LT-9128
Metri-Pack to Stop/Tail/Turn Plug	TL-94706
Metri-Pack to Wire Lead	TL-94707

We Offer Lighting Products from the Following Vendors

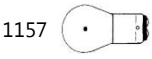
Grote · Truck-Lite · Buyers Products Company · PETERSON Manufacturing Company · UBLights Lighting & Safety Products · A.L. LIGHTech Incorporated · Optronics · North American Signal Company · Betts · PRECO · TecNiq Changing the Shape of Light · Target Tech Federal Signal Corporation

RV Stop/Tail/Turn Lights



Color	Manufacturer	Mfg. #	Feature	
2 Stud Mounts				
Red	Optronics	ST8RB	Right	LT2-M440
Red	Optronics	ST9RB	Left with License Light.	LT2-M440L

Accessories



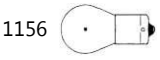
Description	
Replacement Bulb (Tail)	1157
Replacement Bulb (Side)	168

Stud Mount Box Type Stop/Tail/Turn Lights



Color	Manufacturer	Mfg. #	Feature	
Red	UB Lights	TL6400	Universal Combination Red Lamp with 3 Studs, Stop/Tail/Turn and Back Up, Rear Reflector & License Light.	LT2-4027

Accessories



Description	
Replacement Bulb	1156
Replacement Bulb	1157
Replacement Lens	TLR-6400R

2 1/2" Round Side Marker Lights

LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.



Color	Manufacturer	Manufacturer #	Feature	
Standard				
Red	Optronics	MC55RB		LT2-1010R
Red	Optronics	MC57RB	Reflector	LT2-1011R
Amber	Optronics	MC55AB		LT2-1010A
Amber	Optronics	MC57AB	Reflector	LT2-1011A
LED (3 Diodes)				
Red	Optronics	MCL57RB		LT2-17000R
Amber	Optronics	MCL57AB		LT2-17000A

Accessories



Description	
Universal Grommet	LT-9119
Universal (Closed Back) Grommet	LT-9156
Heavy Duty Grommet	LT-9121
Branch Deflector	LT2-9391
90° 2-Wire Plug	LT-9122

2" Round Side Marker Lights

LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.



Color	Manufacturer	Manufacturer #	
Standard			
Red	Optronics	MC53RB	LT2-1030R
Amber	Optronics	MC53AB	LT2-1030A
LED (3 Diodes)			
Red	Optronics	MCL55RB	LT2-16000R
Amber	Optronics	MCL55AB	LT2-16000A

Accessories



Description	
Universal Grommet	LT-9139
Branch Deflector	LT2-9395
Grommet for Use with Branch Deflector	LT-9118
90° 2-Wire Plug	LT-9122

Rectangular Side Marker Lights





Color	Manufacturer	Manufacturer #	
Standard 2 1/2" x 1 3/16"			
Red	Optronics	A91RB	LT2-1500R
Amber	Optronics	A91AB	LT2-1500A
LED 2 1/2" x 1 1/4" (3 Diodes)			
Red	Optronics	AL91RB	LT2-15200R
Amber	Optronics	AL91AB	LT2-15200A

Accessories



Description	
Branch Deflector (Single Wire Included)	LT-9393
Rail Mount (Two Wire Plug Needed)	LT2-9387
Chrome Base (Two Wire Plug Needed)	LT2-9381
90° 2-Wire Plug	LT-9122

Marker Lights

Rectangular Side Marker Lights - 3 15/16" X 1 1/4"


Red


Amber

Color	Manufacturer	Manufacturer #	Feature	
Standard				
Red	Optronics	MC65RB		LT2-1900R
Amber	Optronics	MC65AB		LT2-1900A
Clear	UB Lights	SE1040C	Utility / Dome Light	LT2-1900W
LED (4 Diodes)				
Red	Optronics	MCL75RB		LT2-15000R
Amber	Optronics	MCL75AB		LT2-15000A

Accessories


Base

Description	
Base (Single Wire/Self Grounding)	LT-9389

Rectangular Side Marker Lights - 4 1/16" X 1 1/8"


Red


Amber

Color	Manufacturer	Manufacturer #	Feature	
Red	Optronics	MC66RB	Surface Mount, 2 Wire	LT2-1259R
Amber	Optronics	MC66AB	Surface Mount, 2 Wire	LT2-1259A

Accessories


193

Description	
Replacement Bulb	193

Rectangular Bullseye Side Marker Lights - 4 1/16" X 1 1/8"


LT2-1211R


LT2-1211A

Color	Manufacturer	Manufacturer #	Feature	
Red	Optronics	MC42RB	Surface Mount, 2 Wire	LT2-1211R
Amber	Optronics	MC42AB		LT2-1211A

Accessories


Lens

Description	
Red Lens	LT-9007R
Amber Lens	LT-9007A
Replacement Bulb	193

Rectangular Micro Thin Line Side Marker Lights - 4 1/16" X 1 1/4"

LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.


OPT-MCL-63RB


OPT-MCL-63AB

Color	Manufacturer	Manufacturer #	Feature	
LED (4 Diodes)				
Red	Optronics	MCL63RB	Surface Mount, 2 Wire	OPT-MCL-63RB
Amber	Optronics	MCL63AB	Surface Mount, 2 Wire	OPT-MCL-63AB

Accessories


Base

Description	
Base (Single Wire/Self Grounding)	LT-9389

Mini LED Marker Lights - 2 1/2" X 11/16"


OPT-MCL-13R2B


OPT-MCL-13A2B

Color	Manufacturer	Manufacturer #	Feature	
Red	Optronics	MCL13R2B	Red Lens and LED	OPT-MCL-13R2B
Amber	Optronics	MCL13A2B	Amber Lens and LED	OPT-MCL-13A2B
Red	Optronics	MCL13CR2B	Clear Lens and Red LED	OPT-MCL-13CR2B
Amber	Optronics	MCL13CA2B	Clear Lens and Amber LED	OPT-MCL-13CA2B

3/4" Round LED Marker Lights

3/4" Round LED Marker Lights, 2-Wire

A



B



C



3/4" Round LED Marker and Supplemental Stop Lights, 3-Wire

D



E



F



The **2-wire** LED marker lights are a great space saving option. Rather than use a 2" round marker light, use this tiny but powerful DOT approved 3/4" marker light. Can be corner mounted, serving both side and front or back. (PC rated, viewable at 90°). Use bullets for ease of installation.

The **3-wire** LED add additional markers to supplement your stop/tail/turn lights in a small space. These lights are used to supplement, not replace your stop/tail/turn lights.

The **red** 3-wire LED lights have a dual function as a marker light and a supplemental stop light.

The **amber** 3-wire LED lights have a dual function as a marker light and a stop/tail/turn light.

The 2-wire and 3-wire all have 8" long wire leads and are 12 volt. Requires 3/4" mounting hole. Grommets are included.

	Black Grommet with Open End Wires		Stainless Steel Cover with Bullet Connectors		Stainless Steel Cover with Clear Lens and Bullet Connectors	
Color	**(A)** 2-Wire	**(D)** 3-Wire	**(B)** 2-Wire	**(E)** 3-Wire	**(C)** 2-Wire	**(F)** 3-Wire
Red	ALT-0201300	ALT-0201310	ALT-0201301	ALT-0201311	ALT-0201302	ALT-0201312
Amber	ALT-0201100	-------	ALT-0201101	ALT-0201111	ALT-0201102	ALT-0201112

We Offer Lighting Products from the Following Vendors

ID Light Bars



LT2-1515R



LT2-1055



OPT-MCL-78RB

Description	Length	Color	Material	
3 - 2 1/2" x 1 3/16" Rectangle	15"	Red	Rectangular Side Markers on a White Steel Base	LT2-1515R
3 - 2 1/2" Round	16"	Red	Round Side Markers on a Black Steel Base	LT2-1055
3 - LEDs and 11 Reflectors	17"	Red	Rectangular All-Weather Plastic Housing	OPT-MCL-78RB

Waterproof ID Bar





Side Profile

Description	Length	Color	Features	
3 - Super Bright LED Round Lights	14.5"	Red	Fully Submersible, Mounted in a Black Poly Body, 12 VDC, Mounts with #10 Screws, 9" Pigtail	TN-S50-RRB0

12 Volt Cigarette Plug Adapters

12 volt receptacles work with any standard 12-volt plugs. Cigarette plug adapters are sold individually.

A



B



Description	
(A) Cigarette Plug Black with 3 amp Fuse	CIG-M
(B) Cigarette Socket Black	CIG-F

C



D



Description	
(C) Cigarette Socket Metal Insulated with Insert Lock	CIG-FPP
(D) Cigarette Socket Black with Snap-in Design	MR-12VRCSP

Standard LED to Strobe Conversion Pigtails



The PT-LED/QUAD provides power to 12 volt LED lamp assemblies. It is intended for 12 volt vehicle systems only and not intended for use with incandescent lamps.

Features:
- **Turns every standard LED into a strobe on the same circuit**
- Toggle between standard LEDs to strobe LEDs by adding a switch
- Maximum 30 lamps or 10 amps total
- Epoxy sealed pigtail for exterior severe duty

Wiring directions:
- 12 volt power is applied to blue wire
- Output to lamp load on red wire
- Ground for unit is white wire

Part # PT-LED/QUAD



PT-LED/ST is an electronic flasher that converts an LED lamp into a strobe lamp. It is designed for use in a flashing circuit with a vehicle flasher controlling the rate of flashes per minute.

Features:
- **Converts a single LED lamp into a strobe, includes plug**
- When used for 2-40 led lamps, cut-off the plug and connect to a light circuit controlled by a flasher
- Maximum 40 lamps or 15 amps total
- Fully sealed encapsulated electronics
- LED lamps only, 12 volts, not for incandescent lamps

Part # PT-LED/ST

Strobe Lights & Snow Plow Lights

4" Round LED General Purpose Light



LEDs use approximately 85% less power and last ten times longer, approximately 100,000 hours. LEDs are unaffected by shock or vibration.

Color	Manufacturer	Manufacturer #	Feature	
Clear	Optronics	BUL43CB	10 Diodes	OPT-BUL-43CB

Accessories



Grommet



Straight 2-Wire Plug



90° 2-Wire Plug

Description	
Universal Grommet	LT-9127
Straight 2-Wire Plug	LT-9123
90° 2-Wire Plug	LT-9125

Strobe Lights

Beacon lights are designed to create maximum visibility to reduce accidents on the road and in the workplace.

Ultra (Class 1) are commonly used on police, fire, ambulances, and road commission vehicles. They are 4 times brighter than the High (Class 2) strobes and 10 times brighter than the Medium (Class 3) strobes.

High (Class 2) are commonly used on construction, maintenance, and service vehicles. They are 2 1/2 times brighter than Medium (Class 3) strobes.

Medium (Class 3) are commonly used for indoor vehicles, such as forklifts, sweepers, and floor cleaners.

LED have superior durability, shock resistance, and energy efficiency.

A 

B 

C 

D 

E 

F 

G 

	Intensity	Mount	Voltage	Amps	Size (H x D)	Part Number
(A)	High (Class 2)	Permanent, Wire Leads, Short Lens	12-30 VDC	0.4	5" x 6.5"	ST-256TSL-A
(A)	High (Class 2)	Permanent, Wire Leads, Short Clear Lens	12-30 VDC	0.4	5" x 6.5"	ST-256TSL-C
(B)	High (Class 2)	Permanent, Wire Leads, Tall Lens	12-30 VDC	0.4	6.7" x 6.5"	ST-256TCL-A
(C)	High (Class 2)	Magnet, Cigarette Plug, Short Lens	12-30 VDC	0.4	5" x 6.5"	ST-256TSLM-A
(D)	High (Class 2)	Magnet, Cigarette Plug, Tall Lens	12-30 VDC	0.4	6.7" x 6.5"	ST-256TCLM-A
(E)	Medium (Class 3)	Permanent, Wire Leads	12-80 VDC	2.7	3.8" x 5.6"	PR-7314A
(F)	Medium (Class 3)	Magnet, Cigarette Plug	12-80 VDC	2.7	3.8" x 5.6"	PR-7314A-MG
(G)	Low	Magnet, Uses 2 "D" Batteries	N/A	N/A	5" x 4.25"	NAS-PSLM2-A

Halogen have replaceable bulbs.

A 

B 

C 

D 

	Intensity	Mount	Voltage	Amps	Size (H x D)	Part Number
(A)	Ultra (Class 1)	Permanent, Wire Leads	12-48 VDC	2.0	4.5" x 5.5"	FLST-SC12-4
(B)	High (Class 2)	Permanent, Wire Leads	12-24 VDC	2.0	4.25 " x 5.5 "	STAR 240SFQ
(C)	High (Class 2)	Permanent, Wire Leads	12-24 VDC	0.9	4.5" x 5.5"	NAS-DFS625-A
(A)	Low	Permanent, Wire Leads	12-36 VDC	0.25	3 5/8" x 4"	FLST-SC20-4
(A)	Low	Permanent, Wire Leads	12-36 VDC	0.5	4" x 4"	FLST-SC40-4
(D)	Low	Magnet, Cigarette Plug	12 VDC	0.5	4" x 4"	FLST-SC4041-12V

Snow Plow Lights

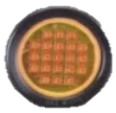


The pair are packed in a Grote kit with switch, hardware, and instructions.

Style	Voltage	Amperage	Description	Bulbs	Part Number
High-Low Beam	12	5.0 / 3.5	Polycarbonate	H6545 and 1157	GR-64261-4

Flashing LED Lights

Amber

Description	Size	Voltage	Flashes/Min	Part Number	
High Powered LED, No Control Box, Can be Wired to Alternate with Second Light, Grommet Included, Will fit Standard 4" Round Stop/Tail/Turn Hole	4" Diameter	12-24 VDC	18 Quad Flashes	NAS-LEDQR45-A	
High Powered LED, No Control Box, Can be Wired to Alternate with Second Light, Grommet Included, Will fit Standard Oval Stop/Tail/Turn Hole	6.25" L x 2.25" H Oval	12-24 VDC	18 Quad Flash	NAS-LEDQO45-A	
LED Flashing Light, Polycarbonate Housing Kit, Includes Grommet, Light and Pigtail, Will fit Standard Oval Stop/Tail/Turn Hole	6.5" L x 2.36" H Oval	12-24 VDC	72 Quad Flash	TT-607101-02	
High Powered Grill-Light Features Two 6 LED Lamps with 10' of Cable Between the Two Heads, Mounting Clips for Installation, Class 2	1.25"H x 7"L x 1.25"W (each lamp size)	12 VDC	-------	GLED8001-A	

Green and Amber

Description	Size	Voltage	Flashes/Min	Part Number	
Green and Amber, LED, Recessed Grommet Mount, Includes Grommet, Light and Pigtail, Alternating or Synchronized Flash Patterns	6.5" L x 2.25" H Oval	12-24 VDC	284 Quad Flash	BY-SL66AG	
Green and Amber, LED, Ultra Thin, Clear Lens, Permanent Mount, Includes Self Adhesive Tape, 0.65 Amps, 23 Flash Patterns	4.38" L x 1.18" H	12-24 VDC	-------	BY-8892250	
Green, LED, Ultra Thin, Clear Lens, Permanent Mount, Includes Self Adhesive Tape, 1 Amp, 23 Flash Patterns	5.14" L x 1.18" H	12-24 VDC	-------	BY-8892209	
Green and Amber, LED, Ultra Thin, Clear Lens, Permanent Mount, Includes Self Adhesive Tape, 1 Amp, 23 Flash Patterns	5.14" L x 1.18" H	12-24 VDC	-------	BY-8892210	

LED Mini Light Bars

Amber

Description	Size	Voltage		
Amber, LED, Mini Low-Profile, Magnetic or Permanent Mount, Class 3, 24 LEDs, 2 Amps, Cigarette Lighter Plug with On/Off Switch, 10 Flash Patterns	2.25"H x 11"L x 6.5"W	12-24 VDC	BY-8891040	
Amber, Magnetic Mount, LED, Mini, Ultra-Bright, Clear Dome, 8 Flash Patterns, Permanent Mounting Bar Included, Cigarette Lighter Plug with On/Off Switch	2"H x 10.9"L x 6.4"W	12-24 VDC	ALT-F2410100	
Amber, Permanent Mount, LED, Mini Low-Profile, Class 2, 80 LEDs, Clear Dome, 1.2 Amp Draw, Cycles Through Three Flash Patterns, Steel Base	2.75"H x 13.5"L x 9.5"W	12-24 VDC	NAS-MINIFLZ-C/A	
Amber, Magnetic Mount, LED, Mini Low-Profile, Class 2, 80 LEDs, Clear Dome, 1.2 Amp Draw, Cycles Through Three Flash Patterns, Steel Base, Cigarette Lighter Plug	2.75"H x 13.5"L x 9.5"W	12-24 VDC	NAS-MINIFLMZ-C/A	

Green and Amber

Description	Size	Voltage		
Green and Amber, LED, Magnetic or Permanent Mount Included, Clear Dome, 2 Amps, Cigarette Lighter Plug with On/Off Switch, 10 Flash Patterns	2.25"H x 11"L x 6.5"W	12-24 VDC	BY-8891049	

Work Lights

LED Work Lights



ALT-W0503500



SYLEDECWLR



ALL-W0904500



UB-LW54020-33



UB-LW50020-1

Style	Voltage	Amperage	Description	Part Number
3.4" Magnetic Portable Ultra-Bright LED Work Light				
Work Light	12-24	-----	Aluminum, Rechargeable, Cigarette Plug Charger	ALT-W0503500
4.5" White LED Work Lights				
Flood	12-24	1.25	Aluminum, 1ft. Wire Lead	SYLEDECWLR
5" Ultra-Bright White LED Work Lights				
Spot	12-24	2.25	Aluminum, 1ft. Wire Lead	ALL-W0904500
2" X 4" White LED Work Lights				
Work/Flood	10-30	0.54	726 Lumens, 33 Diodes	UB-LW54020-33
2" White LED Round Work Lights				
Work/Flood	10-30	1.0	700 Lumens, 1/10 Watt Diode	UB-LW50020-1

Sealed-Beam Work Lights



LT2-620W



LT2-630W



GR-43300

Style	Voltage	Amperage	Description	Bulbs	Part Number
5" Rubber Work Lights					
Trapezoid/Work	12	2.7	Rubber	4411	LT2-620W
6" Rubber Work Light					
Trapezoid/Work	12	2.7	Rubber	4419	LT2-630W
	12		Housing Only	4419	LT2-630H
Accessory					
Magnetic Base, Replaces Threaded Bolt			Chrome Steel, Fits All Standard Work Lights		GR-43300

Rectangular Work Lights



ALT-W0606500



AG4601



AG4620



AG3501

Style	Voltage	Amperage	Description	Bulbs	Part Number
2.36" x 6.3" Low-Profile, High Intensity LED Work Light					
Spot	12-24	1.4	Aluminum, 1ft. Wire Lead		ALT-W0606500
4" x 6" Halogen Work Lights					
1 Bulb					
Trapezoid	12	4.6	High Strength Plastic	1255-H3	AG4601
Flood	12	4.6	High Strength Plastic	1255-H3	AG4602
Spot	12	4.6	High Strength Plastic	1255-H3	AG4603
2 Bulb					
Spot and Flood	12	9	High Strength Plastic	1255-H3	AG4620
3" X 5" Halogen Work Lights					
1 Bulb					
Trapezoid	12	4.6	High Strength Plastic	1255-H3	AG3501
Flood	12	4.6	High Strength Plastic	1255-H3	AG3502
Spot	12	4.6	High Strength Plastic	1255-H3	AG3503

Automotive Incandescent Bulbs



S.C. Bayonet | D.C. Bayonet | D.C. Indexing | Miniature Screw | Miniature Bayonet | Wedge | Candelabra Screw | C. Midget Flanged | Midget Screw | Midget Grooved | Rigid Loop | Miniature Cap

Part Number	Volts	Watt	Base Type	Overall Length
24NA	14	3.36	Wedge	0.86"
24-PSB	24	1.75	Slide No.5	0.91"
28-PSB	28	1.12	Slide No.5	0.91"
37	14	1.26	Subminiature Wedge	0.80"
PC37	14	1.26	Printed Circuit	0.84"
53	14	1.73	Miniature Bayonet	0.94"
57	14	3.36	Miniature Bayonet	1.07"
67	13.5	7.97	S.C. Bayonet	0.81"
68	13.5	7.97	D.C. Bayonet	0.81"
70	14	2.1	Subminiature Wedge	0.80"
73	14	1.12	Subminiature Wedge	0.80"
74	14	1.4	Subminiature Bayonet	0.80"
85	28	1.12	Subminiature Wedge	0.80"
89	13	7.54	S.C. Bayonet	1.44"
90	13	7.54	D.C. Bayonet	1.44"
93	12.8	13.31	S.C. Bayonet	2.00"
94	12.8	13.31	D.C. Bayonet	2.00"
97	13.5	9.3	S.C. Bayonet	1.44"
98	13	8.06	S.C. Bayonet	1.44"
105	12.8	12.8	S.C. Bayonet	1.75"
161	14	2.66	Wedge	1.06"
168	14	4.9	Wedge	1.06"
193	14	4.62	Wedge	1.06"
194	14	3.78	Wedge	1.06"
194NA	14	3.78	Wedge	1.06"
194-PC	14	3.78	Printed Circuit	1.11"
198	14	28.8	D.C. Index	1.25"
199	12.8	28.8	S.C. Bayonet	1.25"
211	12.8	12.42	Festoon Caps	1.75"
211-2	12.8	12.42	End Caps	1.72"
222	2.25	0.56	Miniature Screw	0.94"
265	28	2.24	Miniature Bayonet	0.94"
293	14	4.62	Miniature Bayonet	1.07"
382	14	1.12	S.C. Midget Flanged	0.63"
400	28	2.8	Wedge	1.06"
425	5	2.5	Miniature Screw	1.06"
464	28	4.76	Wedge	1.06"
456	28	4.76	Miniature Bayonet	1.07"
561	12.8	12.42	Rigid Loop	1.72"
623	28	10.36	S.C. Bayonet	1.44"
624	28	10.36	D.C. Bayonet	1.44"
755	6.3	0.95	Miniature Bayonet	1.19"
757	28	2.24	Miniature Bayonet	1.19"
795	12.8	50	S.C. Bayonet	2.50"
904	13.5	9.32	Wedge	1.49"
906	13	9.32	Wedge	1.49"
912	12.8	12.8	Wedge	1.49"
914	4	3.6	Wedge	1.49"
921	12.8	17.92	Wedge	1.49"
922	12.8	12.54	Wedge	1.49"
1003	12.8	12.03	S.C. Bayonet	1.75"
1004	12.8	12.03	D.C. Bayonet	1.75"
1076	12.8	23.04	D.C. Bayonet	2.00"
1141	12.8	18.43	S.C. Bayonet	2.00"
1142	12.8	18.43	D.C. Bayonet	2.00"

Part Number	Volts	Watt	Base Type	Overall Length
1155	13.5	7.97	S.C. Bayonet	1.44"
1156	12.8	26.88	S.C. Bayonet	2.00"
1156DC	12.8	26.88	D.C. Bayonet	2.00"
1156NA	12.8	26.88	S.C. Bayonet	2.00"
1157	12.8	26.88	D.C. Index	2.00"
1157NA	12.8	26.88	D.C. Index	2.00"
1195	12.5	37.5	S.C. Bayonet	2.25"
1203	28	19.88	S.C. Bayonet	2.00"
1251	28	6.44	S.C. Bayonet	1.44"
1252	28	6.44	D.C. Bayonet	1.44"
1445	14.4	1.87	Miniature Bayonet	0.94"
1450	24	0.84	Miniature Bayonet	0.94"
1638	28	28.56	D.C. Bayonet	2.00"
1662	28/28	25.2	D.C. Index	2.00"
1683	28	28.56	S.C. Bayonet	2.00"
1816	13	4.29	Miniature Bayonet	1.19"
1819	28	1.12	Miniature Bayonet	1.19"
1820L	28	2.8	Miniature Bayonet	1.19"
1821	28	4.76	Miniature Screw	1.19"
1847	6.3	0.95	Miniature Bayonet	1.19"
1850	5	0.45	Miniature Bayonet	1.19"
1864	28	4.76	Miniature Bayonet	1.19"
1866	6.3	1.58	Miniature Bayonet	1.19"
1873	28	5.6	Miniature Bayonet	1.19"
1889	14	3.78	Miniature Bayonet	1.19"
1891	14	3.36	Miniature Bayonet	1.19"
1893	14	4.62	Miniature Bayonet	1.19"
1895	14	3.78	Miniature Bayonet	1.07"
2057	12.8	26.88	D.C. Index	2.00"
2057NA	12.8	26.88	D.C. Index	2.00"
2233	28	22.4	S.C. Bayonet	2.00"
2357	12.8	28.16	D.C. Index	2.00"
2357NA	12.8	28.16	D.C. Index	2.00"
3057	12.8	26.88	D.F. Wedge	2.09"
3057NA	12.8	26.88	D.F. Wedge	2.09"
3156	12.8	26.88	S.F. Wedge	2.09"
3156NA	12.8	26.88	S.F. Wedge	2.09"
3157	12.8	26.88	D.F. Wedge	2.09"
3157NA	12.8	26.9	D.F. Wedge	2.09"
3175	12	10	Festoon	1.22"
3457	12.8/14	28.1	D.F. Wedge	2.09"
3457NA	12.8/14	28.2/8.3	D.F. Wedge	2.09"
3797	24	2	Miniature Bayonet	0.93"
4114LL	14/14	31.2/8.3	D.F. Wedge	2.09"
4157LL	12.8/14	28.5/8.3	D.F. Wedge	2.09"
PR-2	2.38	1.2	S.C. Mini. Flanged	1.25"
PR-3	3.57	1.8	S.C. Mini. Flanged	1.50"
PR-20	8.63	4.32	S.C. Mini. Flanged	1.25"
11009	14.4	1.7	BA7s	0.75"
13050	13	4.9	SV7	1.14"
17053	12	2.0	BA9s	0.93"
78270	12	1.40	Wedge	0.80"
120-PSB	120	3	Slide No.5	1.10"
120-MB	120	3	Miniature Bayonet	1.19"
130-MB	130	3.25	Miniature Bayonet	1.19"

Pigtails & Halogen Headlight Capsules

Pigtails for Automotive Incandescent Bulbs

	Use With	# of Leads	Lead Length	Part Number
	63, 67, 89, 1156	1	12"	PT-SC
	1034, 1157, 2057	2	12"	PT-DC
	194, 194A	2	12"	PT-ML-194
	51, 53, 55, 57	1	12"	PT-57
	1156	1	10"	PT-1156
	1157, 195, 2057	2	8"	PT-1157

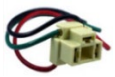
	Use With	# of Leads	Lead Length	Part Number
	3057, 3057A, 3157, 3157A	3	10"	PT-3057
	194, 194A, 168, 161	2	9"	PT-194-90
	196, 1016, 1034, 1154, 1157	2	12"	PT-GM-1157S
	Flashers and Sealed Beams	3	12"	PT-SB-3
	2-Prong Flashers and Sealed Beams	3	12"	PT-SB-2

Halogen Headlight Capsules

Part Number	Volts	Watt	Overall Length	Pigtail Part #
1210/H1	12	100	2.46"	-------
1210/H3	12	100	1.65"	-------
1255-H1	12	55	2.46"	-------
1255-H2	12	55	1.22"	-------
1255-H3	12	55	1.65"	-------
1255-H7	12	55	3.62"	PT-H7
1255-H11	13.2	55	2.63"	PT-H8-11
2470/H1	24	70	2.46"	-------
2470/H3	24	70	1.65"	-------
2470/H4	24	70	3.62"	-------

Part Number	Volts	Watt	Overall Length	Pigtail Part #
9003	12	60	3.62"	PT-H4/9003H-W
9004	12.8	65	3.74"	PT-9004
9005	12.8	65	3.09"	PT-9005
9005XS LL	12.8	55	3.09"	PT-9005
9006	12.8	65	3.09"	PT-9006
9006XS LL	12.8	55	3.09"	PT-9006
9007	12.8	65	3.74"	PT-9004
9008	12.8	65	3.54"	-------
9140	12	40	3.09"	-------
9145	12	45	3.09"	-------

Pigtails for Halogen Headlight Capsules

	Feature	Lead Length	Part Number
	High Temp. Socket Use with H4/9003	5"	PT-H4/9003HW
	Headlight Hi-Lo Contact Use with 9004	9"	PT-9004
	Headlight High Beam Use with 9005	9"	PT-9005
	Headlight Low Beam Use with 9006		PT-9006
	H8, H11 Series	10"	PT-H8-11

	Feature	Lead Length	Part Number
	Straight Socket Pigtail	10"	PT-800
	90° Socket Pigtail Use with 800 Series	10"	PT-800-90
	H7 Series	5"	PT-H7
	H9 Series	10"	PT-H9
	9000 Series, H10, Use with H12 Series	10"	PT-9000-H10-12

Miscellaneous Pigtails

	Feature	Lead Length	Part Number
	Ford Voltage Regulator	8"	PT-REG/FO
	Ford Regulator HD, 6 Color Coded Wire Leads	8"	PT-FO/REG HD
	For Alternator with Internal Voltage Regulator	6"	PT-ALT/GM
	Under Dash Headlight Switch Pigtail, F Series	6"	PT-F0-HLS

	Feature	Lead Length	Part Number
	Continuous Pigtails with Connectors on 9" Centers	9"	PT-6020-100
	Mates with .157 Male Snap Plug	11"	RP1-12
	Mates with Itself Molded 2-Wire Plug	9"	RP2-12

Sealed-Beams


4912-1

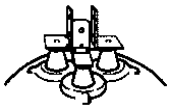

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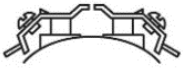

H-6054


4636-3


Slip On


Screw Base


3 Lug Base


Multipurpose

Part Number	Volts	Watts	Base Type	Application	PAR/Size	Diameter
4000	12.8	37.5 Hi / 60 Lo	3 Lug	Auto Headlamp	PAR46	5 3/4"
4350	36	60	Slip On	Work Light/Elect. Truck	PAR36	4 1/2"
4405	12.8	30	Screw	Spot	PAR36	4 1/2"
4411	12.8	35	Screw	Tractor	PAR36	4 1/2"
4412	12.8	35	Screw	Fog/Automotive	PAR46	5 3/4"
4412A	12.8	35	Screw	Fog/Automotive	PAR46	5 3/4"
4416	12.8	30	Screw	Spot/Automotive	PAR36	4 1/2"
4502	28	50	Screw	Military Headlamp	PAR36	4 1/2"
4505	28	50	Screw	Spot Aircraft	PAR36	4 1/2"
4578	28	60	2 Lug	Flood/Construction	PAR46	5 3/4"
4579	28	80 Hi / 60 Lo	3 Lug	Headlamp/Construction	PAR46	5 3/4"
4589	28	50	Screw	Construction	PAR36	4 1/2"
4636-3	14	80	Multipurpose	Signal	PAR46	5 3/4"
4651	12.8	50	2 Lug	Headlamp-Hi	100mm x 165mm	-------
4912-1	12.8	50	Slip On	Tractor-Trap	100mm x 165mm	-------
4921-1	12.8	100	Multipurpose	Fog/Automotive	100mm x 165mm	-------
6015	12.8	60 Hi / 50 Lo	3 Lug	Headlamp Heavy duty	PAR56	7"
6052	12.8	65 Hi / 55 Lo	3 Lug	Headlamp-Hi/Low	142mm x 200mm	-------
7400	12.8	35	Multipurpose	Rotating Beacon	PAR36	4 1/2"
H-4651	12.8	50	2 Lug	Auto-Hi Halogen	100mm x 165mm	-------
H-4656	12.8	35 Hi / 35 Lo	3 Lug	Auto-Hi/Low Halogen	100mm x 165mm	-------
H-4656BL	12.8	40 Hi / 55 Lo	3 Lug	Headlamp-Hi/Low-Xenon	100mm x 165mm	-------
H-4701	12.8	65	2 Lug	Headlamp-Hi Halogen	92mm x 150mm	-------
H-4703	12.8	55	2 Lug	Headlamp-Low Halogen	92mm x 150mm	-------
H-5001	12.8	50	2 Lug	Headlamp-Hi Halogen	PAR46	5 3/4"
H-5006	12.8	35 Hi / 35 Lo	2 Lug	Auto-Hi Halogen	PAR46	5 3/4"
H-6024	12.8	60 Hi / 35 Lo	3 Lug	Auto-Hi/Low Halogen	PAR56	7"
H-6054	12.8	65 Hi / 35 Lo	3 Lug	Auto-Hi/Low Halogen	142mm x 200mm	-------
H-6054HO	12.8	65 Hi / 55 Lo	3 Lug	Auto-Hi/Low Halogen	142mm x 200mm	-------
H-6545	12.8	65 Hi / 45 Lo	3 Lug	Auto-Hi/Low Halogen	100mm x 165mm	-------
H-7604	12.8	50	Screw	Auto Spot Halogen	PAR36	4 1/2"
H-7921-1	12.8	50	Slip On	Fog/Automotive Halogen	100mm x 165mm	-------

Sealed-Beam Retaining Grommet

Part Number	Application	PAR/Size
BE-920234	Sealed Beam Retaining Grommet	PAR36 (MG4)



Automotive Flashers

Flashers are commonly used for turn signals and emergency lights to make lights flash rhythmically.



576


EF-32


EF-33H


EL-13A

Volts	Terminals	Number of Lights Controlled	Part Number	Alternate Part Number
12	2	1-6	552	-------
12	2	2-6	552-BUSS	-------
12	3	2-6	550-BUSS	-------
12	2	1-8	575	-------
12	2	1-20	576	-------
12	3	1-20	577	-------
12	2	1-10	852-5X	-------
12	3	1-10	850-5X	-------
12	2	1-10	EL-12	EF32
12	3	1-10	EL-13	EF33

Volts	Terminals	Number of Lights Controlled	Part Number	Alternate Part Number
12	3	1-6	EL-13A	EF30A
12	2	16	EL-16	EF40
12	5	2-10	EF-27	-------
12	2	1-12	EF-32H	-------
12	2	1-12	EF-32L	-------
12	3	1-12	EF-33H	-------
12	3	16	EF-41	-------
24	2	1-6	EG-22	-------
24	3	1-6	EG-23	EF-23

Truck Mirrors, Techniq Lights & License Plate Lights

West Coast, OEM & Economy Mirrors





All the west coast mirrors have heavy 3mm glass. Come in two sizes: 6"x16" and 7"x16". Stainless steel west coast mirrors have stainless steel bodies and end caps. Rods and hardware are plated for corrosion resistance.

Size	Type	Feature	
Mirrors			
6"x16"	Stainless Steel	Heated	WC6165SS
7"x16"	Stainless Steel	Standard	LT2-7815
7"x16"	Stainless Steel	Heated	LT2-7817
7"x16"	Stainless Steel	Heated and Light	LT2-7817A
7"x16"	Stainless Steel	OEM / Standard	LT2-7084
7"x16"	Stainless Steel	OEM / Heated	LT2-7085

Size	Type	Feature	
Mirrors	(Cont.)		
7"x16"	Stainless Steel	OEM / Heated and Light	LT2-7085A
6"x16"	Aluminum	Economy / Standard	LT2-7010
Mirror Arm Assembly			
-------	Stainless Steel	-------	LT2-7117
-------	White	-------	LT2-7115

Convex Round & Rectangular Mirrors





All the convex round mirrors have 2mm thick glass. They have a nickel plated ball stud and have stainless steel hardware and "L" brackets.

Diameter	Mounting Hole Position	Type	
5"	Center	Stainless Steel	LT2-7062
6"	Center	Black	LT2-7071
6"	Center	Stainless Steel	LT2-7072
7.5"	Center	Black	LT2-7077-CTR-B
7.5"	Center	Stainless Steel	LT2-7077-CTR

Diameter	Mounting Hole Position	Type	
7.5"	Offset	Stainless Steel	LT2-7077
8.5"	Center	Black	LT2-7073
8.5"	Center	Stainless Steel	LT2-7074
8.5"	Offset	Stainless Steel	LT2-7074-OFF
8.5"	Center	Stainless Steel, Heated	LT2-7078-CTR

Document Holder



Moisture resistant document holder has a see through cover. Designed for ease of installation. Rubber gasket for moisture resistance. Sold individually.

Color	Width	Depth	
Gray	5.860"	5.220"	TL-97960

Techniq Mini Side Marker Lamp

Mini Side Marker Lamp



Features	Part Number
P2 Rated Mini Red Side Marker, 3/4" Mounting Hole and Includes Grommet, 12 VDC, 180° Light Output, 100,000 Hours, Low Profile Makes it Damage Resistant	TN-S33-RR00

License Plate Lamp



Features	Part Number
Tough Single Piece Sealed LED Lamp, Black Poly Body, 12 VDC, 50,000 Hours, Pigtail Wire, Waterproof, Vertical Place Surface Mount, DOT	TN-L110-WB00

License Plate Lights

LT2-9315K



LT2-436W



LT2-420W



OPT-LPL31CB



Color	Manufacturer	Manufacturer #	Feature	
Clear	UB Lights	LP2002	Light, Housing and Pigtail	LT2-9315K
Clear	UB Lights	SE1225L	Replacement Light Only	LT2-1502W
-------	UB Lights	LP2000	Housing Only	LT2-9315
Clear	UB Lights	LP1001	Light and Chrome Housing	LT2-436W
Clear	Optronics	LP56CB	Gray Surface Mount Housing, #67	LT2-420W
Clear	Optronics	LPL31CB	Light, Chrome Housing and Wiring	OPT-LPL31CB

Accessories for OPT-LPL91CB



Chrome Base



90° 2-Wire Plug

Description	
Chrome Base (Two Wire Plug Needed)	LT2-9381
90° 2-Wire Plug	LT-9122

Back-Up Alarms, Coiled Cords, Flat Type Connectors, Sealant & Circuit Tester

Universal Mount Back-Up Alarms

Economy

The back-up alarm has a potted circuit board. It is surface mounted and has stud connections.



Decibels	Voltage	Size	
97	12-24 VDC	3"H x 3"W	BU-97

Preco

The back-up alarm has a potted circuit board. It is surface mounted and has stud connections.

A 

B 

	Decibels	Voltage	Size	
(A)	87	12 VDC	2.6"H x 4"W	PR-220
(A)	97	12 VDC	2.6"H x 4"W	PR-230
(A)	97	12 VDC	2.6"H x 4"W	PR-230GS
(A)	97	12-24 VDC	2.6"H x 4"W	PR-240
(A)	102	12-24 VDC	2.6"H x 4"W	PR-250
(B)	97	12 VDC	4.5"H x 4.5"W	PR-LDA-50

Back-Up Alarm Switches

When it isn't possible to wire back-up alarms directly to vehicle back-up light circuit. Install adjacent to gear shift lever or linkage. Switch activates alarm when the shaft is moved.



Direction	
Activates in all directions.	TT-210298
Activates in one direction only.	TT-210299

Corrosion & Rust Preventive Sealant

Prevents corrosion in electrical contacts, switches, and junction boxes. Clear gel with great coating abilities.



Description	
4 oz. Tube, Sealant	GR-99170
2 oz. Tube, Compound	TL-97944
8 oz. Can, Compound	TL-97940
14 oz. Cartridge, Compound	TL-97948

Specialty Back-Up Alarms

Round Tail Light Type

Flush Mount alarm fits into any 4" stop/tail/turn light hole. Standard grommets & pigtail complete the low profile installation. Put the sound where it is needed - at the rear bumper and out of the mud.



Decibels	Voltage	Size	
97	12 VDC	4" Diameter	PR-4030
102	12-24 VDC	4" Diameter	PR-4050

Self-Adjusting Alarm

Automatically adjusts to 10 decibels above surrounding noise level. Reduces irritation for workers. Universal mounting. UL listed for electric vehicles.



Decibels	Voltage	Size	
87-112	12-24 VDC	3"H x 7"W	PR-1040

Universal Buzzer

The universal buzzer, can be used for 'door ajar' warning, bus driver alert, low air pressure warning, temperature warning and several more uses.



Voltage	Size	
12	1 7/32" L x 2 1/2" W x 2 17/32" H	CH-4099

Circuit Testing Tools

Description
Hand Operated
Test 6 and 12 Volt Vehicle Systems
"Ice Pick" Type
Flexible Hypalon Ground Wire, Spring Strain Relief on Wire to Handle
Replaceable Bulb



Part # 27000

LED Adhesive Mount String Lights

Great for lighting tool drawers or other internal spaces. These string lights can be used individually or together.



Color	Length	Voltage	Feature	
White	120"	12 VDC	20 Bars per strip	LEDSTRINGLIGHTS

Flat Type Connectors

	2-Way		4-Way		6-Way	
Length	Male	Female	Male	Female	Male	Female
12"	-------	RP2-12*	FM-12	FF-12	FM-6	FF-6
48"	-------	-------	FM-48	FF-48	-------	-------
72"	-------	-------	-------	FF-72	-------	-------

4-Way Adapter Part # 4/ADPT

* RP2-12 has 4" leads



2-Way 4-Way 6-Way 4-Way Adapter

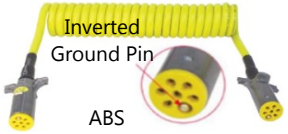
Flat type molded inline connectors are an economical way of connecting electrical systems. Wires are color coded for installation. These connectors offer weather protection.

Coiled Cords

Conductor-Gauges	Lead Length	Working Length	
Standard			
6-12 GA. & 1-10 GA.	12"	12'	CC-612/10-12
6-12 GA. & 1-10 GA.	12"	15'	CC-612/10-15
6-14 GA. & 1-12 GA.	12"	12'	CC-614/12-12
6-14 GA. & 1-12 GA.	12"	15'	CC-712-15
ABS			
4-12 GA. & 2-10 GA. & 1-8 GA.	12"	15'	CC-7YELL-15 ISO



Standard



ABS

The coiled cords are designed to be flexible in extreme temperatures. They have die cast plugs with spring guards.

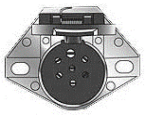
Use our **ABS** power coil for a second tractor/trailer connection that requires auxiliary style connectors. The inverted ground pin prevents incorrect connections.

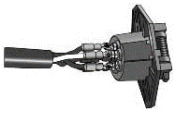
Trailer Connectors & Junction Boxes

Tractor/Trailer Plugs


6-Way


4-Way w/Spring


7-Way w/Spring


7-Way Ring Term. Type

The 1, 2, and 3-way corresponds to the number of wires. All are made of cast zinc bodies with brass pins, except the **poly** plugs and sockets are nylon bodies filled with glass. For secondary power source use our **ISO** auxiliary plugs and sockets. Rated 6-28 volts and 40 amps of continuous duty.

	Plug			Receptacle		
Poles	Tectran #	Pollak #	Cole Hersee #	Tectran #	Pollak #	Cole Hersee #
1-Way	MP-1 (670-11SG)	PK-11-852	CH-11042	FP-1 (670-12)	PK-11-851	CH-11041
2-Way Horizontal	TR-670-19SG	MP-2 (12-800EP)	-------	TR-670-22	FP-2-POLLAK (12-801EP)	-------
2-Way Vertical	TR-670-29SG	-------	CH-11042-05	TR-670-28	-------	CH-11041-06
4-Way	TR-670-41	MP-4 (11-402EP)	CH-1233	670-42	FP-4-POLLAK (11-404EP)	CH-1232
4-Way w/Spring	670-41SG	MP-4 SPRING (11-403EP)	CH-1253	-------	-------	-------
6-Way	670-61	MP-6 (11-604EP)	CH-1236	670-62	F-6-POLLAK (11-609EP)	CH-1235
6-Way w/Spring	670-61SG	MP-6 SPRING (11-605EP)	CH-1254	-------	-------	-------
7-Way w/Spring	670-71SG	MP-7 (11-702EP)	CH-12092	-------	-------	-------
7-Way Nylon	670P-71SG	MP-7 POLY (11-710EP)	CH-12082	670P-72	FP-7 POLY (11-724EP)	CH-12080
7-Way ISO Auxiliary	MP-7 ISO (680-E71SG)	PK-12-811EP	-------	FP-7 ISO (680-E72)	PK-12-812EP	-------
7-Way Ring Terminal Type		-------	-------	TR-670-74	FP-7 TERM (11-785)	-------

Tractor/Trailer Plug Boots and Bracket


4 or 6-Way Socket Boot


4 or 6-Way Socket Boot

Description	
4 or 6-Way Socket Boot	11-616
7-Way Socket Boot	11-761

Tractor/Trailer Plug Accessories

Plug Scrubber



Description	
7-Way Cleaning Tool	PLG-SCB-7
6-Way Cleaning Tool	PLG-SCB-6
4-Way Cleaning Tool	PLG-SCB-4

The battery brush cleans terminals, posts, and cable connectors. It has a tapered circular wire brush and carbon steel bristles.

For cleaning the plugs and receptacles, try our plug scrub tool. There is a built in guide and the wire bristles are steel.

Tractor/Trailer and Recreational Vehicle Connector Adapters


ADP-6P/7F


ADP-7P/6F

Use these adapters to make a connection between a trailer and a vehicle.

Connects	
6-Way Plugs to Trailers with 7-Way Sockets	ADP-6P/7F
7-Way Plugs to Trailers with 6-Way Sockets	ADP-7P/6F

Pollak Recreational Vehicle Connectors


RV7-M


RV7-F

Description	
7-Way Male Trailer End	RV7-M
7-Way Female Automobile End	RV7-F

Recreational Vehicle Connector Adapters


ADF7-4


ADP-7RV/6P


AD6-4


ADR7-4

Use adapters to make any connection between any trailer and any vehicle.

Description	
7-Way Blade Style to a 4-Way Flat Connection	ADF7-4
7-Way Blade Style to a 6-Way Round Pin Connection	ADP-7RV/6P
6-Way Round Pin to a 4-Way Round Pin Connection	AD6-4
7-Way Round Pin to a 4-Way Flat Connection	ADR7-4

7-Way Plug Checker



Test your 7-way trailer plug with this tester from the seat of your cab. Activate each switch and the corresponding LED light on the tool will illuminate. Faulty wiring or shorts will be indicated if LEDs are dimmer than usual, fail to light, or if more than one LED lights at the same time. Each LED on tool is labeled for function and number. Sold individually.

Part # CK-7

"Bull-Nosed" Circuit Breaker Socket


Front


Back

7-way trailer socket with circuit breakers included. Weather resistant and has isolated ground and circuit protection. Sold individually.

Breaker Amperage	Description	Part Number
20	Split Pin	24020
30	Split Pin	24030

Junction Boxes


7 Terminal Style


7 Circuit Breaker Style

Junction boxes include cover, strain relief collars, and are made of a molded composite.

Circuit breakers are not included in the 7 circuit breaker style.

Type	Size	
7 Terminal Style	7 3/8" x 3 3/8"	22040
7 Circuit Breaker Style	7 3/8" x 3 3/8"	22070

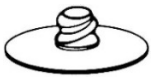
General Purpose Surface Conditioning Discs

General Purpose surface conditioning discs remove grind marks, rust, and coatings with ease. Made of aluminum oxide. Color coded for grade/grit. Simply match the diameter, color, and mounting style to replace an existing surface condition disc.

Made in USA - offers high quality results at an economical price.

3M's Roloc™ - offer the quality you've come to know with 3M.





Plastic Screw (TR)

Color	Grit	Grade	Made in USA	Pkg. Qty.	3M's Roloc™	Pkg. Qty.
1" Diameter						
Brown	120	Coarse	--------	----	ROL-SC1TR-BR	5
Maroon	150	Medium	--------	----	ROL-SC1TR-MA	5
Blue	320	Very Fine	--------	----	ROL-SC1TR-BL	5
Gray	600	Super Fine	--------	----	ROL-SC1TR-GR	5
1.5" Diameter						
Brown	120	Coarse	--------	----	ROL-SC1.5TR-BR	5
Maroon	150	Medium	--------	----	ROL-SC1.5TR-MA	5
Blue	320	Very Fine	--------	----	ROL-SC1.5TR-BL	5
Gray	600	Super Fine	--------	----	ROL-SC1.5TR-GR	5
2" Diameter						
Brown	120	Coarse	SD-2-BR	25	ROL-SC2TR-BR	5
Maroon	150	Medium	SD-2-MAR	25	ROL-SC2TR-MA	5
2" Diameter (cont.)						
Blue	320	Very Fine	SD-2-BL	25	ROL-SC2TR-BL	5
Gray	600	Super Fine	SD-2-GR	25	ROL-SC2TR-GR	5
3" Diameter						
Brown	120	Coarse	SD-3-BR	25	ROL-SC3TR-BR	1
Maroon	150	Medium	SD-3-MAR	25	ROL-SC3TR-MA	1
Blue	320	Very Fine	SD-3-BL	25	ROL-SC3TR-BL	1
Gray	600	Super Fine	SD-3-GR	25	ROL-SC3TR-GR	1
4" Diameter						
Brown	120	Coarse	--------	----	ROL-SC4TR-BR	1
Maroon	150	Medium	--------	----	ROL-SC4TR-MA	1
Blue	320	Very Fine	--------	----	ROL-SC4TR-BL	1
Gray	600	Super Fine	--------	----	ROL-SC4TR-GR	1

Disc Holders

Surface prep disc holders offer firm support for plastic screw style (TR) discs.

Diameter	Backing Pad		Pkg. Qty.
2"	Twist-Type	SD-HOLDER-2	1
3"	Twist-Type	SD-HOLDER-3	1



General Purpose Plastic Snap (TP) and Metal Fastener (TS and TSM) Surface Conditioning Discs

3M's Roloc™ SC surface conditioning discs remove grind marks, rust, and coatings with ease. Made of aluminum oxide. Color coded for grade/grit. Simply match the diameter, color, and mounting style to replace an existing surface condition disc.





Plastic Snap (TP)



Metal Fastener (TS & TSM)

Color	Grit	Grade		Pkg. Qty.
Plastic Snap (TP)				
2" Diameter				
Brown	120	Coarse	ROL-SC2TP-BR	5
3" Diameter				
Brown	120	Coarse	ROL-SC3TP-BR	1
Blue	320	Very Fine	ROL-SC3TP-BL	1
TS (Metal Fastener)				
1.5" Diameter				
Brown	120	Coarse	ROL-SC1.5TS-BR	5
3" Diameter				
Brown	120	Coarse	ROL-SC3TS-BR	1
Maroon	150	Medium	ROL-SC3TS-MA	1
Blue	320	Very Fine	ROL-SC3TS-BL	1
Gray	600	Super Fine	ROL-SC3TS-GR	1

Color	Grit	Grade		Pkg. Qty.
Metal Fastener (TSM)				
1.5" Diameter				
Brown	120	Coarse	ROL-SC1.5TSM-BR	5
Maroon	150	Medium	ROL-SC1.5TSM-MA	5
Blue	320	Very Fine	ROL-SC1.5TSM-BL	5
2" Diameter				
Brown	120	Coarse	ROL-SC2TSM-BR	5
Maroon	150	Medium	ROL-SC2TSM-MA	5
Blue	320	Very Fine	ROL-SC2TSM-BL	5
3" Diameter				
Brown	120	Coarse	ROL-SC3TSM-BR	1
Maroon	150	Medium	ROL-SC3TSM-MA	1
Blue	320	Very Fine	ROL-SC3TSM-BL	1

Heavy Duty Surface Conditioning Discs

The same general purpose surface conditioning disc but offers greater durability and a higher cut rate than basic Roloc™ discs. These 3M's Roloc™ SE surface conditioning discs are ideal for heavy duty deburring and finishing.



Color	Grit	Grade		Pkg. Qty.
Plastic Screw (TR)				
2" Diameter				
Brown	120	Coarse	ROL-SE2TR-BR	5
Maroon	150	Medium	ROL-SE2TR-MA	5
Green	240	Fine	ROL-SE2TR-GR	5
3" Diameter				
Brown	120	Coarse	ROL-SE3TR-BR	1
Maroon	150	Medium	ROL-SE3TR-MA	1
Green	240	Fine	ROL-SE3TR-GR	1

Super Duty Surface Conditioning Discs

These 3M's Roloc™ SL surface conditioning discs can last up to twice as long. The same general purpose surface conditioning disc but offers greater durability and a higher cut rate than basic Roloc™ discs.



Color	Grit	Grade		Pkg. Qty.
Plastic Screw (TR)				
2" Diameter				
Black	120	Coarse	ROL-SL2TR-BLK	1
Dark Brown	120	Coarse	ROL-SL2TR-DBR	1
Brown	120	Coarse	ROL-SL2TR-BR	1
Maroon	150	Medium	ROL-SL2TR-MA	1
3" Diameter				
Black	120	Coarse	ROL-SL3TR-BLK	1
Dark Brown	120	Coarse	ROL-SL3TR-DBR	1
Brown	120	Coarse	ROL-SL3TR-BR	1
Maroon	150	Medium	ROL-SL3TR-MA	1

Surface Conditioning Discs, Grinding Discs, Cut-off Wheels & Work Gloves

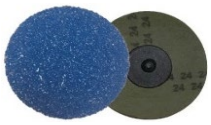
Abrasive Surface Conditioning Discs



3M's Roloc™ Green Corps™ surface conditioning discs remove paint, rust, and welds in collision repair. Made of aluminum oxide. Color coded for grade/grit. Simply match the diameter, color, and mounting style to replace an existing surface condition disc.

Diameter	Color	Grit	Grade		Pkg. Qty.
2"	Green	50	Coarse	SD-01406	1
3"	Green	50	Coarse	SD-01397	1

Grinding Discs



Often used in light welds, blending surfaces, and pre-paint surface preparation, grinding discs have a tough aluminum oxide grain and are made of heavy-duty resin fiber, with an epoxy backing.

Diameter	Grit		Pkg. Qty.
2"	24	GD-224A	25
2"	36	GD-236A	25
2"	50	GD-250A	25
3"	24	GD-324A	25
3"	36	GD-336A	25
3"	50	GD-350A	25

Sanding Pads



Part # SP-96

Use before applying paint and primer. Also can be used for cleaning needs. Rinses clean and won't rust. Can be used several times.

Cut-Off Wheels



Cut-Off Wheel

Cut-off wheels are used in cutting automotive sheet metal, clamps, frame rails, and rusted bolts.

Long-life cut-off wheels last at least three times longer then standard cut-off wheels.

Use mandrels to convert any die grinder or power drill into a cutting tool.



Mandrel

Thickness	Arbor	Grit		Pkg. Qty.
3" Diameter Cut-Off Wheels				
1/32"	3/8"	54	CW-3-132	10
1/16"	3/8"	54	CW-3-116	10
Long-Life 3" Diameter Cut-Off Wheels				
1/32"	3/8"	54	CWZ-3-132	6
1/16"	3/8"	54	CWZ-3-116	6
Mandrels				
Mandrel (3/8" Shoulder Screw)			CW-MANDREL-38	1
Mandrel (1/4" and 3/8" Shoulder Screw)			CW-MANDREL-1438	1

Work Gloves

6 Mil Nitrile Gloves



While most nitrile work gloves are 4 mil, our gloves are 50% thicker at 6 mil. The greater thickness provides superior longevity and cut resistance. Use these gloves where you need maximum dexterity and oil resistance.

Size	Color	Part Number	Pkg. Qty.
Medium	Blue	6M NITR GLV M	100 Gloves
Large	Blue	6M NITR GLV L	100 Gloves
X-Large	Blue	6M NITR GLV XL	100 Gloves
XX-Large	Blue	6M NITR GLV XXL	100 Gloves

Foamed Nitrile Palm Grip Gloves



The foamed nitrile palm provides superior grip in regular and oily environments. They are also quite breathable. These gloves maximize your use of your finger tips for small and difficult to grip items while also protecting your hands from incidental bumps, cuts, and oils on the job.

Size	Color	Part Number	Pkg. Qty.
Medium	Blue with Black Palm	GRIP GLV M	1 pair
X-Large	Blue with Black Palm	GRIP GLV XL	1 pair

Extra-Thick Rubber Palm Work Gloves



The rubber palm of this glove is extra thick, providing superior durability, abrasion, and puncture resistance. Excellent wet and dry grip. Machine washable.

Size	Color	Part Number	Pkg. Qty.
Small	Gray with Blue Palm	PLM GLV S	1 pair
Medium	Gray with Blue Palm	PLM GLV M	1 pair
Large	Gray with Blue Palm	PLM GLV L	1 pair
X-Large	Gray with Blue Palm	PLM GLV XL	1 pair

Leather Work Gloves



This cowhide leather work glove is ideal for general maintenance lifting, pulling, and warehousing. Gloves protect hands from bumps and scratches.

Size	Color	Part Number	Pkg. Qty.
Medium	Gray	ECO LTHR GLV M	1 pair
Large	Gray	ECO LTHR GLV L	1 pair
X-Large	Gray	ECO LTHR GLV XL	1 pair

Knit Cotton Work Gloves



Lightweight and inexpensive cotton work gloves. Use these for light-duty general maintenance applications. Cheap enough that you can use them once and throw them away.

Size	Color	Part Number	Pkg. Qty.
One Size Fits Most	Gray	ECO GLV	12 pair

Drop Lights, Replacement Bulbs, Extension Cords & Plugs and Receptacles

Drop Lights

LED

Features:
- 3 position switch
- 360° ratcheting hook
- Super bright white
- Cordless
- Rechargeable Batteries
- A/C wall charger
- 12v/24v car charger



Part # WL500

Features:
- 3 position switch
- Super bright white
- 5500 Kelvin
- Cordless
- Battery Powered



Part # WL400

Standard

Features:
- 16 gauge wire
- Black high strength handle with push through switch
- Outlet on handle
- Metal guard



Part # 16/3-25TL
- **25 foot** cord

Part # 16/3-50TL
- **50 foot** cord

Heavy Duty Ericson Drop Lights

Features:
- **50 foot** cord
- 16 gauge wire
- Switch
- Outlet on handle
- Industrial grade



Part # ER-9450-RS

Features:
- Replacement head
- Heavy duty guard with reflector, socket, ground clip, switch on handle
- No cord



Part # ER-944RS

Replacement Head Kit

Features:
- Replacement head
- Metal swing open reflector, 3-wire outlet and push switch on handle, interior socket
- No cord



Part # TL-HEAD KIT

Replacement Cage

Features:
- Replacement cage
- Heavy-duty
- Chrome Plated Steel
- 360° ratcheting and locking hook



Part # WL200C

Incandescent Rough Service Replacement Bulbs

Rough service bulbs resist vibration and are known for their durability.



Wattage	Standard	Tough Skin	Pkg. Qty.
75	RSB-75	RSB-75T	6
100	RSB-100	RSB-100T	6

Fluorescent Replacement Bulbs

Features:
- 13 watts, 120 volts
- Fluorescent double tube lamp
- 2 Pin Base
- 4 11/16" length



Part # TLQFS

Extension Cords

Our extension cords are good for all-weather applications down to -58°F and are UL listed for indoor/outdoor use. They are blue, 3 wire grounded, and have molded ends.



Wire Size (AWG)	Cord Length	
Single Connector		
16	25 feet	16/3 CORD-25
16	50 feet	16/3 CORD-50
14	25 feet	14/3 CORD-25
14	50 feet	14/3 CORD-50
12	15 feet	12/3 CORD-15
12	25 feet	12/3 CORD-25
12	50 feet	12/3 CORD-50
Triple Connector		
12	50 feet	12/3 CORD-50-3

Plugs and Receptacles

Prevent accidental disconnection with twist lock plugs.



ER-1510-P and ER-1610-C



MR-5266 and MR-5259

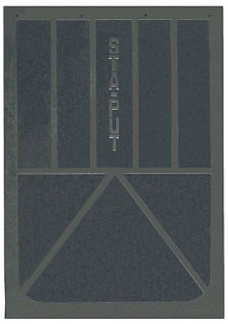


Type	NEMA	Diameter	Male	Female
15 Amp, 125 Volt, 3-Wire				
Standard	5-15	1.53"	**(A)** ER-1510-P	**(A)** ER-1610-C
Economy	5-15	1.47"	**(A)** MR-5266	**(A)** MR-5269
Twist Lock	L5-15	1.53"	**(B)** ER-1520-P	**(B)** ER-1620-C
20 Amp, 125 Volt, 3-Wire				
Twist Lock	L5-20	2.12"	**(C)** ER-2310-P	**(C)** ER-2410-C
20 Amp, 250 Volt, 3-Wire				
Locking	-------	2.14"	-------	**(D)** ER-2416-C

*Many other styles available.

Mud Flaps & Mounting Hardware

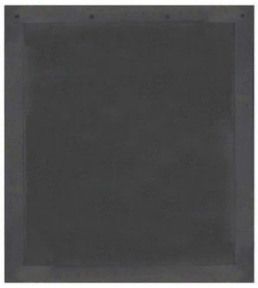
Solid Rubber Mud Flaps



- Black 1/2" thick 100% recycled rubber
- Solid rubber back repels road debris
- Resists snow and ice buildup
- Great for off-road conditions
- Resists cutting and tearing
- Ideal for all-season use
- Made in the USA

Width	Length		Pkg. Qty.
24"	24"	BY-B24SPP	1 pair
24"	30"	BY-B30SPP	1 pair
24"	36"	BY-B36SPP	1 pair

Solid Rubber Mud Flaps



- Black 3/8" thick 100% recycled rubber
- Built for long road life
- Resists snow and ice buildup
- Resists cutting and tearing
- Ideal for all-season use
- Made in the USA

Width	Length		Pkg. Qty.
24"	24"	BY-B24LXP	1 pair
24"	30"	BY-B30LXP	1 pair
24"	36"	BY-B36LXP	1 pair
24"	40"	BY-B40LXP	1 pair

Polymer Mud Flaps



- 3/16" thick durable polymer
- Withstands subfreezing temperatures
- Resists snow and ice buildup
- Reduce impact from road debris
- Ideal for all-season use
- Made in the USA

Color	Width	Length		Pkg. Qty.
Black	24"	18"	BY-RC18PPB	1 pair
Black	24"	24"	BY-RC24PPB	1 pair
Black	24"	30"	BY-RC30PPB	1 pair
Black	24"	36"	BY-RC36PPB	1 pair
Black	24"	40"	BY-RC40PPB	1 pair
Blue	24"	30"	BY-RC30PPBLU	1 pair
Red	24"	30"	BY-RC30PPR	1 pair
White	24"	18"	BY-RC18PPW	1 pair
White	24"	24"	BY-RC24PPW	1 pair
White	24"	30"	BY-RC30PPW	1 pair
White	24"	36"	BY-RC36PPW	1 pair
White	24"	40"	BY-RC40PPW	1 pair
Yellow	24"	24"	BY-B24PPY	1 pair
Yellow	24"	30"	BY-B30PPY	1 pair
Yellow	24"	36"	BY-B36PPY	1 pair

Composite Mud Flaps



Front



Back

- Black polymer and recycled rubber
- Heavy duty, No sail design
- 1/4" or 3/8" grooves on the back
- Withstands subfreezing temperatures

Thickness	Width	Length		Pkg. Qty.
1/4"	20"	14"	BY-BSGS2014	1 pair
1/4"	20"	18"	BY-BSGS2018	1 pair
1/4"	20"	30"	BY-BSGS2030	1 pair
1/4"	24"	24"	BY-BSGS2424	1 pair
1/4"	24"	30"	BY-BSGS2430	1 pair
1/4"	24"	36"	BY-BSGS2436	1 pair
3/8"	24"	24"	BY-BSGD2424	1 pair
3/8"	24"	30"	BY-BSGD2430	1 pair
3/8"	24"	36"	BY-BSGD2436	1 pair
3/8"	24"	42"	BY-BSGD2442	1 pair

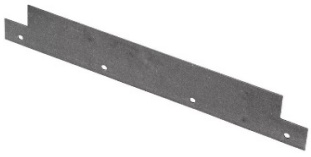
Mud Flap Bolting Plate



- Reinforces mud flap bolt holes
- Corrosion resistant
- Black powder-coated finish

Material	Width	Height		Pkg. Qty.
Steel	24"	1.5"	BY-MFW2375	1 pair

Mud Flap Mounting Plate



- Economical mounting plate
- Weld to truck or trailer body
- Easy installation

Material	Width	Height		Pkg. Qty.
Steel	24"	4"	BY-MFBH2375F	1 pair

90° Mud Flap Mounting Plate



- 90° angle for easy welding
- Weld to truck or trailer body
- Economical

Material	Width	Height		Pkg. Qty.
Steel	24"	3.13"	BY-MFBH2375A	1 pair

Anti-Sail Brackets for Mud Flaps

A



B



- Anti-sail bracket keeps mud flaps straight and flat
- Bolt or weld to truck or trailer body
- Quick and easy mount for all 24" splash guards
- They are silver colored and sold in pairs

	Material	Finish	Length	Height	Width	
(A)	Steel	Galvanized	21.69"	20.84"	1.79"	BY-400BZ
(A)	Stainless Steel	Plain	21.69"	20.84"	1.79"	BY-400SS
(A)	Steel	Chrome	26.17"	20.96"	2"	BY-405BC
(A)	Steel	Galvanized	26.17"	20.96"	2"	BY-405BZ
(A)	Stainless Steel	Plain	26.17"	20.96"	2"	BY-405SS
(B)	Steel	Chrome	24.50"	20.75"	---	BY-B2436ASBC
(B)	Steel	Chrome	24.50"	20.75"	---	BY-B2418ASBC

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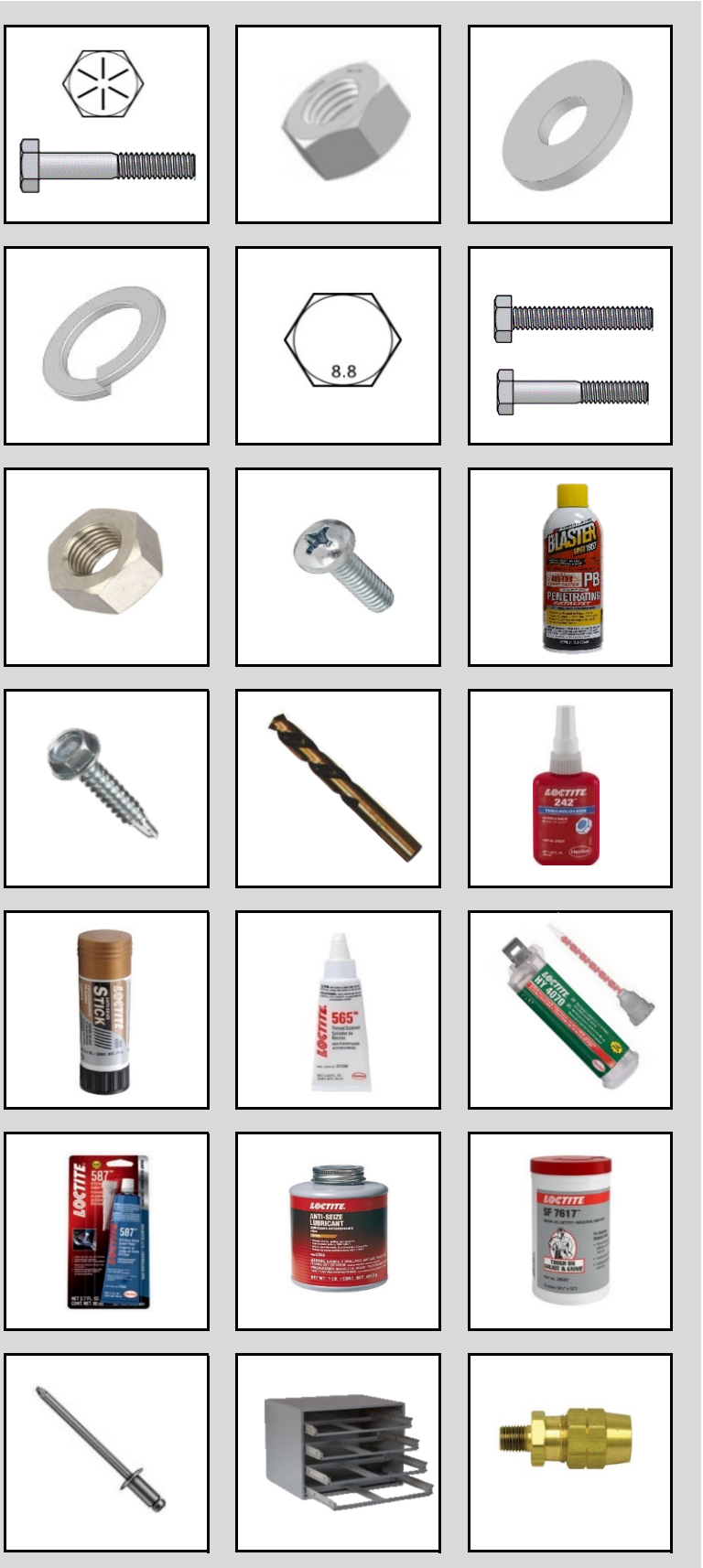
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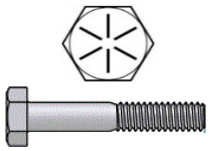
American Made Test Clips

American Made Test Clips 160



Hex Head Cap Screws

Hex Head Cap Screws — Grade 8 — Made in North America



The six ticks on the head of our steel screws signify that they are Grade 8, offering greater strength and durability than traditional Grade 5 cap screws. The zinc-yellow chromate coating offers a high level of corrosion resistance and rust protection.

The minimum thread length can by calculated using the following formula:
Minimum Thread Length = 2 x Diameter + 1/4".

Course Thread (UNC)

Length		Pkg. Qty.
1/4"-20		
0.375"	HS8Y-14C-0.375	100
0.5"	HS8Y-14C-0.5	100
0.625"	HS8Y-14C-0.625	100
0.75"	HS8Y-14C-0.75	100
0.875"	HS8Y-14C-0.875	100
1.0"	HS8Y-14C-1	100
1.25"	HS8Y-14C-1.25	100
1.5"	HS8Y-14C-1.5	100
1.75"	HS8Y-14C-1.75	50
2.0"	HS8Y-14C-2	50
2.25"	HS8Y-14C-2.25	50
2.5"	HS8Y-14C-2.5	50
2.75"	HS8Y-14C-2.75	25
3.0"	HS8Y-14C-3	25
3.25"	HS8Y-14C-3.25	25
3.5"	HS8Y-14C-3.5	25
3.75"	HS8Y-14C-3.75	25
4.0"	HS8Y-14C-4	10
4.5"	HS8Y-14C-4.5	10
5.0"	HS8Y-14C-5	10
5.5"	HS8Y-14C-5.5	5
6.0"	HS8Y-14C-6	5
6.5"	HS8Y-14C-6.5	5
7.0"	HS8Y-14C-7	5
7.5"	HS8Y-14C-7.5	5
5/16"-18		
0.5"	HS8Y-516C-0.5	100
0.625"	HS8Y-516C-0.625	50
0.75"	HS8Y-516C-0.75	50
0.875"	HS8Y-516C-0.875	50
1.0"	HS8Y-516C-1	50
1.25"	HS8Y-516C-1.25	50
1.5"	HS8Y-516C-1.5	50
1.75"	HS8Y-516C-1.75	50
2.0"	HS8Y-516C-2	50
2.25"	HS8Y-516C-2.25	25
2.5"	HS8Y-516C-2.5	25
2.75"	HS8Y-516C-2.75	25
3.0"	HS8Y-516C-3	25
3.25"	HS8Y-516C-3.25	25
3.5"	HS8Y-516C-3.5	10
3.75"	HS8Y-516C-3.75	10
4.0"	HS8Y-516C-4	10
4.5"	HS8Y-516C-4.5	10
5.0"	HS8Y-516C-5	5
5.5"	HS8Y-516C-5.5	5
6.0"	HS8Y-516C-6	5
7.0"	HS8Y-516C-7	5
7.5"	HS8Y-516C-7.5	1
8.0"	HS8Y-516C-8	1
3/8"-16		
0.5"	HS8Y-38C-0.5	50
0.625"	HS8Y-38C-0.625	50
0.75"	HS8Y-38C-0.75	50
0.875"	HS8Y-38C-0.875	50
1.0"	HS8Y-38C-1	50
1.25"	HS8Y-38C-1.25	50

Length		Pkg. Qty.
3/8"-16 (Cont.)		
1.5"	HS8Y-38C-1.5	50
1.75"	HS8Y-38C-1.75	50
2.0"	HS8Y-38C-2	25
2.25"	HS8Y-38C-2.25	25
2.5"	HS8Y-38C-2.5	25
2.75"	HS8Y-38C-2.75	25
3.0"	HS8Y-38C-3	25
3.25"	HS8Y-38C-3.25	10
3.5"	HS8Y-38C-3.5	10
3.75"	HS8Y-38C-3.75	10
4.0"	HS8Y-38C-4	10
4.5"	HS8Y-38C-4.5	5
5.0"	HS8Y-38C-5	5
5.5"	HS8Y-38C-5.5	5
6.0"	HS8Y-38C-6	5
6.5"	HS8Y-38C-6.5	5
7.0"	HS8Y-38C-7	5
8.0"	HS8Y-38C-8	1
7/16"-14		
0.75"	HS8Y-716C-0.75	25
0.875"	HS8Y-716C-0.875	25
1.0"	HS8Y-716C-1	25
1.25"	HS8Y-716C-1.25	25
1.5"	HS8Y-716C-1.5	25
1.75"	HS8Y-716C-1.75	10
2.0"	HS8Y-716C-2	10
2.25"	HS8Y-716C-2.25	10
2.5"	HS8Y-716C-2.5	10
2.75"	HS8Y-716C-2.75	10
3.0"	HS8Y-716C-3	10
3.5"	HS8Y-716C-3.5	10
4.0"	HS8Y-716C-4	5
4.5"	HS8Y-716C-4.5	5
5.0"	HS8Y-716C-5	5
5.5"	HS8Y-716C-5.5	5
6.0"	HS8Y-716C-6	5
6.5"	HS8Y-716C-6.5	1
7.0"	HS8Y-716C-7	1
8.0"	HS8Y-716C-8	1
1/2"-13		
0.75"	HS8Y-12C-0.75	25
0.875"	HS8Y-12C-0.875	25
1.0"	HS8Y-12C-1	25
1.25"	HS8Y-12C-1.25	25
1.5"	HS8Y-12C-1.5	25
1.75"	HS8Y-12C-1.75	10
2.0"	HS8Y-12C-2	10
2.25"	HS8Y-12C-2.25	10
2.5"	HS8Y-12C-2.5	10
2.75"	HS8Y-12C-2.75	10
3.0"	HS8Y-12C-3	10
3.25"	HS8Y-12C-3.25	10
3.5"	HS8Y-12C-3.5	10
3.75"	HS8Y-12C-3.75	5
4.0"	HS8Y-12C-4	5
4.5"	HS8Y-12C-4.5	5
5.0"	HS8Y-12C-5	5

Length		Pkg. Qty.
1/2"-13 (Cont.)		
5.5"	HS8Y-12C-5.5	5
6.0"	HS8Y-12C-6	5
6.5"	HS8Y-12C-6.5	1
7.0"	HS8Y-12C-7	1
8.0"	HS8Y-12C-8	1
9/16"-12		
1.0"	HS8Y-916C-1	10
1.25"	HS8Y-916C-1.25	10
1.5"	HS8Y-916C-1.5	10
1.75"	HS8Y-916C-1.75	5
2.0"	HS8Y-916C-2	5
2.25"	HS8Y-916C-2.25	5
2.5"	HS8Y-916C-2.5	5
2.75"	HS8Y-916C-2.75	5
3.0"	HS8Y-916C-3	5
3.25"	HS8Y-916C-3.25	5
3.5"	HS8Y-916C-3.5	5
3.75"	HS8Y-916C-3.75	5
4.0"	HS8Y-916C-4	5
4.5"	HS8Y-916C-4.5	1
5.0"	HS8Y-916C-5	1
5.5"	HS8Y-916C-5.5	1
6.0"	HS8Y-916C-6	1
6.5"	HS8Y-916C-6.5	1
5/8"-11		
1.0"	HS8Y-58C-1	10
1.25"	HS8Y-58C-1.25	10
1.5"	HS8Y-58C-1.5	10
1.75"	HS8Y-58C-1.75	10
2.0"	HS8Y-58C-2	10
2.25"	HS8Y-58C-2.25	5
2.5"	HS8Y-58C-2.5	5
2.75"	HS8Y-58C-2.75	5
3.0"	HS8Y-58C-3	5
3.25"	HS8Y-58C-3.25	5
3.5"	HS8Y-58C-3.5	5
3.75"	HS8Y-58C-3.75	5
4.0"	HS8Y-58C-4	5
4.5"	HS8Y-58C-4.5	1
5.0"	HS8Y-58C-5	1
5.5"	HS8Y-58C-5.5	1
6.0"	HS8Y-58C-6	1
6.5"	HS8Y-58C-6.5	1
7.0"	HS8Y-58C-7	1
7.5"	HS8Y-58C-7.5	1
8.0"	HS8Y-58C-8	1
8.5"	HS8Y-58C-8.5	1
9.0"	HS8Y-58C-9	1
9.5"	HS8Y-58C-9.5	1
10.0"	HS8Y-58C-10	1
3/4"-10		
1.0"	HS8Y-34C-1	5
1.25"	HS8Y-34C-1.25	5
1.5"	HS8Y-34C-1.5	5
1.75"	HS8Y-34C-1.75	5
2.0"	HS8Y-34C-2	5
2.25"	HS8Y-34C-2.25	5

Length		Pkg. Qty.
3/4"-10 (Cont.)		
2.5"	HS8Y-34C-2.5	5
2.75"	HS8Y-34C-2.75	5
3.0"	HS8Y-34C-3	1
3.25"	HS8Y-34C-3.25	1
3.5"	HS8Y-34C-3.5	1
3.75"	HS8Y-34C-3.75	1
4.0"	HS8Y-34C-4	1
4.5"	HS8Y-34C-4.5	1
5.0"	HS8Y-34C-5	1
5.5"	HS8Y-34C-5.5	1
6.0"	HS8Y-34C-6	1
6.5"	HS8Y-34C-6.5	1
7.0"	HS8Y-34C-7	1
7.5"	HS8Y-34C-7.5	1
8.0"	HS8Y-34C-8	1
8.5"	HS8Y-34C-8.5	1
9.0"	HS8Y-34C-9	1
9.5"	HS8Y-34C-9.5	1
10.0"	HS8Y-34C-10	1
7/8"-9		
1.5"	HS8Y-78C-1.5	1
2.0"	HS8Y-78C-2	1
2.5"	HS8Y-78C-2.5	1
3.0"	HS8Y-78C-3	1
3.5"	HS8Y-78C-3.5	1
4.0"	HS8Y-78C-4	1
4.5"	HS8Y-78C-4.5	1
5.0"	HS8Y-78C-5	1
5.5"	HS8Y-78C-5.5	1
6.0"	HS8Y-78C-6	1
6.5"	HS8Y-78C-6.5	1
7.0"	HS8Y-78C-7	1
7.5"	HS8Y-78C-7.5	1
8.0"	HS8Y-78C-8	1
9.0"	HS8Y-78C-9	1
10.0"	HS8Y-78C-10	1
1"-8		
1.5"	HS8Y-1C-1.5	1
2.0"	HS8Y-1C-2	1
2.25"	HS8Y-1C-2.25	1
2.5"	HS8Y-1C-2.5	1
2.75"	HS8Y-1C-2.75	1
3.0"	HS8Y-1C-3	1
3.25"	HS8Y-1C-3.25	1
3.5"	HS8Y-1C-3.5	1
4.0"	HS8Y-1C-4	1
4.5"	HS8Y-1C-4.5	1
5.0"	HS8Y-1C-5	1
5.5"	HS8Y-1C-5.5	1
6.0"	HS8Y-1C-6	1
6.5"	HS8Y-1C-6.5	1
7.0"	HS8Y-1C-7	1
7.5"	HS8Y-1C-7.5	1
8.0"	HS8Y-1C-8	1
8.5"	HS8Y-1C-8.5	1
9.0"	HS8Y-1C-9	1

(Continued on following page)

Hex Head Cap Screws — Grade 8 — Made in North America

(Continued from previous page)

Course Thread (UNC) (Cont.)

Length		Pkg. Qty.
1"-8	(Cont.)	
9.5"	HS8Y-1C-9.5	1
10.0"	HS8Y-1C-10	1
1 1/8"-7		
2.5"	HS8Y-118C-2.5	1
3.0"	HS8Y-118C-3	1
3.5"	HS8Y-118C-3.5	1
1 1/8"-7	(Cont.)	
4.0"	HS8Y-118C-4	1
4.5"	HS8Y-118C-4.5	1
5.0"	HS8Y-118C-5	1
6.0"	HS8Y-118C-6	1
6.5"	HS8Y-118C-6.5	1
8.0"	HS8Y-118C-8	1
1 1/4"-7		
2.5"	HS8Y-114C-2.5	1
3.0"	HS8Y-114C-3	1
3.5"	HS8Y-114C-3.5	1
4.0"	HS8Y-114C-4	1
4.5"	HS8Y-114C-4.5	1
5.5"	HS8Y-114C-5.5	1
1 1/4"-7	(Cont.)	
6.5"	HS8Y-114C-6.5	1
7.0"	HS8Y-114C-7	1
8.0"	HS8Y-114C-8	1
9.0"	HS8Y-114C-9	1
10.0"	HS8Y-114C-10	1

Fine Thread (UNF)

Length		Pkg. Qty.
1/4"-28		
0.5"	HS8Y-14F-0.5	100
0.625"	HS8Y-14F-0.625	100
0.75"	HS8Y-14F-0.75	100
1.0"	HS8Y-14F-1	50
1.25"	HS8Y-14F-1.25	50
1.5"	HS8Y-14F-1.5	25
1.75"	HS8Y-14F-1.75	25
2.0"	HS8Y-14F-2	25
2.25"	HS8Y-14F-2.25	25
2.5"	HS8Y-14F-2.5	10
2.75"	HS8Y-14F-2.75	10
3.0"	HS8Y-14F-3	10
3.25"	HS8Y-14F-3.25	10
3.5"	HS8Y-14F-3.5	10
3.75"	HS8Y-14F-3.75	10
4.0"	HS8Y-14F-4	5
4.5"	HS8Y-14F-4.5	5
5.0"	HS8Y-14F-5	5
5.5"	HS8Y-14F-5.5	5
6.0"	HS8Y-14F-6	5
6.5"	HS8Y-14F-6.5	5
7.0"	HS8Y-14F-7	5
7.5"	HS8Y-14F-7.5	5
8.0"	HS8Y-14F-8	5
5/16"-24		
0.5"	HS8Y-516F-0.5	50
0.625"	HS8Y-516F-0.625	50
0.75"	HS8Y-516F-0.75	50
0.875"	HS8Y-516F-0.875	50
1.0"	HS8Y-516F-1	50
1.25"	HS8Y-516F-1.25	50
1.5"	HS8Y-516F-1.5	50
1.75"	HS8Y-516F-1.75	25
2.0"	HS8Y-516F-2	25
2.25"	HS8Y-516F-2.25	25
2.5"	HS8Y-516F-2.5	25
2.75"	HS8Y-516F-2.75	25
3.0"	HS8Y-516F-3	25
3.25"	HS8Y-516F-3.25	10
3.5"	HS8Y-516F-3.5	10
4.0"	HS8Y-516F-4	10
4.5"	HS8Y-516F-4.5	5
5.0"	HS8Y-516F-5	5
5.5"	HS8Y-516F-5.5	5
6.0"	HS8Y-516F-6	5
7.0"	HS8Y-516F-7	1
3/8"-24		
0.5"	HS8Y-38F-0.5	25
0.625"	HS8Y-38F-0.625	25
0.75"	HS8Y-38F-0.75	25
0.875"	HS8Y-38F-0.875	25
1.0"	HS8Y-38F-1	25
1.25"	HS8Y-38F-1.25	25
3/8"-24	(Cont.)	
1.5"	HS8Y-38F-1.5	10
1.75"	HS8Y-38F-1.75	10
2.0"	HS8Y-38F-2	10
2.25"	HS8Y-38F-2.25	10
2.5"	HS8Y-38F-2.5	10
3.0"	HS8Y-38F-3	10
3.25"	HS8Y-38F-3.25	10
3.5"	HS8Y-38F-3.5	10
3.75"	HS8Y-38F-3.75	10
4.0"	HS8Y-38F-4	10
4.5"	HS8Y-38F-4.5	5
5.0"	HS8Y-38F-5	5
5.5"	HS8Y-38F-5.5	5
6.0"	HS8Y-38F-6	5
6.5"	HS8Y-38F-6.5	1
7.0"	HS8Y-38F-7	1
8.0"	HS8Y-38F-8	1
7/16"-20		
0.75"	HS8Y-716F-0.75	25
1.0"	HS8Y-716F-1	25
1.25"	HS8Y-716F-1.25	25
1.5"	HS8Y-716F-1.5	10
1.75"	HS8Y-716F-1.75	10
2.0"	HS8Y-716F-2	10
2.25"	HS8Y-716F-2.25	10
2.5"	HS8Y-716F-2.5	10
2.75"	HS8Y-716F-2.75	10
3.0"	HS8Y-716F-3	10
3.5"	HS8Y-716F-3.5	10
4.0"	HS8Y-716F-4	5
5.0"	HS8Y-716F-5	5
5.5"	HS8Y-716F-5.5	5
6.0"	HS8Y-716F-6	5
6.5"	HS8Y-716F-6.5	1
7.0"	HS8Y-716F-7	1
1/2"-20		
0.75"	HS8Y-12F-0.75	10
0.875"	HS8Y-12F-0.875	10
1.0"	HS8Y-12F-1	10
1.25"	HS8Y-12F-1.25	10
1.5"	HS8Y-12F-1.5	10
1.75"	HS8Y-12F-1.75	10
2.0"	HS8Y-12F-2	10
2.25"	HS8Y-12F-2.25	10
2.5"	HS8Y-12F-2.5	5
2.75"	HS8Y-12F-2.75	5
3.0"	HS8Y-12F-3	5
3.25"	HS8Y-12F-3.25	5
3.5"	HS8Y-12F-3.5	5
3.75"	HS8Y-12F-3.75	5
4.0"	HS8Y-12F-4	5
4.5"	HS8Y-12F-4.5	5
5.0"	HS8Y-12F-5	5
1/2"-20	(Cont.)	
5.5"	HS8Y-12F-5.5	5
6.0"	HS8Y-12F-6	1
6.5"	HS8Y-12F-6.5	1
7.0"	HS8Y-12F-7	1
7.5"	HS8Y-12F-7.5	1
8.0"	HS8Y-12F-8	1
9/16"-12		
1.0"	HS8Y-916F-1	10
1.25"	HS8Y-916F-1.25	10
1.5"	HS8Y-916F-1.5	10
2.0"	HS8Y-916F-2	10
3.0"	HS8Y-916F-3	5
3.5"	HS8Y-916F-3.5	5
4.0"	HS8Y-916F-4	5
4.5"	HS8Y-916F-4.5	5
5.0"	HS8Y-916F-5	1
6.0"	HS8Y-916F-6	1
5/8"-18		
1.0"	HS8Y-58F-1	10
1.25"	HS8Y-58F-1.25	10
1.5"	HS8Y-58F-1.5	10
1.75"	HS8Y-58F-1.75	10
2.0"	HS8Y-58F-2	5
2.25"	HS8Y-58F-2.25	1
2.5"	HS8Y-58F-2.5	1
3.0"	HS8Y-58F-3	1
3.25"	HS8Y-58F-3.25	5
3.5"	HS8Y-58F-3.5	1
3.75"	HS8Y-58F-3.75	5
4.0"	HS8Y-58F-4	1
4.5"	HS8Y-58F-4.5	1
5.0"	HS8Y-58F-5	1
6.0"	HS8Y-58F-6	1
6.5"	HS8Y-58F-6.5	1
7.0"	HS8Y-58F-7	1
7.5"	HS8Y-58F-7.5	1
8.0"	HS8Y-58F-8	1
3/4"-16		
1.25"	HS8Y-34F-1.25	5
1.5"	HS8Y-34F-1.5	5
1.75"	HS8Y-34F-1.75	5
2.0"	HS8Y-34F-2	5
2.5"	HS8Y-34F-2.5	5
2.75"	HS8Y-34F-2.75	1
3.0"	HS8Y-34F-3	1
3.5"	HS8Y-34F-3.5	1
4.0"	HS8Y-34F-4	1
4.5"	HS8Y-34F-4.5	1
5.0"	HS8Y-34F-5	1
5.5"	HS8Y-34F-5.5	1
6.0"	HS8Y-34F-6	1
6.5"	HS8Y-34F-6.5	1
7.0"	HS8Y-34F-7	1
3/4"-16	(Cont.)	
7.5"	HS8Y-34F-7.5	1
8.0"	HS8Y-34F-8	1
8.5"	HS8Y-34F-8.5	1
9.0"	HS8Y-34F-9	1
10.0"	HS8Y-34F-10	1
7/8"-14		
2.0"	HS8Y-78F-2	1
2.25"	HS8Y-78F-2.25	1
2.5"	HS8Y-78F-2.5	1
3.0"	HS8Y-78F-3	1
3.25"	HS8Y-78F-3.25	1
3.5"	HS8Y-78F-3.5	1
3.75"	HS8Y-78F-3.75	1
4.0"	HS8Y-78F-4	1
4.5"	HS8Y-78F-4.5	1
5.0"	HS8Y-78F-5	1
5.5"	HS8Y-78F-5.5	1
6.0"	HS8Y-78F-6	1
6.5"	HS8Y-78F-6.5	1
7.0"	HS8Y-78F-7	1
7.5"	HS8Y-78F-7.5	1
8.0"	HS8Y-78F-8	1
8.5"	HS8Y-78F-8.5	1
9.0"	HS8Y-78F-9	1
10.0"	HS8Y-78F-10	1
1"-14		
4.0"	HS8Y-1F-4	1
5.0"	HS8Y-1F-5	1
6.0"	HS8Y-1F-6	1
7.0"	HS8Y-1F-7	1
8.0"	HS8Y-1F-8	1
9.0"	HS8Y-1F-9	1
10.0"	HS8Y-1F-10	1

Fastener Loosener/Lubricator

Saves time by eliminating the need to burn off or drill out nuts and bolts. The rust inhibitor quickly breaks loose surface tension rust and corrosion. It can be used in hard to reach places and is ideal for brake, exhaust and suspension system projects. The spray also leaves a lubricating film on parts to further inhibit rust. 11oz can.



Part #
PB BLASTER

Hex Nuts & Washers

Hex Nuts — Grade 8


Standard

These Grade 8 steel hex nuts offer greater strength and durability than their Grade 5 counterparts. The zinc-yellow chromate coating offers a high level of corrosion resistance and rust protection.


Nylon Lock

The **nylon lock** insert in these hex nuts eliminates the worry of vibration loosening the nut. They're also reusable.

Size	Standard	Nylon Lock	Pkg. Qty.
Coarse Thread (UNC)			
1/4"-20	HN8Y-14C	NHN8Y-14C	100
5/16"-18	HN8Y-516C	NHN8Y-516C	100
3/8"-16	HN8Y-38C	NHN8Y-38C	100
7/16"-14	HN8Y-716C	NHN8Y-716C	50
1/2"-13	HN8Y-12C	NHN8Y-12C	50
9/16"-12	HN8Y-916C	NHN8Y-916C	25
5/8"-11	HN8Y-58C	NHN8Y-58C	10
3/4"-10	HN8Y-34C	NHN8Y-34C	10
7/8"-9	HN8Y-78C	NHN8Y-78C	10
1"-8	HN8Y-1C	NHN8Y-1C	10
1 1/8"-7	HN8Y-118C	NHN8Y-118C	5
1 1/4"-7	HN8Y-114C	NHN8Y-114C	1
1 3/8"-6	HN8Y-138C	-------	1
1 1/2"-6	HN8Y-112C	NHN8Y-112C	1
1 3/4"-5	HN8Y-134C	-------	1
2"-4.5	HN8Y-2C	-------	1

Size	Standard	Nylon Lock	Pkg. Qty.
Fine Thread (UNF)			
1/4"-28	HN8Y-14F	NHN8Y-14F	100
5/16"-24	HN8Y-516F	NHN8Y-516F	100
3/8"-24	HN8Y-38F	NHN8Y-38F	50
7/16"-20	HN8Y-716F	NHN8Y-716F	50
1/2"-20	HN8Y-12F	NHN8Y-12F	25
9/16"-18	HN8Y-916F	NHN8Y-916F	10
5/8"-18	HN8Y-58F	NHN8Y-58F	10
3/4"-16	HN8Y-34F	NHN8Y-34F	10
7/8"-14	HN8Y-78F	NHN8Y-78F	5
1"-14	HN8Y-1F	NHN8Y-1F	5
1 1/8"-12	HN8Y-118F	-------	5
1 1/4"-12	HN8Y-114F	-------	1
1 3/8"-12	HN8Y-138F	-------	1
1 1/2"-12	HN8Y-112F	-------	1
1 3/4"-12	HN8Y-134F	-------	1
2"-12	HN8Y-2F	-------	1

Split-Lock Washers



Split-lock washers decrease the likelihood that your fasteners will come unfastened by adding tension to the contact point. Made of high strength steel, with a zinc-yellow chromate finish.

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
1/4"	0.25"	0.49"	0.07"	LWY-14	100
5/16"	0.32"	0.59"	0.09"	LWY-516	100
3/8"	0.38"	0.68"	0.10"	LWY-38	100
7/16"	0.44"	0.78"	0.12"	LWY-716	50
1/2"	0.5"	0.87"	0.13"	LWY-12	50
9/16"	0.57"	0.97"	0.14"	LWY-916	25
5/8"	0.63"	1.08"	0.16"	LWY-58	25
3/4"	0.75"	1.27"	0.19"	LWY-34	25
7/8"	0.88"	1.46"	0.23"	LWY-78	10
1"	1"	1.66"	0.26"	LWY-1	10
1 1/4"	1.25"	2.04"	0.32"	LWY-114	5
1 1/2"	1.5"	2.42"	0.38"	LWY-112	1

Flat Washers



We offer two types of flat washers. Our premium washers are made of through-hardened **high-strength steel** and have a zinc-yellow chromate finish that provides superior corrosion and rust protection. Our more economical option is our steel washers with a **zinc-clear** coating that provides good corrosion resistance and rust protection.

SAE washers have a smaller ID and OD than their USS washer counterparts.

Large-diameter washers cover up oversized holes.

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
SAE Flat					
High Strength, Zinc-Yellow					
1/4"	9/32"	5/8"	0.06"	W8Y-SAE-14	100
5/16"	11/32"	11/16"	0.06"	W8Y-SAE-516	100
3/8"	13/32"	13/16"	0.05"	W8Y-SAE-38	100
7/16"	15/32"	59/64"	0.05"	W8Y-SAE-716	100
1/2"	17/32"	1 1/16"	0.08"	W8Y-SAE-12	100
9/16"	19/32"	1 5/32"	0.08"	W8Y-SAE-916	100
5/8"	21/32"	1 5/16"	0.08"	W8Y-SAE-58	50
3/4"	13/16"	1 1/2"	0.11"	W8Y-SAE-34	25
7/8"	15/16"	1 3/4"	0.13"	W8Y-SAE-78	25
1"	1 1/16"	2"	0.13"	W8Y-SAE-1	25
1 1/8"	1 1/4"	2 1/4"	0.13"	W8Y-SAE-118	10
1 1/4"	1 3/8"	2 1/2"	0.14"	W8Y-SAE-114	5
1 3/8"	1 1/2"	2 3/4"	0.13"	W8Y-SAE-138	5
1 1/2"	1 5/8"	3"	0.12"	W8Y-SAE-112	5
Zinc-Clear					
No. 6	5/32"	3/8"	0.05"	WZ-SAE-N6	100
No. 8	3/16"	7/16"	0.06"	WZ-SAE-N8	100
No. 10	7/32"	1/2"	0.05"	WZ-SAE-N10	100
1/4"	9/32"	5/8"	0.05"	WZ-SAE-14	100
5/16"	11/32"	11/16"	0.07"	WZ-SAE-516	100
3/8"	13/32"	13/16"	0.07"	WZ-SAE-38	100
7/16"	15/32"	59/64"	0.05"	WZ-SAE-716	100
1/2"	17/32"	1 1/16"	0.08"	WZ-SAE-12	100
9/16"	19/32"	1 5/32"	0.09"	WZ-SAE-916	100
5/8"	21/32"	1 5/16"	0.12"	WZ-SAE-58	100
3/4"	13/16"	1 1/2"	0.11"	WZ-SAE-34	100
7/8"	15/16"	1 3/4"	0.13"	WZ-SAE-78	50

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
SAE Flat (Cont.)					
Zinc-Clear (Cont.)					
1"	1 1/16"	2"	0.12"	WZ-SAE-1	50
1 1/8"	1 1/4"	2 1/4"	0.12"	WZ-SAE-118	25
1 1/4"	1 3/8"	2 1/2"	0.15"	WZ-SAE-114	10
1 1/2"	1 5/8"	3"	0.14"	WZ-SAE-112	10
USS Flat					
High Strength, Zinc-Yellow					
1/4"	5/16"	47/64"	0.06"	W8Y-USS-14	100
5/16"	3/8"	7/8"	0.07"	W8Y-USS-516	100
3/8"	7/16"	1"	0.07"	W8Y-USS-38	100
7/16"	1/2"	1 1/4"	0.08"	W8Y-USS-716	100
1/2"	9/16"	1 3/8"	0.09"	W8Y-USS-12	50
9/16"	5/8"	1 1/2"	0.09"	W8Y-USS-916	50
5/8"	11/16"	1 3/4"	0.12"	W8Y-USS-58	25
3/4"	13/16"	2"	0.12"	W8Y-USS-34	10
7/8"	15/16"	2 1/4"	0.14"	W8Y-USS-78	10
1"	1 1/16"	2 1/2"	0.13"	W8Y-USS-1	10
1 1/8"	1 1/4"	2 3/4"	0.13"	W8Y-USS-118	5
1 1/4"	1 3/8"	3"	0.14"	W8Y-USS-114	5
1 1/2"	1 5/8"	3 1/2"	0.17"	W8Y-USS-112	5
Zinc-Clear					
1/4"	5/16"	47/64"	0.06"	WZ-USS-14	100
5/16"	3/8"	7/8"	0.10"	WZ-USS-516	100
3/8"	7/16"	1"	0.08"	WZ-USS-38	100
7/16"	1/2"	1 1/4"	0.08"	WZ-USS-716	100
1/2"	9/16"	1 3/8"	0.11"	WZ-USS-12	50
9/16"	5/8"	1 1/2"	0.09"	WZ-USS-916	50
5/8"	11/16"	1 3/4"	0.11"	WZ-USS-58	25

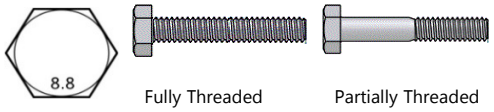
Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
USS Flat (Cont.)					
Zinc-Clear (Cont.)					
3/4"	13/16"	2"	0.12"	WZ-USS-34	25
7/8"	15/16"	2 1/4"	0.14"	WZ-USS-78	25
1"	1 1/16"	2 1/2"	0.17"	WZ-USS-1	10
1 1/8"	1 1/4"	2 3/4"	0.16"	WZ-USS-118	10
1 1/4"	1 3/8"	3"	0.16"	WZ-USS-114	10
1 3/8"	1 1/2"	3 1/4"	0.16"	WZ-USS-138	10
1 1/2"	1 5/8"	3 1/2"	0.17"	WZ-USS-112	5
1 5/8"	1 3/4"	3 3/4"	0.17"	WZ-USS-158	5
1 3/4"	1 7/8"	4"	0.17"	WZ-USS-134	5
2"	2 1/8"	4 1/2"	0.19"	WZ-USS-2	5
2 1/4"	2 3/8"	4 3/4"	0.21"	WZ-USS-214	5
2 1/2"	2 5/8"	5"	0.23"	WZ-USS-212	1
3"	3 1/8"	5 1/2"	0.29"	WZ-USS-3	1

Large-Diameter Washers — Fender

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
# 10	9/32"	1"	0.06"	FWZ-N10-1	100
# 10	9/32"	1 1/4"	0.06"	FWZ-N10-114	100
1/4"	9/32"	1"	0.05"	FWZ-14-1	100
1/4"	9/32"	1 1/4"	0.06"	FWZ-14-114	100
1/4"	9/32"	1 1/2"	0.06"	FWZ-14-112	100
5/16"	11/32"	1 1/4"	0.07"	FWZ-516-114	100
5/16"	11/32"	1 1/2"	0.06"	FWZ-516-112	100
3/8"	13/32"	1 1/4"	0.05"	FWZ-38-114	100
3/8"	13/32"	1 1/2"	0.06"	FWZ-38-112	100
1/2"	17/32"	2"	0.06"	FWZ-12-2	100

Metric Hex Head Cap Screws — Class 8.8

These metric hex head cap screws are made of heat-treated steel with a zinc-clear coating that offer good corrosion resistance and rust protection. These Class 8.8 metric screws correspond to Class 8 nuts. The **fully** threaded screws meet DIN 933, the **partially** threaded screws meet DIN 931.



Fully Threaded

Length		Pkg. Qty.
M6-1		
12	HS8.8Z-M6-12F	100
16	HS8.8Z-M6-16F	100
20	HS8.8Z-M6-20F	100
25	HS8.8Z-M6-25F	100
30	HS8.8Z-M6-30F	100
35	HS8.8Z-M6-35F	50
40	HS8.8Z-M6-40F	50
M8-1.25		
16	HS8.8Z-M8-16F	50
20	HS8.8Z-M8-20F	50
25	HS8.8Z-M8-25F	50
30	HS8.8Z-M8-30F	50
35	HS8.8Z-M8-35F	50
40	HS8.8Z-M8-40F	50
50	HS8.8Z-M8-50F	25
60	HS8.8Z-M8-60F	25

Length		Pkg. Qty.
M10-1.5		
16	HS8.8Z-M10-16F	25
20	HS8.8Z-M10-20F	25
25	HS8.8Z-M10-25F	25
30	HS8.8Z-M10-30F	25
35	HS8.8Z-M10-35F	25
40	HS8.8Z-M10-40F	25
45	HS8.8Z-M10-45F	25
50	HS8.8Z-M10-50F	25
60	HS8.8Z-M10-60F	10
M12-1.75		
20	HS8.8Z-M12-20F	25
25	HS8.8Z-M12-25F	25
30	HS8.8Z-M12-30F	25
35	HS8.8Z-M12-35F	25
40	HS8.8Z-M12-40F	25
45	HS8.8Z-M12-45F	25

Length		Pkg. Qty.
M12-1.75 (Cont.)		
50	HS8.8Z-M12-50F	25
60	HS8.8Z-M12-60F	10
M14-2.0		
25	HS8.8Z-M14-25F	10
30	HS8.8Z-M14-30F	10
35	HS8.8Z-M14-35F	10
40	HS8.8Z-M14-40F	10
45	HS8.8Z-M14-45F	10
50	HS8.8Z-M14-50F	10
M16-2.0		
30	HS8.8Z-M16-30F	10
35	HS8.8Z-M16-35F	10
40	HS8.8Z-M16-40F	10
45	HS8.8Z-M16-45F	10
50	HS8.8Z-M16-50F	10
55	HS8.8Z-M16-55F	5

Length		Pkg. Qty.
M20-2.5		
40	HS8.8Z-M20-40F	5
45	HS8.8Z-M20-45F	5
50	HS8.8Z-M20-50F	1
55	HS8.8Z-M20-55F	1
60	HS8.8Z-M20-60F	1
M24-3.0		
40	HS8.8Z-M24-40F	1
50	HS8.8Z-M24-50F	1
60	HS8.8Z-M24-60F	1
65	HS8.8Z-M24-65F	1
70	HS8.8Z-M24-70F	1
M30-3.5		
70	HS8.8Z-M30-70F	1
80	HS8.8Z-M30-80F	1
90	HS8.8Z-M30-90F	1
100	HS8.8Z-M30-100F	1

Partially Threaded

Length		Pkg. Qty.
M6-1		
30	HS8.8Z-M6-30	50
40	HS8.8Z-M6-40	50
45	HS8.8Z-M6-45	50
50	HS8.8Z-M6-50	50
M8-1.25		
30	HS8.8Z-M8-30	25
35	HS8.8Z-M8-35	25
40	HS8.8Z-M8-40	25
45	HS8.8Z-M8-45	25
50	HS8.8Z-M8-50	25
55	HS8.8Z-M8-55	25
60	HS8.8Z-M8-60	25
70	HS8.8Z-M8-70	25
75	HS8.8Z-M8-75	25
80	HS8.8Z-M8-80	25
90	HS8.8Z-M8-90	25
100	HS8.8Z-M8-100	25
130	HS8.8Z-M8-130	25
M10-1.5		
35	HS8.8Z-M10-35	25

Length		Pkg. Qty.
M10-1.5 (Cont.)		
40	HS8.8Z-M10-40	25
45	HS8.8Z-M10-45	25
50	HS8.8Z-M10-50	25
60	HS8.8Z-M10-60	25
65	HS8.8Z-M10-65	10
70	HS8.8Z-M10-70	10
75	HS8.8Z-M10-75	10
80	HS8.8Z-M10-80	10
90	HS8.8Z-M10-90	10
100	HS8.8Z-M10-100	10
110	HS8.8Z-M10-110	10
120	HS8.8Z-M10-120	10
M12-1.75		
40	HS8.8Z-M12-40	10
45	HS8.8Z-M12-45	10
50	HS8.8Z-M12-50	10
55	HS8.8Z-M12-55	10
60	HS8.8Z-M12-60	10
65	HS8.8Z-M12-65	10
70	HS8.8Z-M12-70	10

Length		Pkg. Qty.
M12-1.75 (Cont.)		
75	HS8.8Z-M12-75	10
80	HS8.8Z-M12-80	10
90	HS8.8Z-M12-90	10
100	HS8.8Z-M12-100	10
110	HS8.8Z-M12-110	5
120	HS8.8Z-M12-120	5
M14-2.0		
50	HS8.8Z-M14-50	10
60	HS8.8Z-M14-60	10
70	HS8.8Z-M14-70	5
80	HS8.8Z-M14-80	5
90	HS8.8Z-M14-90	5
100	HS8.8Z-M14-100	5
M16-2.0		
50	HS8.8Z-M16-50	10
55	HS8.8Z-M16-55	10
60	HS8.8Z-M16-60	10
65	HS8.8Z-M16-65	5
70	HS8.8Z-M16-70	5
75	HS8.8Z-M16-75	5

Length		Pkg. Qty.
M16-2.0 (Cont.)		
80	HS8.8Z-M16-80	5
90	HS8.8Z-M16-90	5
100	HS8.8Z-M16-100	5
110	HS8.8Z-M16-110	1
120	HS8.8Z-M16-120	5
M20-2.5		
70	HS8.8Z-M20-70	5
80	HS8.8Z-M20-80	5
90	HS8.8Z-M20-90	5
100	HS8.8Z-M20-100	1
110	HS8.8Z-M20-110	1
120	HS8.8Z-M20-120	1
M24-3.0		
80	HS8.8Z-M24-80	1
90	HS8.8Z-M24-90	1
100	HS8.8Z-M24-100	1
110	HS8.8Z-M24-110	1
120	HS8.8Z-M24-120	1

Metric Hex Nuts — Class 8



Our metric Class 8 steel hex nuts have a zinc-clear coating which offers good corrosion resistance. These Class 8 nuts correspond to Class 8.8 metric screws. Meet DIN 934.

Size		Pkg. Qty.
M6-1.0	HN8Z-M6	100
M8-1.25	HN8Z-M8	100
M10-1.5	HN8Z-M10	100
M12-1.75	HN8Z-M12	100
M14-2.0	HN8Z-M14	50
M16-2.0	HN8Z-M16	50
M20-2.5	HN8Z-M20	10
M24-3.0	HN8Z-M24	10
M30-3.5	HN8Z-M30	5

Metric Washers



Made of steel with a zinc-clear coating which offers good corrosion resistance.

Flat washers meet DIN 125A.

Split-lock washers decrease the likelihood that your fasteners will come unfastened by adding tension to the contact point. Meet DIN 127B.

Flat Washers

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
M6	6.4	12	1.27	WZ-M6	100
M8	8.4	16	1.52	WZ-M8	100
M10	10.5	20	1.78	WZ-M10	100
M12	13	24	2.29	WZ-M12	100
M14	15	28	2.54	WZ-M14	100
M16	17	30	2.79	WZ-M16	100
M20	21	37	2.79	WZ-M20	50
M24	25	44	3.56	WZ-M24	25
M30	31	56	3.81	WZ-M30	10

Split-Lock Washers

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
M6	6.5	9.9	1.78	LWZ-M6	100
M8	8.5	12.7	2.03	LWZ-M8	100
M10	10.7	16	2.29	LWZ-M10	100
M12	12.7	18	2.54	LWZ-M12	100
M14	14.7	21.1	3.05	LWZ-M14	100
M16	17.0	24.4	3.56	LWZ-M16	50
M20	21.2	30.6	4.06	LWZ-M20	25
M24	25.5	35.9	4.83	LWZ-M24	10
M30	31.7	44.1	5.59	LWZ-M30	10

Steel Machine Screws and Hex Nuts & Stainless Steel Hex Nuts and Washers

Steel Machine Screws



Made of heat-treated steel, these machine screws have a zinc-clear coating that offer good corrosion resistance and rust protection. They have a pan head phillips head and are fully threaded. Meet ASME B18.6.3.

Length		Pkg. Qty.
Coarse Thread (UNC)		
#2-56		
0.313''	MSPPZ-N2C-0.313	100
0.375''	MSPPZ-N2C-0.375	100
#4-40		
0.1875''	MSPPZ-N4C-0.187	100
0.25''	MSPPZ-N4C-0.25	100
0.313''	MSPPZ-N4C-0.313	100
0.375''	MSPPZ-N4C-0.375	100
0.5''	MSPPZ-N4C-0.5	100
0.75''	MSPPZ-N4C-0.75	100
0.875''	MSPPZ-N4C-0.875	100
1''	MSPPZ-N4C-1	100
1.25''	MSPPZ-N4C-1.25	50
1.5''	MSPPZ-N4C-1.5	25
#6-32		
0.25''	MSPPZ-N6C-0.25	100
0.313''	MSPPZ-N6C-0.313	100
0.375''	MSPPZ-N6C-0.375	100
0.5''	MSPPZ-N6C-0.5	100
0.625''	MSPPZ-N6C-0.625	100
0.75''	MSPPZ-N6C-0.75	100
1''	MSPPZ-N6C-1	100
1.25''	MSPPZ-N6C-1.25	100
1.5''	MSPPZ-N6C-1.5	100
1.75''	MSPPZ-N6C-1.75	100
2''	MSPPZ-N6C-2	100

Length		Pkg. Qty.
Coarse Thread (UNC) (Cont.)		
#6-32 (Cont.)		
2.5''	MSPPZ-N6C-2.5	100
3''	MSPPZ-N6C-3	100
#8-32		
0.25''	MSPPZ-N8C-0.25	100
0.313''	MSPPZ-N8C-0.313	100
0.375''	MSPPZ-N8C-0.375	100
0.5''	MSPPZ-N8C-0.5	100
0.625''	MSPPZ-N8C-0.625	100
0.75''	MSPPZ-N8C-0.75	100
1''	MSPPZ-N8C-1	100
1.25''	MSPPZ-N8C-1.25	100
1.5''	MSPPZ-N8C-1.5	100
1.75''	MSPPZ-N8C-1.75	100
2''	MSPPZ-N8C-2	100
2.5''	MSPPZ-N8C-2.5	100
3''	MSPPZ-N8C-3	100
#10-24		
0.25''	MSPPZ-N10C-0.25	100
0.375''	MSPPZ-N10C-0.37	100
0.5''	MSPPZ-N10C-0.5	100
0.625''	MSPPZ-N10C-0.62	100
0.75''	MSPPZ-N10C-0.75	100
1''	MSPPZ-N10C-1	100
1.25''	MSPPZ-N10C-1.25	100
1.5''	MSPPZ-N10C-1.5	100

Length		Pkg. Qty.
Coarse Thread (UNC) (Cont.)		
#10-24 (Cont.)		
1.75''	MSPPZ-N10C-1.75	100
2''	MSPPZ-N10C-2	100
2.5''	MSPPZ-N10C-2.5	100
3''	MSPPZ-N10C-3	50
3.5''	MSPPZ-N10C-3.5	50
4''	MSPPZ-N10C-4	50
#12-24		
0.375''	MSPPZ-N12C-0.37	50
0.5''	MSPPZ-N12C-0.5	100
0.75''	MSPPZ-N12C-0.75	100
1''	MSPPZ-N12C-1	100
1.25''	MSPPZ-N12C-1.25	100
2''	MSPPZ-N12C-2	25
1/4"-20		
0.375''	MSPPZ-14C-0.375	100
0.5''	MSPPZ-14C-0.5	100
0.625''	MSPPZ-14C-0.625	100
0.75''	MSPPZ-14C-0.75	100
1''	MSPPZ-14C-1	100
1.25''	MSPPZ-14C-1.25	100
1.5''	MSPPZ-14C-1.5	50
1.75''	MSPPZ-14C-1.75	50
2''	MSPPZ-14C-2	50
2.5''	MSPPZ-14C-2.5	50
3''	MSPPZ-14C-3	25

Length		Pkg. Qty.
Coarse Thread (UNC) (Cont.)		
1/4"-20 (Cont.)		
3.5''	MSPPZ-14C-3.5	25
4''	MSPPZ-14C-4	50
5/16"-18		
0.625''	MSPPZ-516C-0.62	50
0.75''	MSPPZ-516C-0.75	50
1''	MSPPZ-516C-1	50
1.5''	MSPPZ-516C-1.5	50
2''	MSPPZ-516C-2	25
Fine (UNF)		
#10-32		
0.25''	MSPPZ-N10F-0.25	100
0.375''	MSPPZ-N10F-0.37	100
0.5''	MSPPZ-N10F-0.5	100
0.625''	MSPPZ-N10F-0.62	100
0.75''	MSPPZ-N10F-0.75	100
0.875''	MSPPZ-N10F-0.87	100
1''	MSPPZ-N10F-1	100
1.25''	MSPPZ-N10F-1.25	100
1.5''	MSPPZ-N10F-1.5	100
1.75''	MSPPZ-N10F-1.75	100
2''	MSPPZ-N10F-2	100
2.5''	MSPPZ-N10F-2.5	100
3''	MSPPZ-N10F-3	50

Machine Screw Hex Nuts



These zinc plated steel hex nuts thread onto smaller diameter machine screws. They have a coarse internal thread. They are thinner than standard hex nuts and have a flat side to fit closer to the material surface.

Screw/Bolt Size		Pkg. Qty.
8-32	MHN-832	100
10-24	MHN-1024	100
10-32	MHN-1032	100
1/2"-13	MHN-1420	100

Stainless Steel Hex Nuts



These hex nuts are made of 18-8 stainless steel for excellent corrosion resistance and rust protection. Coarse threads.

Screw/Bolt Size	Part Number	Pkg. Qty.
1/4"-20	HNSS-14C	100
5/16"-18	HNSS-516C	100
3/8"-16	HNSS-38C	100
7/16"-14	HNSS-716C	50
1/2"-13	HNSS-12C	25
9/16"-12	HNSS-916C	10
5/8"-11	HNSS-58C	10
3/4"-10	HNSS-34C	5
7/8"-9	HNSS-78C	5
1"-8	HNSS-1C	1

Stainless Steel Flat Washers



These SAE & USS flat washers are made of 18-8 stainless steel for excellent corrosion resistance and rust protection. USS washers have a larger ID and OD than their SAE washer counterparts.

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
SAE Flat					
1/4"	9/32"	5/8"	0.05"	WSS-SAE-14	100
5/16"	11/32"	11/16"	0.05"	WSS-SAE-516	100
3/8"	13/32"	13/16"	0.05"	WSS-SAE-38	100
7/16"	15/32"	59/64"	0.05"	WSS-SAE-716	50
1/2"	17/32"	1 1/16"	0.07"	WSS-SAE-12	50
5/8"	21/32"	1 5/16"	0.08"	WSS-SAE-58	10
3/4"	13/16"	1 1/2"	0.11"	WSS-SAE-34	10
7/8"	15/16"	1 3/4"	0.11"	WSS-SAE-78	5

Screw/Bolt Size	ID	OD	Thick.		Pkg. Qty.
USS Flat					
1/4"	9/32"	5/8"	0.03"	WSS-USS-14	100
5/16"	11/32"	11/16"	0.03"	WSS-USS-516	100
3/8"	13/32"	13/16"	0.04"	WSS-USS-38	100
7/16"	15/32"	59/64"	0.06"	WSS-USS-716	50
1/2"	17/32"	1 1/16"	0.06"	WSS-USS-12	25
9/16"	19/32"	1 5/32"	0.05"	WSS-USS-916	25
5/8"	21/32"	1 5/16"	0.05"	WSS-USS-58	10
3/4"	13/16"	1 1/2"	0.09"	WSS-USS-34	5
7/8"	15/16"	1 3/4"	0.10"	WSS-USS-78	5
1"	1 1/16"	2"	0.12"	WSS-USS-1	5

Self Drilling Screws

Hex Washer Head Self Drilling Screws

Made of heat-treated steel, these self-drilling screws have a zinc-clear coating that offer good corrosion resistance and rust protection. They have a hex washer head and are fully threaded. Meet J78.



Length		Pkg. Qty.
#6-20		
0.375''	TSHW-638	100
0.5''	TSHW-612	100
0.75''	TSHW-634	100
#8-18		
0.5''	TSHW-812	100
0.625''	TSHW-858	100
0.75''	TSHW-834	100
1''	TSHW-81	100

Length		Pkg. Qty.
#8-18 (Cont.)		
1.25''	TSHW-8114	100
1.5''	TSHW-8112	100
#10-16		
0.5''	TSHW-1012	100
0.625''	TSHW-1058	100
0.75''	TSHW-1034	100
1''	TSHW-101	100
1.25''	TSHW-10114	100

Length		Pkg. Qty.
#10-16 (Cont.)		
1.5''	TSHW-10112	100
2''	TSHW-102	50
#12-14		
0.75''	TSHW-1234	100
1''	TSHW-121	100
1.25''	TSHW-12114	50
1.5''	TSHW-12112	25
2''	TSHW-122	25

Length		Pkg. Qty.
#14-14		
0.75''	TSHW-1434	50
1''	TSHW-141	50
1.25''	TSHW-14114	50
1.5''	TSHW-14112	50
1.75''	TSHW-14134	50
2''	TSHW-142	50
3''	TSHW-143	50

Pan Phillips Self Drilling Screws

These self drilling screws have a phillips pan head that provides good control when driving. They are zinc plated steel and fully threaded.

Thread	Length	Color		Pkg. Qty.
Pan Head				
#8-18	1.5''	Silver	TSPP-812	100
#10-16	1''	Silver	TSPP-101	100



Pan Head

Thread	Length	Color		Pkg. Qty.
Pan Washer Head				
#8-18	1.5''	Silver	TSPPW-8112	100
#8-18	0.5''	Black	TSPPWB-812	100
#8-18	1''	Black	TSPPWB-81	100
#8-18	1.5''	Black	TSPPWB-8112	100



Pan Washer Head

Drill Bits

Mechanic Length

These mechanic length drill bits are made of special hi-molybdenum tool steel. They have a 135° split point to stop the drill from walking. To eliminate drill slippage, there are 3 flats on the shank. These drill bits are heat treated to 2185°F and are nitro-carburized to reduce friction, for a longer life.



Diameter	Overall Length	Flute Length		Pkg. Qty.
Standard (Diameter = Shank Diameter)				
1/16"	1-7/8"	7/8"	175AG-1/16	12
5/64"	2"	1"	175AG-5/64	12
3/32"	2-1/4"	1-1/4"	175AG-3/32	12
7/64"	2-3/8"	1-5/16"	175AG-7/64	12
1/8"	2-1/2"	1-7/16"	175AG-1/8	12
9/64"	2-5/8"	1-9/16"	175AG-9/64	12
5/32"	2-3/4"	1-11/16"	175AG-5/32	12
11/64"	2-7/8"	1-13/16"	175AG-11/64	12
3/16"	3"	1-7/8"	175AG-3/16	12
13/64"	3-1/8"	1-15/16"	175AG-13/64	12
7/32"	3-1/4"	2"	175AG-7/32	12
15/64"	3-3/8"	2-1/16"	175AG-15/64	12
1/4"	3-1/2"	2"	175AG-1/4	12
17/64"	3-5/8"	2-1/8"	175AG-17/64	12
9/32"	3-3/4"	2-1/4"	175AG-9/32	12
19/64"	3-7/8"	2-3/8"	175AG-19/64	6
5/16"	4"	2-1/2"	175AG-5/16	6
21-64"	4-1/16"	2-9/16"	175AG-21/64	6

Diameter	Overall Length	Flute Length		Pkg. Qty.
Standard (Diameter = Shank Diameter) (Cont.)				
11/32"	4-1/8"	2-5/8"	175AG-11/32	6
23/64"	4-3/16"	2-11/16"	175AG-23/64	6
3/8"	4-1/4"	2-11/16"	175AG-3/8	6
25/64"	4-5/16"	2-3/4"	175AG-25/64	6
13/32"	4-3/8"	2-13/16"	175AG-13/32	6
27/64"	4-7/16"	2-7/8"	175AG-27/64	6
7/16"	4-1/2"	2-15/16"	175AG-7/16	6
29/64"	4-5/8"	3"	175AG-29/64	6
15/32"	4-3/4"	3-1/8"	175AG-15/32	6
31/64"	4-7/8"	3-1/4"	175AG-31/64	6
1/2"	5"	3-3/8"	175AG-1/2	6
3/8" Shank				
27/64"	4-7/16"	2-7/8"	178AG-27/64	6
7/16"	4-1/2"	2-15/16"	178AG-7/16	6
29/64"	4-5/8"	3"	178AG-29/64	6
15/32"	4-3/4"	3-1/8"	178AG-15/32	6
31/64"	4-7/8"	3-1/4"	178AG-31/64	6
1/2"	5"	3-3/8"	178AG-1/2	6

Step

Self-starting point eliminates starter holes or punctures, even on curved surfaces. They have a double-fluted design for balanced cuts and cooler operation. 1" long shafts and titanium coating.

Size Range	Number of Hole Sizes	Size Increments	Shank Diameter	Step Thickness		Pkg. Qty.
1/8" to 1/2"	13	1/32	1/4"	1/8"	35-511	1
1/4" to 3/4"	9	1/16	3/8"	1/8"	35-512	1
1/4" to 7/8"	11	1/16	3/8"	1/16"	35-513	1
1/4" to 1 1/8"	16	1/16	3/8"	1/16"	35-515	1



Drill Bit Sets

Description		Pieces in Set	
By 1/64" Increments			
1/16"	to 1/4"	13	SPM-13
1/16"	to 3/8"	21	SPM-21
1/16"	to 1/2"	29	SPM-29
3/32"	to 3/8"	29	SPM-29P

Description	Pieces in Set	
Bolt Remover Sets / Type 420 and 190-AL		
Extractors 3/32" to 3/8", and Left Hand Drills 3/32", 1/8",3/16" and 1/4"	8	BR-8
Extractors 3/32" to 5/8", and Left Hand Drills 3/32", 1/8",3/16", 1/4" and 5/16"	10	BR-10



SPM-29P



SPM-29

Rivets, Coarse and Fine Thread Dimensions & Open Storage Bins

Domed Blind Rivets



Also known as pop rivets, our **all steel** domed rivets offer added strength.
Our **all aluminum** domed rivets offer superior corrosion resistance and are ideal where minimizing weight is a concern.
Our **all stainless steel** domed rivets offer superior corrosion resistance.

		All Steel		All Aluminum		All Stainless Steel	
Diameter	Material Thickness		Pkg. Qty.		Pkg. Qty.		Pkg. Qty.
1/8"	0.032"-0.062"	R41-SD	250	R41-AD	100	-------	----
1/8"	0.063"-0.125"	R42-SD	250	R42-AD	100	R42-SSD	50
1/8"	0.126"-0.187"	R43-SD	250	R43-AD	100	R43-SSD	50
1/8"	0.188"-0.25"	R44-SD	250	R44-AD	100	R44-SSD	50
1/8"	0.251"-0.312"	R45-SD	250	R45-AD	100	-------	----
1/8"	0.313"-0.375"	R46-SD	250	R46-AD	100	R46-SSD	50
1/8"	0.376"-0.5"	R48-SD	250	R48-AD	100	R48-SSD	50
1/8"	0.501"-0.625"	R410-SD	250	-------	----	-------	----
3/16"	0.020"-0.125"	R62-SD	100	R62-AD	100	R62-SSD	50
3/16"	0.188"-0.25"	R64-SD	100	R64-AD	100	R64-SSD	50
3/16"	0.251"-0.375"	R66-SD	100	R66-AD	100	R66-SSD	50
3/16"	0.376"-0.5"	R68-SD	100	R68-AD	100	R68-SSD	50
3/16"	0.501"-0.625"	R610-SD	100	R610-AD	100	-------	----
3/16"	0.626"-0.75"	R612-SD	100	R612-AD	100	-------	----
3/16"	0.751"-0.875"	R614-SD	100	R614-AD	100	-------	----
3/16"	0.876"-1"	R616-SD	100	R616-AD	100	-------	----

American National and Unified Coarse and Fine Thread Dimensions

Diameter	Threads Per Inch		Outside Diameter
	Coarse (UNC)	Fine (UNF)	
#0	-------	80	0.0600"
#1	64	72	0.0730"
#2	56	64	0.0860"
#3	48	56	0.0990"
#4	40	48	0.1120"
#5	40	44	0.1250"
#6	32	40	0.1380"
#8	32	36	0.1640"
#10	24	32	0.1900"
#12	24	28	0.2160"
1/4"	20	28	0.2500"
5/16"	18	24	0.3215"
3/8"	16	24	0.3750"
7/16"	14	20	0.4375"
1/2"	13	20	0.5000"
9/16"	12	18	0.5625"
5/8"	11	18	0.6250"

Diameter	Threads Per Inch		Outside Diameter
	Coarse (UNC)	Fine (UNF)	
3/4"	10	16	0.7500"
7/8"	9	14	0.8750"
1"	8	12	1.0000"
1 1/8"	7	12	1.1250"
1 1/4"	7	12	1.2500"
1 3/8"	6	12	1.3750"
1 1/2"	6	12	1.5000"
1 3/4"	5	-------	1.7500"
2"	4 1/2	-------	2.0000"
2 1/4"	4 1/2	-------	2.2500"
2 1/2"	4 1/2	-------	2.5000"
2 3/4"	4	-------	2.7500"
3"	4	-------	3.0000"
2 1/4"	4 1/2	-------	2.2500"
2 1/2"	4 1/2	-------	2.5000"
2 3/4"	4	-------	2.7500"
3"	4	-------	3.0000"

Open Storage Bins

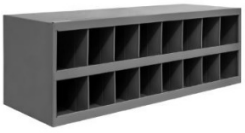
Need to organize? These gray storage bins are just what you need. They are made from cold rolled steel and have a powder coat gloss finish.



(A)



(B)



(C)

Bin Openings	Overall Dimensions **W x D x H**	Bin Dimensions	
40	33 7/8" x 8 1/2" x 22 2/7	32 Bins: 3 3/16" x 8 3/8" x 2 7/8" 8 Bins: 3 13/16" x 8 3/8" x 4"	DH-349-95
20	33 7/8" x 8 1/2" x 22 2/7	16 Bins: 7 13/16" x 8 3/8" x 2 7/8" 4 Bins: 7 13/16" x 8 3/8" x 4 1/8"	DH-394-95
16	33 7/8" x 12" x 11 2/3"	16 Bins: 3 13/16" x 11 7/8" x 4"	DH-353-95

Metal Boxes and Racks

All of our metal boxes, housings, and bases are constructed of steel. Welded construction with a secure metal clasp. They have a durable gray powder coat finish.

Large Boxes

Key	Number of Compartments	Dimensions	
(A)	6	18"W x 12"D x 3"H	LMB-6
(B)	12	18"W x 12"D x 3"H	LMB-12
(C)	24	18"W x 12"D x 3"H	LMB-24
(D)	32	18"W x 12"D x 3"H	LMB-32
(E)	3 Adjustable Rows	18"W x 12"D x 3"H	LMB-A

Housing for Large Boxes

Key	Number of Drawers	Dimensions	
(F)	Standard	20"W x 15"D x 15 3/4"H	LMB-H
(G)	Ball Bearing Easy Glide	20 3/8"W x 15 3/4"D x 14 7/8"H	DH-303B-15.7595

Base for Housing for Large Boxes

Key	Notes	Dimensions	
(H)	Use with LMB-H	20 5/8"W x 16 1/4"D x 15-5/8"H	LMB-BASE

Small Boxes

Key	Number of Compartments	Dimensions	
(I)	21	13 3/8"W x 9 1/4"D x 2"H	SMB
(J)	20	13 3/8"W x 9 1/4"D x 2"H	SMB-20

Housing for Small Boxes

Key	Number of Drawers	Dimensions	
(K)	4 Easy Glide	15 1/4"W x 11 3/4"D x 11 1/4"H	SMB-H4


(A)LMB-6


(B)LMB-12


(C)LMB-24


(D)LMB-32


(E)LMB-A


(F)LMB-H


(G)DH-303B-15.7595


(H)LMB-BASE


(I)SMB


(J)SMB-20


(K)SMB-14

Plastic Boxes

Small Boxes

Key	Number of Compartments	Dimensions	
(A)	12	11"W x 6 3/4"D x 1 3/4"H	SB-12
(B)	18	11"W x 6 3/4"D x 1 3/4"H	SB-18
(C)	3 Adjustable Rows	11"W x 6 3/4"D x 1 3/4"H	SBA-12
(D)	9	7"W x 3 1/4"D x 1 1/4"H	PB-9

Large Box

Key	Number of Compartments	Dimensions	
(E)	3 Adjustable Rows	13 1/8"W x 9"D x 2 5/16"H	SBA-18


(A)SB-12


(B)SB-18


(C)SBA-12


(D)PB-9


(E)SBA-18

Modular Compartment Wall Cabinet

Number of Compartments	Dimensions	
Separate Sections		
8 (2 Rows of 4 Bins)	11.75"W x 7.75"H x 3.25"D	P-308
6 (2 Rows of 3 Bins)	11.75"W x 9.75"H x 4"D	P-306
4 (1 Row of 4 Bins)	23.5" x 8" x 7"	P-604
Complete Wall Cabinet		
44 Comprised of the following sections: (2) P-308, (4) P-306, and (1) P-604.	23.5"W x 35.25"H x 7"D	P-44


P-44

The modular wall cabinet is ideal for organizing small parts. The modular components fit together enabling custom layout of cabinet. It has clear compartment windows and is wall mountable.


P-308


P-306


P-604

Wire Racks

Easy to store different sized spools on the same rod. The punched side panels allow for quick spool changes. Gray powder coat finish.

Description	Size	
1 Rod, Handle	26 1/8"W x 6"D x 10 3/8"H	WR-1
2 Rods	26 1/8"W x 6"D x 17 7/8"H	WR-2
4 Rods	26 1/8"W x 6"D x 37 1/8"H	WR-4

Please note: Wire not included


WR-1


WR-2


WR-4

Wire Caddy

All in one, wire caddy and storage for terminals and crimp tool. Heavy duty steel construction, gray in color. Exterior dimensions: 11"W x 7 1/2"D x 16 3/4"H.

Part # WIRE CADDY



Loctite® Threadlockers

Loctite® Threadlockers

Think of threadlockers as insurance. Prevents loosening of threaded fasteners and equipment failures. Seals out corrosion, fills gaps between locking threads and completely seals the threaded assembly. These threadlockers cure at room temperature with the absence of air, giving you ample time to work. Fully hardens in 24 hours.



A) **Purple Low Strength**
Use on:
- Tiny items
- Adjustment screws
- Calibration screws
- Meters and gauges



B) **Blue Medium Strength**
Use on:
- Machine tools and presses
- Pumps and compressors
- Mounting bolts
- Gear boxes



C) **Red High Strength**
Use on:
- Heavy equipment
- Suspension bolts
- Motor and pump mounts
- Bearing cap bolts and studs



D) **Red Heavy Duty**
Use on:
- Frame brackets
- Suspension fasteners
- Shock absorber mounts
- Wheel studs



E) **Red High Temperature**
Use on:
- Camshaft sprocket bolts
- Crankshaft bolts
- Idler bearings
- Press fit filler tubes
- Ring gear and shock bolts
- Transmission input & output shaft threads



F) **Green Wicking**
Use on:
- Preassembled fasteners
- Instrumentation screws
- Electrical connectors
- Carburetors

Model Number	Size	Container	Begins to Harden	For Max. Thread Diameter	Viscosity (cP)	Torque in. lbs. Break/Prevail	Temp. Range	
(A) **Purple Low Strength (Remove with hand tools)**								
222™	6 ml	Tube	10 min.	1/4"	1200	53/30	-65° to 300°F	555339
(B) **Blue Medium Strength (Remove with hand tools)**								
242®	0.5 ml	Ampule	10 min.	3/4"	1200	110/43	-65° to 300°F	230718
242®	6 ml	Tube	10 min.	3/4"	1200	110/43	-65° to 300°F	487229
242®	36 ml	Bottle	10 min.	3/4"	1200	110/43	-65° to 300°F	492140
243™	0.5 ml	Ampule	10 min.	3/4"	2250	230/40	-65° to 300°F	1330255
243™	6 ml	Tube	10 min.	3/4"	2250	230/40	-65° to 300°F	1330799
243™	36 ml	Bottle	10 min.	3/4"	2250	230/40	-65° to 300°F	1330906
249™	0.5" x 260"	Tape	30 min.	3/4"	Tape	74/47	-65° to 300°F	2096082
(C) **Red High Strength (Remove with heat and hand tools)**								
262™	6 ml	Tube	5 min.	3/4"	1800	189/275	-65° to 300°F	487231
262™	36 ml	Bottle	5 min.	3/4"	1800	189/275	-65° to 300°F	492141
263™	0.5 ml	Ampule	5 min.	1"	400/600	290/290	-65° to 360°F	1330582
263™	6 ml	Tube	5 min.	1"	400/600	290/290	-65° to 360°F	2203451
263™	36 ml	Bottle	5 min.	1"	400/600	290/290	-65° to 360°F	2205310
(D) **Red Heavy Duty (Remove with heat and hand tools)**								
271™	0.5 ml	Ampule	10 min.	1"	500	250/275	-65° to 300°F	232532
271™	6 ml	Tube	10 min.	1"	500	250/275	-65° to 300°F	487232
271™	36 ml	Bottle	10 min.	1"	500	250/275	-65° to 300°F	492142
277™	36 ml	Bottle	60 min.	1 1/2"	7000	275/275	-65° to 300°F	555353
(E) **Red High Temperature (Remove with heat and hand tools)**								
272™	6 ml	Tube	60 min.	1 1/2"	9500	200/220	-65° to 450°F	487233
272™	36 ml	Bottle	60 min.	1 1/2"	9500	200/220	-65° to 450°F	492143
(F) **Green Wicking (Remove with heat and hand tools)**								
290™	6 ml	Tube	20 min.	-------	12	90/260	-65° to 300°F	487234
290™	36 ml	Bottle	20 min.	-------	12	90/260	-65° to 300°F	492144
(G) **Green Anaerobic Activating Primer (Use with 242® and 262™ when using inactive metals)**								
Klean N' Prime	127 g	Aerosol	1 min.	-------	-------	-------	-------	494147

Directions

Preparation: Protect work area. Parts to be sealed must be clean and dry. Shake the product thoroughly before use.
Note: To prevent the product from clogging in the nozzle, avoid touching the bottle tip to the metal surface.

Application:
For Thru Holes: Apply several drops of the product onto the bolt at the nut engagement area.
For Blind Holes: Apply several drops of the product down the internal threads to the bottom of the hole.
For Sealing: Apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads to thoroughly fill the voids. For bigger threads and voids, adjust product amount accordingly and apply a 360° bead of product on the female threads also.
Assemble parts and tighten as required. Sets in approximately 10 minutes and fully cures in 24 hours.

Clean-up: Clean adhesive residue immediately with a damp cloth. Cured product can be removed with a combination of soaking in methylene chloride and mechanical abrasion such as a wire brush.

Disassembly: Shear with standard hand tools and remove with methylene chloride. In rare instances where hand tools do not work because of excessive engagement length, apply localized heat to nut or bolt to approximately 482°F . Disassemble while hot.

Loctite® Threadlocker & Thread Treatment No-Drip Sticks

Loctite® Thread Treatment No-Drip Sticks Kit

Less messy, less waste. Five thread treatment sticks in one conveniently packaged kit. Their size makes them easy to carry. Store them in your tool belt, toolbox, or in your pocket.



Kit contains:
504466 - Blue Threadlocker - 19 g
511535 - Red Threadlocker - 19 g
504467 - White Thread Sealant - 19 g
504468 - Copper Anti Seize - 20 g
504469 - Silver Anti Seize - 20 g

Kit Part # 576507

Loctite® Threadlocker No-Drip Sticks

Won't spill or leak. Threadlocker sticks are compact and deliver the same great performance in a solid stick form. Can be used overhead and on tough applications. Consistency is semi-solid paste. Cures at room temperature.

A) **Blue Medium Strength**
Use on:
- Valve cover bolts
- Water pump bolts
- Oil pan bolts
- Drive shaft bolts
- Carburetor studs
- Rocker arm adjustment nuts



B) **Red High Strength**
Use on:
- Assembly with air tools
- Cylinder block bolts
- Ring gear bolts
- Transmission shaft bolts



C) **White Thread Sealant**
Use on:
- Stainless steel fitting
- Oil and coolant lines
- Fuel fittings
- Rear axle fill plug
- Intake manifold switches
- Head bolts into through holes



Model Name	Size	Container	Begins to Harden	For Max. Thread Diameter	Torque in. lbs. Break/Prevail	Temp. Range	
(A) **Blue Medium Strength (Remove with hand tools)**							
Blue Stick	9 g	Stick	5 min.	3/4"	226/36	-65° to 300°F	506166
Blue Stick	19 g	Stick	5 min.	3/4"	226/36	-65° to 300°F	504466
(B) **Red High Strength (Remove with heat and hand tools)**							
Red Stick	9 g	Stick	5 min.	3/4"	311/83	-65° to 300°F	511537
Red Stick	19 g	Stick	5 min.	3/4"	311/83	-65° to 300°F	511535
(C) **White Thread Sealant (Remove with hand tools)**							
Thread Sealant Stick	19 g	Stick	5 min.	3 1/8"	-------	-65° to 300°F	504467

Loctite® Treatment No-Drip Sticks

Treatment sticks can be used overhead and on tough applications and won't spill or leak. Their size makes them easy to carry.

A) **Copper Anti Seize**
Use on:
- Spark plug threads installed in aluminum
- Exhaust manifold bolts
- Engine bolts
- Thermostat housing bolts
- Oxygen sensors
- Battery cable connections



B) **Silver Anti Seize**
Use on:
- Spark plugs, cylinder head and exhaust head bolts for easy removal



C) **Green Bearing Mount**
Use on:
- Bushings and bearings
- Oil Seals
- Ring gear bolts
- Differential lock pins
- Axle bearings
- Water and power steering pump pulleys



D) **Purple Hi-Tack Gasket Dressing**
Use on:
- Valve covers
- Fuel pumps
- Carburetors
- Manifold gaskets



E) **Blue Disc Brake Quiet**
Use on:
- Disc brake pads and apply at the point of contact with caliper



	Model Name	Size	Container	Begins to Harden	Temp. Range	
(A)	Copper Anti Seize	20 g	Stick	-------	-20° to 1800°F	504468
(B)	Silver Anti Seize	20 g	Stick	-------	-20° to 1600°F	504469
(C)	Green Bearing Mount	9 g	Stick	30 min.	-65° to 400°F	640482
(D)	Purple Hi-Tack Gasket Dressing	19 g	Stick	5 min.	-65° to 300°F	640807
(E)	Blue Disc Brake Quiet	19 g	Stick	-------	-------	718808

Loctite® Sealants & Retaining Compounds

Loctite® Sealants

Thread sealants seal, secure and fill the space between threaded metal on pipes and fittings. Prevent leakage created by vibration loosening, solvent evaporation, tape shredding and damaged threads. When they are fully cured, they seal to most piping systems burst strengths.



A) **White High Performance**
Use on:
- Stainless steel fittings
- Oil and coolant lines
- Rear axle fill plug
- Intake manifold switches
- Oil psi-sending units and sensors



B) **Purple Pneumatic/Hydraulic**
Use on:
- Hydraulic line fittings
- Brake Fittings
- Transmission fluid fitting
- PTO fittings



C) **White High Temperature**
Use on:
- Fuel fittings
- Oil and coolant lines
- Oil psi-sending units and sensors
- Brake and power steering fittings



D) **White Fitting Sealant with PTFE**
Use on:
- Air conditioning fittings
- Temperature sending fittings
- Hydraulic fittings



E) **Black Head Bolt and Water Jacket**
Use on:
- Head bolts
- Water pump bolts
- Thermostat housings
- Intake manifold bolts
- Temperature sensors

Model Name	Size	Container	Temp. Range	Viscosity (cP)	Seals to Operating Pressure	
(A) **White High Performance**						
565™	50 ml	Tube	-65° to 300°F	300,000	10,000 psi	483629
Thread Sealant Stick	19 g	Stick	-65° to 300°F	Semisolid Paste	10,000 psi	504467
(B) **Purple Pneumatic/Hydraulic**						
545™	36 ml	Bottle	-65° to 300°F	14,000	10,000 psi	492145
(C) **White High Temperature**						
592™	6 ml	Tube	-65° to 400°F	350,000	10,000 psi	483631
592™	50 ml	Tube	-65° to 400°F	350,000	10,000 psi	483630
(D) **White Fitting Sealant with PTFE**						
Thread Sealant with PTFE	470 ml	Brush Top	-65° to 300°F	Paste	50,000 psi	1533652
(E) **Black Head Bolt and Water Jacket**						
Head Bolt & Water Jacket	50 ml	Tube	-65° to 300°F	Paste	10,000 psi	1158514

Loctite® Retaining Compounds

Bond non-threaded, round metal parts with retaining compounds. Will restore fit to worn parts, secure new parts and prevent wear. Fully cures in 24 hours at room temperature.



A) **Silver Medium-Strength for Worn Parts**
Use on:
- Refitting worn shafts
- Coupling and form-in-place shims
- loose set screws and other worn parts
- Repairing worn keyways



B) **Green High Strength**
Use on:
- Cylinder sleeves
- Valve guides and seats
- Bearings and bushings
- Liner assemblies



C) **Green High-Strength for Oily Loose Fitting Parts**
Use on:
- Replaces set screws
- Clamp rings
- Snap rings
- Wheel bearings



D) **Green High Temperature**
Use on:
- Axle bearings
- Water and power steering pump pulleys
- Ring gear bolts

Model Name	Size	Container	Begins to Harden	Max. Gap Size Filled	Viscosity (cP)	Shear Strength (psi)	Temp. Range	
(A) **Silver Medium-Strength for Worn Parts**								
660™	50 ml	Bottle	20 min.	0.020"	250,000	3335	-65° to 300°F	555337
(B) **Green High Strength**								
640™	6 ml	Tube	1 hour	0.007"	600	3000	-65° to 400°F	487235
640™	36 ml	Bottle	1 hour	0.007"	600	3000	-65° to 400°F	492147
(C) **Green High-Strength for Oily Loose Fitting Parts**								
680™ Bearing Mount	36 ml	Bottle	10 min.	0.015"	1250	2800	-65° to 300°F	2301375
(D) **Green High Temperature**								
620™	36 ml	Bottle	30 min.	0.015"	8500	3800	-65° to 450°F	555338
Bearing Mount Stick	9 g	Stick	30 min.	0.005"	Semisolid	3800	-65° to 400°F	640482

Loctite® Adhesives

Loctite® adhesives offer a large range of quality products for all of your repair needs.

Speed and Strength

Loctite® Universal Bonder 4070™ is a powerful combination of speed and strength. When time is limited, it will handle almost any repair challenge. Able to quickly bond with high strength performance.



Model Name	Size	Container	Color	Begins to Bond	Bonds To	
Universal Bonder 4070™	11 ml	Syringe	Clear	5 min.	Interior molding clips, dash components, consoles, molded bumpers, body, trim repair	2264448

Quick Sets

A 

B 

C 

D 

E 

F 

	Model Name	Size	Container	Color	Begins to Bond	Bonds To	
(A)	Epoxy Quick Set	25 ml	Syringe	Yellow	5-10 min.	Auto trim, ornaments, tools, emblems, knobs	1395391
(B)	Quick Set Auto Epoxy	25 ml	Syringe	Clear	4-6 min.	Auto trim, ornaments, tools, emblems, knobs	1326795
(C)	Epoxy Plastic Bonder	25 ml	Syringe	Yellow	20-25 min.	PVC, polycarbonate, acrylic, nylon, Mylar® phenolic, aluminum and stainless steel	1363118
(D)	Epoxy Mixer In Cups	(10) 4 ml	Cups	Grey	5-15 min.	Loose trim, broken grilles, loose door glass channels, casting cracks and holes	494151
(E)	3092™ Kit	10 ml	Syringe	Clear	3.5 min.	Interior molding clips, body, molded bumpers, dash components, consoles, trim repair	1807961
(F)	3092™ Mixer Nozzles	(5) 2.5 mm	Nozzle	-------	-------	-------	1434516

Instant Adhesives

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D 

E 

F 

G 

H 

	Model Name	Size	Container	Color	Begins to Bond	Bonds To	
(A)	Quick Gel Super Glue	2 ml	Tube	Clear	30 sec.	Metal, most plastics, vinyl, rubber, ceramics, paper, wood, textiles, leather, synthetic leather, cork, and chipboard	483624
(B)	Super Glue Professional	20 ml	Bottle	Clear	45 sec.	Figurines, costume jewelry, metal car parts, toys, cameras, wiper blades, rubber seals and O-rings	1365882
(C)	Super Glue Longneck	5 ml	Bottle	Clear	10 sec.	Ceramic, rubber, paper, metal, china, wood and most plastics	230992
(D)	Super Glue Liquid	2 ml	Tube	Clear	10 sec.	Metal, laminated plastics, rubber, ceramics, china	1399967
(E)	Super Glue Liquid Instant	2 ml	Tube	Yellow	30 sec.	Metal, laminated plastics, rubber, ceramics, vinyl	487236
(F)	Super Glue Ultra Liquid Control	4 ml	Applicator	Clear	15 sec.	Figurines, costume jewelry, metal car parts, toys, cameras, wiper blades, rubber seals and O-rings	1647358
(G)	Super Glue Ultra Gel Control	4 ml	Applicator	Clear	1 min.	Leather, fabric, cork, paper, cardboard, wood, chipboard, metal, ceramic, rubber, polystyrene, hard plastics and PVC	1363589
(H)	Super Glue Gel	4 ml	Applicator	Clear	30 sec.	Metal, most plastics, rubber, vinyl, paper, wood, textiles, ceramics, china and cork	636095

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Loctite® Adhesives

Loctite® Adhesives (Continued from previous page)

RTV Silicone

RTV (room temperature vulcanizing) silicone begins curing as soon as it is exposed to the moisture in the air. RTV silicone is 100% pure, as where extended silicone sealant is diluted.



RTV Black Silicone
300 ml cartridge



RTV Clear Silicone
80 ml tube



RTV Green Silicone
190 ml aerosol

Model Name	Size	Container	Color	Begins to Bond	
Bonds to Windshields, Door Frames, Electrical Connections, Seams and Roofs, Vinyl Tops, Weather-Stripping					
RTV Black Silicone	80 ml	Tube	Black	30 min.	491979
RTV Black Silicone	190 ml	Aerosol	Black	30 min.	2093365
RTV Black Silicone	300 ml	Cartridge	Black	30 min.	495315
RTV Clear Silicone	80 ml	Tube	Clear	30 min.	491981
RTV Clear Silicone	190 ml	Aerosol	Clear	30 min.	2093366
RTV Clear Silicone	300 ml	Aerosol	Clear	30 min.	495076
Bonds to Glass, Metal, Plastic, Fabric, Vinyl, and Weather Stripping					
RTV Green Silicone	190 ml	Aerosol	Green	30 min.	1165866

Specialty



A



B



C



D



E



F



G

	Model Name	Size	Container	Color	Begins to Bond	Bonds To	
(A)	Fast Cure Marine	88 ml	Tube	White	30 min.	Teak and other woods, fiberglass, vinyl, glass, FRP,	2020627
(B)	Fast Cure Marine	300 ml	Cartridge	White	30 min.	metal, gel coat, polycarbonate and most plastics	2016891
(C)	Marine Epoxy	25 ml	Syringe	White	2 hours	Glass, metal, wood and other common materials	1919324
(D)	Power Grab for Construction	300 ml	Cartridge	White	20 min.	Wood, drywall, plaster, ceramic, concrete, brick, masonry, foam board, cork and aluminum	2137678
(E)	Stik 'N Seal® Extreme Conditions	17 ml	Tube	Clear	5 min.	Glass, mirror, leather, fabric, many plastics, wood, ceramic, concrete, and metal-to-porous surfaces	1360784
(F)	Oil and Gas Resistant	30 ml	Tube	Clear	30 min.	Rubber, plastic, auto/van carpeting, weather-striping and metal-to-porous surfaces	1252795
(G)	All Purpose Spray	350 g	Aerosol	White	20 min.	Foam, carpet, fabrics, plastics, rubber, lightweight porous, and non-porous surfaces	2383478

Cold Weld



The LocWeld™ bonding compound is a two-part adhesive and filler system, that eliminates the need for welding or brazing. It can be drilled, sanded, painted or filed when it is cured.

Model Name	Size	Container	Color	Begins to Bond	Bonds To	
LocWeld™ Bonding Compound	(2) 28 ml	Tubes	Multi	15 min.	Aluminum, steel, brass, bronze, castings and stampings	495540

(Continued on following page)

Loctite® Adhesives (Continued from previous page)

Automotive

A 

B 

C 

D 

E 

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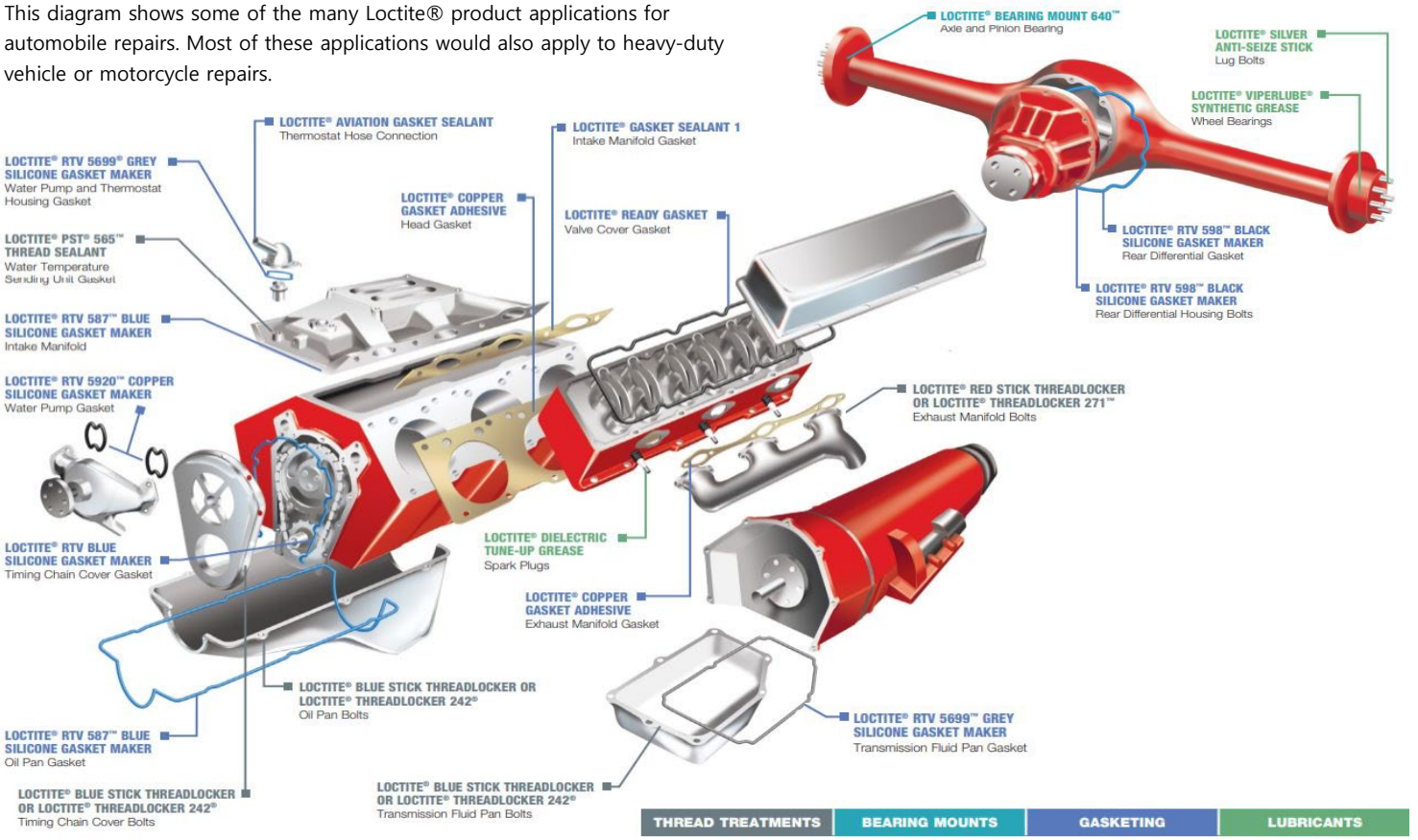
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H 

	Model Name	Size	Container	Color	Begins to Bond	Bonds To	
(A)	Windshield Repair Kit	33 ml	Syringe	Clear	30 min.	Bulls eye cracks and chips in windshields or other laminated glass windows	504465
(B)	Rearview Mirror Kit	0.9 ml	Kit	Clear	15 min.	Mounting rearview mirrors to windshields.	487865
(C)	Rearview Mirror Kit	6 ml	Kit	Clear	15 min.		236971
(D)	Rearview Mirror Kit	24 ml	Kit	Amber	15 min.		228190
(E)	Rear Window Defogger	1.4 ml	Kit	Clear	15 min.	Rear window defogger tabs.	194080
(F)	Professional Performance	382 g	Aerosol	Clear	5-10 min.	Trim work, marine applications, upholstery work, van/motor home conversions, kick plates and signage. Bonds wood, metal, acrylic, carpet, laminate, polypropylene, and PVC.	2267077
(G)	Black Weatherstrip	147 ml	Tube	Black	5-15 min.	Cut gaskets, auto/van carpeting, door and trunk moldings, vinyl tops, fabric-backed vinyl upholstery, headliners	495541
(H)	Yellow Weatherstrip	147 ml	Tube	Yellow	5-15 min.	All types of weather-stripping, auto/van carpeting, door and trunk moldings	782111

LOCTITE® product applications automobile engine

This diagram shows some of the many Loctite® product applications for automobile repairs. Most of these applications would also apply to heavy-duty vehicle or motorcycle repairs.



Loctite® Gasketing

Loctite® Gasketing

Form-in-place gasket makers, gasket dressing and general purpose sealants offer precise, reliable sealing. RTV (room temperature vulcanizing) high performance gasket makers remain flexible and withstands high vibrations. Sensor safe gasket makers will not foul oxygen sensors when fully cured. Ready gaskets make a gasket in one minute and out performs pre-cut gaskets.

High Performance Silicone Gasket Makers



A) **587™ RTV Blue**
Use on:
- Valve covers
- Oil pans
- Timing covers
- Transmission pans
- Differential covers



B) **598™ RTV Black**
Use on:
- Valve covers
- Oil pans
- Timing covers
- Transmission pans
- Intake manifold end seals



C) **5699™ RTV Grey**
Use on:
- Valve covers
- Oil pans
- Timing covers
- Water pumps
- Thermostat housings



D) **5920™ RTV Copper**
Use on:
- Valve covers
- Oil pans
- Timing covers
- Water pumps
- Thermostat housings

Model Name	Size	Container	Tack free in	Temp. Range	
(A) **587™ RTV Blue**					
RTV Blue Silicone	80 ml	Tube	30 min.	-75° to 500°F	491983
RTV Blue Silicone	190 ml	Aerosol	30 min.	-75° to 500°F	2093364
RTV Blue Silicone	300 ml	Cartridge	30 min.	-75° to 500°F	495072
(B) **588™ RTV Black**					
RTV Black Silicone	11 ml	Tube	30 min.	-75° to 625°F	492006
RTV Black Silicone	80 ml	Tube	30 min.	-75° to 625°F	491985
RTV Black Silicone	190 ml	Aerosol	30 min.	-75° to 625°F	2093362
RTV Black Silicone	8.75 oz.	Can	30 min.	-75° to 625°F	495075
RTV Black Silicone	300 ml	Cartridge	30 min.	-75° to 625°F	495074
(C) **5699™ RTV Grey**					
RTV Grey Silicone	80 ml	Tube	30 min.	-75° to 625°F	491982
RTV Grey Silicone	190 ml	Aerosol	30 min.	-75° to 625°F	2093363
(D) **5920™ RTV Copper**					
RTV Copper Silicone Flange Sealant	80 ml	Tube	60 min.	-65° to 700°F	491984

Sensor Safe Silicone Gasket Makers



A



B



C



D



E



F



G

	Model Name	Size	Container	Tack free in	Temp. Range	
(A)	RTV Blue	80 ml	Tube	30 min.	-65° to 500°F	491980
(B)	RTV Blue	190 ml	Aerosol	30 min.	-65° to 500°F	2093361
(C)	RTV Blue	300 ml	Cartridge	30 min.	-65° to 500°F	495318
(D)	RTV Red - High Temperature	80 ml	Tube	30 min.	-75° to 600°F	492001
(E)	RTV Red - High Temperature	214 ml	Can	30 min.	-75° to 600°F	495538
(F)	RTV Red - High Temperature	190 g	Aerosol	30 min.	-75° to 600°F	2093360
(G)	RTV Red - High Temperature	300 ml	Cartridge	30 min.	-75° to 600°F	495536

Ready Gasket



A



B



C



D

	Model Name	Size	Container	Seals in	Temp. Range	
(A)	Ready Gasket Black	147 ml	Cartridge	1 min.	-75° to 500°F	494150
(B)	Ready Gasket Black	190 ml	Aerosol	1 min.	-75° to 500°F	743914
(C)	Ready Gasket Black	207 g	Aerosol	1 min.	-75° to 500°F	494148
(D)	Ready Gasket Black	300 ml	Cartridge	1 min.	-75° to 500°F	2207527

(Continued on following page)

Loctite® Gasketing (Continued from previous page)

Gasket Makers

A 

B 

C 

D 

E 

F 

	Model Name	Size	Container	With Primer Seals in	Without Primer Seals in	Temp. Range	
(A)	Black High Flex Sealant	50 ml	Tube	-------	1 min.	-75° to 500°F	555354
(B)	515™ Purple	50 ml	Tube	0.25-2 hours	1-12 hours	-65° to 300°F	555352
(C)	518™ Red	6 ml	Tube	0.50-4 hours	4-24 hours	-65° to 300°F	2203452
(D)	518™ Red	50 ml	Tube	0.50-4 hours	4-24 hours	-65° to 300°F	2096059
(E)	518™ Red	300 ml	Cartridge	0.50-4 hours	4-24 hours	-65° to 300°F	2096063
(F)	518™ Red	25 ml	Pen	0.50-4 hours	4-24 hours	-65° to 300°F	2392164

Gasket Dressing

A) **Hi-Tack Purple Stick**
Use on:
- Valve covers
- Fuel pumps
- Carburetors
- Manifold gaskets



B) **Hi-Tack Red Sealant Aerosol**
Use on:
- Valve covers
- Fuel pumps
- Carburetors
- Manifold gaskets



C) **Hi-Tack Red Sealant Brush top**
Use on:
- Valve covers
- Fuel pumps
- Carburetors
- Manifold gaskets



D) **Aviation Red/Brown Sealant**
Use on:
- Close-fitting machined surfaces
- Hoses
- Solid gaskets



E) **Copper Adhesive High Temperature**
Use on:
- Cylinder head gaskets
- Carburetor gaskets
- Exhaust manifold gaskets
- High-temperature applications



F) **Black Sealant 2 Non-Hardening**
Use on:
- Valve covers gaskets
- Oil pan gaskets

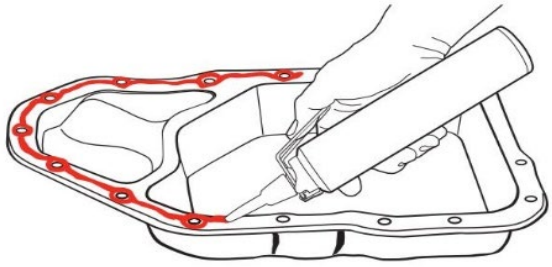


	Model Name	Size	Container	Sets in	Temp. Range	
(A)	Hi-Tack Purple Stick	19 g	Stick	5 min.	-65° to 300°F	640807
(B)	Hi-Tack Red Sealant	266 g	Aerosol	5 min.	-65° to 500°F	497091
(C)	Hi-Tack Red Sealant	473 ml	Brush Top	5 min.	-65° to 500°F	1537776
(D)	Aviation Red/Brown Sealant	473 ml	Brush Top	12 hours	-65° to 400°F	1525607
(E)	Copper Adhesive High Temperature	266 g	Aerosol	Remains tacky	-50° to 500°F	502911
(F)	Black Sealant 2 Non-Hardening	85 g	Tube	Remains tacky	-65° to 500°F	495572

Ready Gasket and 587™ Blue Form-In-Place Directions (See previous page)

Stamped or Sheet Metal Flanges

1. Remove old gasketing material and other heavy contaminants.
2. Clean both flanges with a cleaner.
3. Apply a continuous bead of LOCTITE® Ready Gasket or LOCTITE® High Performance silicones to sealing surface. Circle all bolt holes.
   NOTE: • Use proper bead diameter to seal flange width and depth.
   • Minimize excessive material "squeeze in."
4. Assemble within 10 minutes by pressing together. Tighten as required.
5. Clean up any excess or squeeze out.
6. Cure times will vary with temperature, humidity and gap. Typical full cure time is 24 hours.



Model Name	Color	Viscosity, cP	Gap fill	Cure Method	Tack-free	Service Temp. Range
Loctite® Ready Gasket*	Black	Paste	1/4"	Moisture/Oxime	5 minutes	-75°F to 500°F
Loctite® 587™ Blue	Blue	Paste	1/4"	Moisture/Oxime	30 minutes	-75°F to 500°F

*Loctite® Ready Gasket provides a low pressure instant seal (100 psi at zero gap).

Loctite® Lubricants

Loctite® Lubricants

To reduce wear and tear, anti-seize and lubricating compounds work to protect metal parts from corrosion, locking together and seizing. Made for harsh environments, these products protect against high temperatures, chemicals, heavy loads and vibration.

Anti-Seize

A 

B 

C 

D 

E 

F 

G 

H 

I 

J 

K 

L 

	Model Name	Size	Container	
Uses - Spark Plug Threads Installed in Aluminum, Exhaust Manifold Bolts, Engine Bolts, Thermostat Housing Bolts, Oxygen Sensors, Battery Cable Connections				
(A)	Copper Stick	20 g	Stick	504468
Uses - Spark Plug Threads Installed in Aluminum, Exhaust Manifold Bolts, Engine Bolts, Oxygen Sensors, Knock Sensors, Thermostat Housing Bolts, Fuel Filter Fittings and Battery Cable Connections				
(B)	Copper Lubricant	113 ml	Brush top	500997
(C)	Copper Lubricant	226 ml	Brush top	555336
(D)	Copper Lubricant	453 ml	Brush top	500995
Uses - Spark Plugs, Cylinder Head, Exhaust Head Bolts, for Easy Removal				
(E)	Silver Stick	20 g	Stick	504469
(F)	Silver Lubricant	28 ml	Tube	495556
(G)	Silver Lubricant	236 ml	Brush top	501000
(H)	Silver Lubricant	340 g	Aerosol	623856
(I)	Silver Lubricant	453 ml	Brush top	501001
Uses - Bolts, Screws, Studs, Nuts, Shafts, Bushings, Pipe Joints, Splines, Chains and Cables, for Marine Applications				
(J)	Black Marine Grade	198 ml	Brush top	1999556
(K)	Black Marine Grade	226 ml	Brush top	299175
(L)	Black Marine Grade	453 ml	Brush top	275026

High Performance Synthetic Grease

A 

B 

C 

	Model Name	Size	Container	Uses	
(A)	Tan Viper Lube	85 ml	Tube	Anti-rust film on bearings, bushings, machine parts,	457456
(B)	Tan Viper Lube	286 g	Aerosol	equipment, or as a release agent on gaskets and seals	1906103
(C)	Tan Viper Lube	400 ml	Cartridge		457457

(Continued on following page)

Loctite® Lubricants (Continued from previous page)

Lubricants

A 

B 

C 

D 

E 

F 

G 

	Model Name	Size	Container	Uses	
(A)	Blue Disc Brake Quiet Stick	19 g	Stick	Quiet disk brake pads, apply at point of contact with caliper	718808
(B)	Freeze and Release	383 g	Aerosol	Release seized and corroded assemblies of threaded and cylindrical parts. Any applications where a threadlocker or anti-seize has not been previously used, and rust and corrosion has formed.	2343776
(C)	Dielectric Tune-Up Grease	9.75 ml	Tube	Marine and automotive electrical connections, spark plug	495545
(D)	Dielectric Tune-Up Grease	80 ml	Tube	boots, trailer hitches, battery terminals	495549
(E)	Belt Dressing and Conditioner	141 g	Aerosol	Fan belts, water pumps, power steering, sewing machines, washing machines, air conditioners, lawn mowers and power tools	502909
(F)	Silicone Lubricant	368 g	Aerosol	Door locks, trunk lids, brake cables and rubber molding	503049
(G)	Penetrating Oil	340 g	Aerosol	Free any corroded or seized part, penetrates rust, scale, paint, varnish, carbon or gum	503054

Loctite® Specialty Products

Need to repair, protect, seal, insulate or prevent corrosion, we carry a wide variety of Loctite® products for you. If you need to make a thread repair, or remove or prevent rust, these products will help your parts and equipment last longer and work more efficiently.

A 

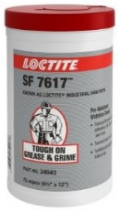
B 

C 

D 

E 

F 

G 

H 

I 

J 

K 

L 

	Model Name	Size	Container	Uses	
(A)	Extend Rust Neutralizer	236 ml	Bottle	One step rust treatment that destroys old rust and	1381192
(B)	Extend Rust Neutralizer	290 g	Aerosol	prevents new rust	633877
(C)	Extend Rust Neutralizer	945 ml	Bottle		234981
(D)	Clover® Lapping and Grinding Compound 280 Grit	56 ml	Can	Ensuring proper fit of valves to valve seats in gas and diesel engines	1777012
(E)	Heavy-Duty Rubberized Undercoating	454 g	Aerosol	Seals, protects and insulates automotive frames, rocker panels and wheels	502908
(F)	Naval Jelly Rust Dissolver	142 ml	Jar	Removes rust from metal surfaces, such as iron railings, automobiles, patio furniture, tools, and lawn mowers	1381191
(G)	SF 7617™ Industrial Hand Wipes	75 count	-------	Pre moistened abrasive wipes scrub off toughest	337637
(H)	SF 7617™ Industrial Hand Wipes	130 count	-------	grease and grime without scratching hands or paint	337638
(I)	Red Insulating and Sealing Wrap	1in. x 10ft.	Roll	Non-sticky, self-fusing, multi-purpose wrap, stretches	1212164
(J)	Black Insulating and Sealing Wrap	1in x 10 ft.	Roll	three times it's size for quick fixes anywhere	1540599
(K)	PC 3967™ Stripped Thread Repair Kit	4.8 ml	Syringe	Restores worn, stripped or damaged threads and eliminates future corrosion, galling, seizing and rust	236382
(L)	Leather and Vinyl Repair Kit	35 ml	Kit	Repair leather, vinyl and plastic, mend holes, rips and burns on seats, door panels and vinyl tops	2445836

Brass Fittings

Brass Reusable Hose Fittings

When you screw brass reusable hose fittings they form a strong seal against the hose. They can be then be unscrewed and used over and over. Remember to use a female connector and a male adapter with the same hose ID to make the connection.

Brass fittings have good corrosion resistance. The brass is a softer metal, making them easier to thread together.



With Spring Guard



Without Spring Guard



Threaded Assembly, D.O.T Approved

Hose ID Size	Pipe Thread Size	With Spring Guard	Without Spring Guard	Pkg. Qty.
3/8"	1/4"	TR-102	TR-105	1
3/8"	3/8"	TR-103	TR-106	1
3/8"	1/2"	TR-104	TR-107	1
1/2"	3/8"	TR-103-8	TR-106-8	1
1/2"	1/2"	TR-104-8	TR-107-8	1

Adapter

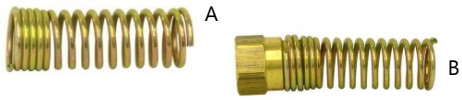
(Use with swivel type reusable and crimped-on fittings)

Straight Thread Size	Pipe Thread Size		Use on Fitting #	Pkg. Qty.
3/4-20	1/4"	TR-161201	TR-1105	1
3/4-20	3/8"	TR-161201-6	TR-1106	1
3/4-20	1/2"	TR-161201-8	TR-1107	1
7/8-20	3/8"	TR-181201-6	TR-1106-8	1
7/8-20	1/2"	TR-181201-8	TR-1107-8	1



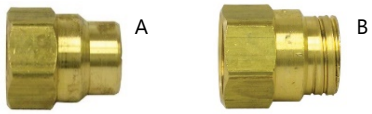
Body

Hose ID Size	Pipe Thread Size		Pkg. Qty.
3/8"	1/4"	TR-1021	1
3/8"	3/8"	TR-1031	1
3/8"	1/2"	TR-1041	1
1/2"	3/8"	TR-1031-8	1
1/2"	1/2"	TR-1041-8	1



Spring

Hose ID Size			Pkg. Qty.
Spring Only			
(A)	3/8"	TR-1024	10
(A)	1/2"	TR-1024-8	1
Spring-Nut Assembly, D.O.T Approved			1
(B)	3/8"	TR-10234	1
(B)	1/2"	TR-10234-8	1



Nut, D.O.T Approved

	Hose ID Size		Pkg. Qty.
(A)	3/8"	TR-1025	1
(A)	1/2"	TR-1025-8	1
For use with Spring			1
(B)	3/8"	TR-1023	1
(B)	1/2"	TR-1023-8	1



Ferrule

Hose ID Size		Pkg. Qty.
3/8"	TR-1022	1
1/2"	TR-1022-8	1



Mender Body

Hose ID Size		Pkg. Qty.
3/8"	TR-1055011	1
1/2"	TR-1077011	1



Hose Mender, D.O.T.

Hose ID Size		Pkg. Qty.
3/8"	TR-105501	1
1/2"	TR-107701	1



Swivel Type, D.O.T. approved

Hose ID Size	Pipe Thread Size		Pkg. Qty.
3/8"	1/4"	TR-1105	1
3/8"	3/8"	TR-1106	1
3/8"	1/2"	TR-1107	1
1/2"	3/8"	TR-1106-8	1
1/2"	1/2"	TR-1107-8	1



Swivel Type with Spring Guard

Hose ID Size	Pipe Thread Size		Pkg. Qty.
3/8"	1/4"	TR-1102	1
3/8"	3/8"	TR-1103	1
3/8"	1/2"	TR-1104	1

Hose End Kits



Keep a Hose End Kit on hand for quick easy repairs, reducing downtime. Each FIX-IT pack will repair two damaged hoses.

Description	Thread NPT		Pkg. Qty.
Fix-It Pack / Includes 2 swivel ends and 1 hex wrench	3/8"	TR-40-31402	1
Fix-It Pack / Includes 2 swivel ends and 1 hex wrench	1/2"	TR-40-31403	1
Fix-It Pack / Includes 2 swivel ends, 2 springs and 1 hex wrench	3/8"	TR-40-31422	1
Case of Fix-It Packs / Includes 5 packs per case	3/8"	TR-40-31406	1
Case of Fix-It Packs / Includes 5 packs per case	1/2"	TR-40-31407	1
Bag of Swivel Ends / Includes 10 swivel ends and 1 hex wrench	3/8"	TR-40-31404	1
Bag of Swivel Ends / Includes 10 swivel ends and 1 hex wrench	1/2"	TR-40-31405	1
Box of Swivel Ends / Includes 100 swivel ends (Wrench not included)	3/8"	TR-40-31408	1
Box of Swivel Ends / Includes 100 swivel ends (Wrench not included)	1/2"	TR-40-31409	1

D.O.T. Air Brake Fittings for Copper Tubing

These fittings are designed for air brake systems on heavy trucks and trailers that have copper tubing. They meet the Department of Transportation (D.O.T.) requirements. They have excellent vibration resistance.



Sleeve

Tube Size		Pkg. Qty.
1/4"	TR-1160-4	25
3/8"	TR-1160-6	10
1/2"	TR-1160-8	10
5/8"	TR-1160-10	1
3/4"	TR-1160-12	1



Nut

Tube Size		Pkg. Qty.
1/4"	TR-1161-4	1
3/8"	TR-1161-6	1
1/2"	TR-1161-8	1
5/8"	TR-1161-10	1
3/4"	TR-1161-12	1



Union

Tube Size		Pkg. Qty.
1/4"	TR-1162-4	1
3/8"	TR-1162-6	1
1/2"	TR-1162-8	1
5/5"	TR-1162-10	1
3/4"	TR-1162-12	1



Union Elbow

Tube Size		Pkg. Qty.
3/8"	TR-1165-6	1
5/8"	TR-1165-10	1



Tee Union

Tube Size		Pkg. Qty.
1/4"	TR-1164-4	1
3/8"	TR-1164-6	1
1/2"	TR-1164-8	1



Male Run Tee

Tube Size	Pipe Thread Size		Pkg. Qty.
3/8"	1/4"	TR-1171-6B	1
3/8"	3/8"	TR-1171-6C	1



Male Connector

Tube Size	Pipe Thread Size		Pkg. Qty.
1/4"	1/8"	TR-1168-4A	1
1/4"	1/4"	TR-1168-4B	1
1/4"	3/8"	TR-1168-4C	1
3/8"	1/8"	TR-1168-6A	1
3/8"	1/4"	TR-1168-6B	1
3/8"	3/8"	TR-1168-6C	1
3/8"	1/2"	TR-1168-6D	1
1/2"	1/4"	TR-1168-8B	1
1/2"	3/8"	TR-1168-8C	1
1/2"	1/2"	TR-1168-8D	1
1/2"	3/4"	TR-1168-8E	1
5/8"	3/8"	TR-1168-10C	1
5/8"	1/2"	TR-1168-10D	1
3/4"	1/2"	TR-1168-12D	1
3/4"	3/4"	TR-1168-12E	1



Male Elbow

Tube Size	Pipe Thread Size		Pkg. Qty.
1/4"	1/8"	TR-1169-4A	1
1/4"	1/4"	TR-1169-4B	1
1/4"	3/8"	TR-1169-4C	1
3/8"	1/8"	TR-1169-6A	1
3/8"	1/4"	TR-1169-6B	1
3/8"	3/8"	TR-1169-6C	1
3/8"	1/2"	TR-1169-6D	1
1/2"	1/4"	TR-1169-8B	1
1/2"	3/8"	TR-1169-8C	1
1/2"	1/2"	TR-1169-8D	1
5/8"	3/8"	TR-1169-10C	1
5/8"	1/2"	TR-1169-10D	1
3/4"	1/2"	TR-1169-12D	1



Female Connector

Tube Size	Pipe Thread Size		Pkg. Qty.
1/4"	1/4"	TR-1166-4B	1
3/8"	1/4"	TR-1166-6B	1
3/8"	3/8"	TR-1166-6C	1
1/2"	3/8"	TR-1166-8C	1



Female Elbow

Tube Size	Pipe Thread Size		Pkg. Qty.
3/8"	1/4"	TR-1170-6B	1
3/8"	3/8"	TR-1170-6C	1
5/8"	1/2"	TR-1170-10D	1



45° Male Elbow Air Brake to Male Pipe

Tube Size	Pipe Thread Size		Pkg. Qty.
1/4"	1/4"	TR-1174-4B	1
3/8"	1/4"	TR-1174-6B	1
3/8"	3/8"	TR-1174-6C	1
3/8"	1/2"	TR-1174-6D	1
1/2"	3/8"	TR-1174-8C	1
1/2"	1/2"	TR-1174-8D	1
5/8"	1/2"	TR-1174-10D	1



Male Branch Tee

Tube Size	Pipe Thread Size		Pkg. Qty.
1/4"	1/8"	TR-1172-4A	1
1/4"	1/4"	TR-1172-4B	1
3/8"	1/8"	TR-1172-6A	1
3/8"	1/4"	TR-1172-6B	1
3/8"	3/8"	TR-1172-6C	1
1/2"	3/8"	TR-1172-8C	1
1/2"	1/2"	TR-1172-8D	1

Brass Fittings

D.O.T. Air Brake Fittings for Nylon Tubing

These fittings are designed for air brake systems on heavy trucks and trailers that have nylon tubing. They meet the Department of Transportation (D.O.T.) requirements, unless noted below. They have excellent vibration resistance.

Composite fittings are easy to assemble, and can be assembled and disassembled over and over again.





Female Connector

Tube Size	Pipe Thread Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
1/4"	1/8"	TR-1366-4A	TR-PL1366-4A	TR-QL1366-4A	1
1/4"	1/4"	TR-1366-4B	TR-PL1366-4B	TR-QL1366-4B	1
3/8"	1/8"	TR-1366-6A	TR-PL1366-6A	TR-QL1366-6A	1
3/8"	1/4"	TR-1366-6B	TR-PL1366-6B	TR-QL1366-6B	1
3/8"	3/8"	TR-1366-6C	TR-PL1366-6C	TR-QL1366-6C	1
1/2"	3/8"	TR-1366-8C	TR-PL1366-8C	TR-QL1366-8C	1
1/2"	1/2"	TR-1366-8D	-------	TR-QL1366-8D	1
5/8"	1/2"	-------	-------	TR-QL136610D	1





Male Connector

Tube Size	Pipe Thread Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
1/8"	1/16"	TR-1368-21*	TR-PL13682X1*	TR-QL13682X1*	1
1/8"	1/8"	TR-1368-2A*	TR-PL1368-2A*	TR-QL1368-2A*	1
1/8"	1/4"	-------	-------	TR-QL1368-2B*	1
5/32"	1/16"	TR-1368-251*	TR-PL1368251	TR-QL136825A	1
5/32"	1/8"	TR-1368-25A*	TR-PL136825A	TR-QL136825B	1
5/32"	1/4"	-------	TR-PL136825B	TR-QL1368251	1
3/16"	1/16"	TR-1368-31	TR-PL13683X1	-------	1
3/16"	1/8"	TR-1368-3A	TR-PL1368-3A	TR-QL1368-3A*	1
3/16"	1/4"	TR-1368-3B	TR-PL1368-3B	TR-QL1368-3B*	1
1/4"	1/16"	TR-1368-41	TR-PL1368-41	-------	1
1/4"	1/8"	TR-1368-4A	TR-PL1368-4A	TR-QL1368-4A	1
1/4"	1/4"	TR-1368-4B	TR-PL1368-4B	TR-QL1368-4B	1
1/4"	3/8"	TR-1368-4C	TR-PL1368-4C	TR-QL1368-4C	1
3/8"	1/8"	TR-1368-6A	TR-PL1368-6A	TR-QL1368-6A	1
3/8"	1/4"	TR-1368-6B	TR-PL1368-6B	TR-QL1368-6B	1
3/8"	3/8"	TR-1368-6C	TR-PL1368-6C	TR-QL1368-6C	1
3/8"	1/2"	TR-1368-6D	TR-PL1368-6D	TR-QL1368-6D	1
1/2"	1/4"	TR-1368-8B	TR-PL1368-8B	TR-QL1368-8B	1
1/2"	3/8"	TR-1368-8C	TR-PL1368-8C	TR-QL1368-8C	1
1/2"	1/2"	TR-1368-8D	TR-PL1368-8D	TR-QL1368-8D	1
1/2"	3/4"	TR-1368-8E	-------	TR-QL1368-8E	1
5/8"	3/8"	TR-1368-10C	TR-PL136810C	TR-QL136810C	1
5/8"	1/2"	TR-1368-10D	TR-PL136810D	TR-QL136810D	1
5/8"	3/4"	TR-1368-10E	-------	TR-QL136810E	1
3/4"	3/8"	-------	-------	TR-QL136812C	1
3/4"	1/2"	TR-1368-12D	TR-PL136812D	TR-QL136812D	1
3/4"	3/4"	TR-1368-12E	TR-PL136812E	TR-QL136812E	1

*Not D.O.T. approved





Sleeve

Tube OD Size		Pkg. Qty.
3/16"	TR-1360-3*	1
1/4"	TR-1360-4	25
3/8"	TR-1360-6	10
1/2"	TR-1360-8	10
5/8"	TR-1360-10	1
3/4"	TR-1360-12	1

*Not D.O.T. approved

Nut

Tube OD Size		Pkg. Qty.
3/16"	TR-1361-3*	1
1/4"	TR-1361-4	10
3/8"	TR-1361-6	1
1/2"	TR-1361-8	1
5/8"	TR-1361-10	1
3/4"	TR-1361-12	1

*Not D.O.T. approved

Insert

Tube OD Size		Pkg. Qty.
1/4"	TR-41484X4	10
3/8"	TR-41484X6	10
1/2"	TR-41484X8	1
5/8"	TR-41484X10	1
3/4"	TR-41484X12	1

D.O.T. Air Brake Fittings for Nylon Tubing (Cont.)





Female Elbow

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
3/16"	1/8"	TR-1370-3A	-------	-------	1
1/4"	1/8"	TR-1370-4A	TR-PL1370-4A	TR-QL1370-4A	1
1/4"	1/4"	TR-1370-4B	TR-PL1370-4B	TR-QL1370-4B	1
3/8"	1/8"	TR-1370-6A	TR-PL1370-6A	TR-QL1370-6A	1
3/8"	1/4"	TR-1370-6B	TR-PL1370-6B	TR-QL1370-6B	1
3/8"	3/8"	TR-1370-6C	TR-PL1370-6C	TR-QL1370-6C	1
1/2"	3/8"	TR-1370-8C	TR-PL1370-8C	TR-QL1370-8C	1
1/2"	1/2"	TR-1370-8D	TR-PL1370-8D	TR-QL1370-8D	1
5/8"	1/2"	TR-1370-10D	-------	TR-QL137010D	1






Male Elbow

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Non-Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
1/8"	1/8"	TR-1369-2A*	TR-PL1369-2A*	TR-PL1315-2A*	TR-QL1369-2A*	1
1/8"	1/16"	TR-1369-21*	-------	-------	TR-QL1369-21*	1
5/32"	1/16"	-------	-------	-------	TR-QL136951*	1
1/8"	1/4"	-------	-------	-------	TR-QL1369-2B*	1
5/32"	1/8"	TR-1369-25A*	TR-PL136925A	TR-PL131525A	TR-QL136925	1
5/32"	1/4"	-------	TR-PL136925B	-------	TR-QL136925B	1
3/16"	1/8"	TR-1369-3A	TR-PL1369-3A	TR-PL1315-3A	TR-QL1369-3A*	1
3/16"	1/4"	TR-1369-3B	-------	-------	TR-QL1369-3B*	1
1/4"	1/8"	TR-1369-4A	TR-PL1369-4A	TR-PL1315-4A	TR-QL1369-4A	1
1/4"	1/4"	TR-1369-4B	TR-PL1369-4B	TR-PL1315-4B	TR-QL1369-4B	1
1/4"	3/8"	TR-1369-4C	TR-PL1369-4C	TR-PL1315-4C	TR-QL1369-4C	1
3/8"	1/8"	TR-1369-6A	TR-PL1369-6A	TR-PL1315-6A	TR-QL1369-6A	1
3/8"	1/4"	TR-1369-6B	TR-PL1369-6B	TR-PL1315-6B	TR-QL1369-6B	1
3/8"	3/8"	TR-1369-6C	TR-PL1369-6C	TR-PL1315-6C	TR-QL1369-6C	1
3/8"	1/2"	TR-1369-6D	TR-PL1369-6D	TR-PL1315-6D	TR-QL1369-6D	1
1/2"	1/4"	TR-1369-8B	TR-PL1369-8B	TR-PL1315-8B	TR-QL1369-8B	1
1/2"	3/8"	TR-1369-8C	TR-PL1369-8C	TR-PL1315-8C	TR-QL1369-8C	1
1/2"	1/2"	TR-1369-8D	TR-PL1369-8D	TR-PL1315-8D	TR-QL1369-8D	1
5/8"	3/8"	TR-1369-10C	TR-PL136910C	-------	TR-QL136910C	1
5/8"	1/2"	TR-1369-10D	TR-PL136910D	TR-PL131510D	TR-QL136910D	1
5/8"	3/4"	TR-1369-10E	-------	-------	TR-QL136910E	1
3/4"	1/2"	TR-1369-12D	TR-PL136912D	TR-PL131512D	TR-QL136912D	1
3/4"	3/4"	TR-1369-12E	TR-PL136912E	-------	TR-QL136912E	1

*Not D.O.T. approved





Male Run Tee

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
1/4"	1/8"	TR-1371-4A	TR-PL1371-4A	TR-QL1371-4A	1
1/4"	1/4"	TR-1371-4B	TR-PL1371-4B	TR-QL1371-4B	1
1/4"	3/8"	-------	-------	TR-QL1371-4C	1
3/8"x1/4"	1/4"	TR-1371-6AB	-------	TR-QL13716AB	1
3/8"	1/4"	TR-1371-6B	TR-PL1371-6B	TR-QL1371-6B	1
3/8"	3/8"	TR-1371-6C	TR-PL1371-6C	TR-QL1371-6C	1
3/8"	1/2"	-------	-------	TR-QL1371-6D	1
1/2"	1/4"	TR-1371-8B	-------	TR-QL1371-8B	1
1/2"	3/8"	TR-1371-8C	TR-PL1371-8C	TR-QL1371-8C	1
1/2"	1/2"	TR-1371-8D	TR-PL1371-8D	TR-QL1371-8D	1
1/2"x1/4"	1/2"	-------	TR-PL137184D	TR-QL137184D	1
5/8"	1/2"	TR-1371-10D	-------	TR-QL137110D	1

D.O.T. Air Brake Fittings for Nylon Tubing (Cont.)






45° Male Elbow

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Non-Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
1/8"	1/8"	-------	-------	-------	TR-QL1374-2A*	1
5/32"	1/8"	-------	-------	-------	TR-QL137425A	1
1/4"	1/8"	TR-1374-4A	TR-PL1374-4A	-------	TR-QL1374-4A	1
1/4"	1/4"	TR-1374-4B	TR-PL1374-4B	-------	TR-QL1374-4B	1
1/4"	3/8"	-------	-------	-------	TR-QL1374-4C	1
3/8"	1/8"	TR-1374-6A	TR-PL1374-6A	-------	TR-QL1374-6A	1
3/8"	1/4"	TR-1374-6B	TR-PL1374-6B	-------	TR-QL1374-6B	1
3/8"	3/8"	TR-1374-6C	TR-PL1374-6C	-------	TR-QL1374-6C	1
3/8"	1/2"	TR-1374-6D	TR-PL1374-6D	-------	TR-QL1374-6D	1
1/2"	1/4"	TR-1374-8B	TR-PL1374-8B	-------	TR-QL1374-8B	1
1/2"	3/8"	TR-1374-8C	TR-PL1374-8C	-------	TR-QL1374-8C	1
1/2"	1/2"	TR-1374-8D	TR-PL1374-8D	TR-PL1375-8D	TR-QL1374-8D	1
5/8"	3/8"	TR-1374-10C	-------	-------	TR-QL137410C	1
5/8"	1/2"	TR-1374-10D	TR-PL137410D	-------	TR-QL137410D	1
3/4"	1/2"	TR-1374-12D	-------	TR-PL137512D	TR-QL137412D	1

*Not D.O.T. approved





Female Branch Tee

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
1/4"	1/8"	-------	TR-PL1378-4A	TR-QL1378-4A	1
1/4"	1/4"	-------	TR-PL1378-4B	TR-QL1378-4B	1
3/8"	1/4"	TR-1378-6B	TR-PL1378-6B	TR-QL1378-6B	1
5/8"	1/4"	TR-1378-10B	-------	TR-QL137810B	1





Male Branch Tee

Tube Size	Pipe Thread Size	Ferrule	Swivel Brass Push-Lock	Swivel Composite Push-Lock	Pkg. Qty.
1/8"	1/8"	-------	TR-PL1372-2A*	TR-QL1372-2A*	1
3/16"	1/8"	-------	-------	TR-QL1372-3A*	1
1/4"	1/8"	TR-1372-4A	TR-PL1372-4A	TR-QL1372-4A	1
1/4"	1/4"	TR-1372-4B	TR-PL1372-4B	TR-QL1372-4B	1
3/8"	1/8"	TR-1372-6A	TR-PL1372-6A	TR-QL1372-6A	1
3/8"	1/4"	TR-1372-6B	TR-PL1372-6B	TR-QL1372-6B	1
3/8"x1/4"	3/8"	TR-1372-6AB	-------	-------	1
3/8"	3/8"	TR-1372-6C	TR-PL1372-6C	TR-QL1372-6C	1
3/8"	1/2"	-------	-------	TR-QL1372-6D	1
1/2"	1/4"	TR-1372-8B	TR-PL1372-8B	TR-QL1372-8B	1
1/2"	3/8"	TR-1372-8C	TR-PL1372-8C	TR-QL1372-8C	1
1/2"x3/8"	1/4"	TR-1372-8CC	-------	-------	1
1/2"	1/2"	TR-1372-8D	TR-PL1372-8D	TR-QL1372-8D	1
5/8"	1/2"	TR-1372-10D	-------	TR-QL137210D	1

*Not D.O.T. approved







Reducing Union Tee

Tube A	Tube B	Tube C	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
3/8"	3/8"	1/4"	TR-1364-664	TR-PL1364664	TR-QL1364664	1
1/2"	1/2"	3/8"	TR-1364-886	-------	TR-QL1364886	1

D.O.T. Air Brake Fittings for Nylon Tubing (Cont.)





Union

Tube Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
1/8"	TR-1362-2	TR-PL1362-2*	TR-QL1362-2*	1
5/32"	TR-1362-25*	TR-PL1362-25	TR-QL1362-25	1
3/16"	-------	TR-PL1362-3	TR-QL1362-3*	1
1/4"	TR-1362-4	TR-PL1362-4	TR-QL1362-4	1
5/16"	-------	TR-PL1362-5*	-------	1
3/8"	TR-1362-6	TR-PL1362-6	TR-QL1362-6	1
1/2"	TR-1362-8	TR-PL1362-8	TR-QL1362-8	1
5/8"	TR-1362-10	TR-PL1362-10	TR-QL1362-10	1
3/4"	TR-1362-12	TR-PL1362-12	TR-QL1362-12	1

*Not D.O.T. approved





Union Tee

Tube Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
1/8"	-------	TR-PL1364-2*	TR-QL1364-2*	1
5/32"	-------	TR-PL1364-25*	TR-QL1364-25	1
3/16"	-------	TR-PL1364-3*	TR-QL1364-3*	1
1/4"	TR-1364-4	TR-PL1364-4	TR-QL1364-4	1
3/8"	TR-1364-6	TR-PL1364-6	TR-QL1364-6	1
1/2"	TR-1364-8	TR-PL1364-8	TR-QL1364-8	1
5/8"	TR-1364-10	TR-PL1364-10	TR-QL1364-10	1
3/4"	TR-1364-12	TR-PL1364-12	-------	1

*Not D.O.T. approved





Union Elbow

Tube Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
5/32"	-------	TR-PL1365-25	TR-QL1365-25	1
1/4"	TR-1365-4	TR-PL1365-4	TR-QL1365-4	1
3/8"	TR-1365-6	TR-PL1365-6	TR-QL1365-6	1
1/2"	TR-1365-8	TR-PL1365-8	TR-QL1365-8	1
5/8"	TR-1365-10	TR-PL1365-10	-------	1




Female Bulkhead Union

Tube Size	Pipe Thread Size	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
1/4"	1/8"	TR-PL1386-4A	TR-QL1386-4A	1
1/4"	1/4"	TR-PL1386-4B	TR-QL1386-4B	1
3/8"	1/4"	TR-PL1386-6B	TR-QL1386-6B	1





Bulkhead Union

Tube Size	Ferrule	Brass Push-Lock	Composite Push-Lock	Pkg. Qty.
3/16"	-------	-------	TR-QL1377-3*	1
1/4"	TR-1377-4	TR-PL1377-4	TR-QL1377-4	1
3/8"	TR-1377-6	TR-PL1377-6	TR-QL1377-6	1
1/2"	TR-1377-8	TR-PL1377-8	TR-QL1377-8	1

*Not D.O.T. approved



Y Union

Tube A	Tube B		Pkg. Qty.
1/4"	1/4"	TR-QL1363444	1
1/4"	3/8"	TR-QL1363446	1
3/8"	3/8"	TR-QL1363666	1

Mounting Hole Dimensions: ID - 4.2 millimeters, OD - 8 millimeters



Push-Lock Fitting Plug

Tube OD Size		Pkg. Qty.
1/4"	TR-PL109-4	1
3/8"	TR-PL109-6	1
1/2"	TR-PL109-8	1

Brass Fittings & American Made Test Clips

Push-Lock Standpipes

Push-Lock Standpipes are useful in routing your nylon tubing in tight spaces, such as behind the cab or under the seat. Often used on gauges and air suspension plumbing. They have a push-to-connect design making them easy to install. No tools are required.



Reducer Adapter



Run Tee



90° Elbow

Reducer Adapter

Tube A	Tube B		Pkg. Qty.
1/4"	3/8"	TR-Q537-4C	1
3/8"	1/4"	TR-Q537-6B	1

Run Tee

Tube A	Tube B	Tube C		Pkg. Qty.
1/4"	1/4"	1/4"	TR-Q571-44B	1
1/4"	1/4"	3/8"	TR-Q571-44C	1
3/8"	1/4"	3/8"	TR-Q571-64C	1
3/8"	3/8"	3/8"	TR-Q571-66C	1
1/2"	1/4"	1/2"	TR-Q571-84D	1

90° Elbow

Tube A	Tube B		Pkg. Qty.
1/4"	1/4"	TR-Q569-4B	1
1/4"	3/8"	TR-Q569-4C	1
3/8"	1/4"	TR-Q569-6B	1
3/8"	3/8"	TR-Q569-6C	1
3/8"	1/2"	TR-Q569-6D	1
1/2"	1/4"	TR-Q569-8B	1
1/2"	1/2"	TR-Q569-8D	1
5/8"	1/2"	TR-Q569-10D	1

American Made Test Clips

These American made test clips have heavy-gauge bodies, springs and rivets. Other test clips on the market have a shorter lifespan and require replacements more frequently. The clips are steel and have different plating options.

Their insulators are designed to fit the clips correctly, to prevent electrical shock and difficult clip operation.



Insulated Plier-Type Clips, Crimp or Solder Connection

Amps	Jaw Opening	Overall Length	Color	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
200	1 1/2"	6"	Black	Up to 1	Copper	BU-41A-0	1
200	1 1/2"	6"	Red	Up to 1	Copper	BU-41A-2	1

Additional Insulators: Black/Part #BU-43PR-0, Red/Part #BU-43PR-2, Yellow/Part #BU-43PR-4, Blue/Part #BU-43PR-6 and White/Part #BU-43PR-9. Sold in pairs.



Insulated Miniature Plier-Type Clips, Crimp or Solder Connection

Amps	Jaw Opening	Overall Length	Color	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
50	1 1/8"	2 7/8"	Black	Up to 10	Copper	BU-46A-0	1
50	1 1/8"	2 7/8"	Red	Up to 10	Copper	BU-46A-2	1
75	1 1/8"	2 7/8"	Black	Up to 10	Copper	BU-46C-0	1
75	1 1/8"	2 7/8"	Red	Up to 10	Copper	BU-46C-2	1



Miniature Alligator Clips, Crimp or Solder Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
5	3/16"	1 3/32"	20-24	Nickel	BU-30	1
5	3/16"	1 3/32"	20-24	Solid Copper	BU-30C	1

Insulators: Purchase separately. Black/Part #BU-32-0, Red/Part #BU-32-2, Yellow/Part #BU-32-4, Green/Part #BU-32-5, Blue/Part #BU-32-6 and White/Part #BU-32-9.



Miniature Alligator Clip, Crimp or Solder Barrel Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
5	3/16"	1 1/4"	18-24	Nickel	BU-30BL	1

Insulators: Purchase separately. Black/Part #BU-31-0, Red/Part #BU-31-2, Yellow/Part #BU-31-4, Green/Part #BU-31-5, Blue/Part #BU-31-6 and White/Part #BU-31-9.



Micro Alligator Clips, Crimp or Solder Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
5	7/32"	1 3/32"	20-24	Nickel	BU-34	1
5	7/32"	1 3/32"	20-24	Copper	BU-34C	1

Insulators: Purchase separately. Black/Part #BU-36-0, Red/Part #BU-36-2, Yellow/Part #BU-36-4, Green/Part #BU-36-5, Blue/Part #BU-36-6 and White/Part #BU-36-9.

American Made Test Clips (Cont.)

Probe Tip Alligator, Phone Tip or Probe Jack Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
10	5/16"	1 31/32"	-------	Nickel	BU-60PR2	1



Probe Tip Alligators, Crimp or Solder Barrel Connection, Compatible with 4mm Banana Plugs

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
10	5/16"	1 31/32"	14-20	Nickel	BU-60	1
10	5/16"	1 31/32"	14-20	Solid Copper	BU-60C	1
10	5/16"	1 31/32"	14-20	Stainless Steel	BU-60X	1



Alligator with Screw, Crimp or Screw Connection, Compatible with 4mm Banana Plugs

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
10	5/16"	1 31/32"	14-20	Nickel	BU-60S	6
10	5/16"	1 31/32"	14-20	Solid Copper	BU-60CS	1



Alligator with Threaded Barrel, 8-32 Threaded Barrel for Test Probe Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
10	5/16"	2 1/8"	-------	Nickel	BU-60TBO	1



Insulators: For BU-60PR2, BU-60, BU-60C, BU-60X, BU-60S and BU-60TBO purchase Yellow/Part #BU-62-4, Green/Part #BU-62-5, Blue/Part #BU-62-6 and White/Part #BU-62-9.

For BU-60, BU-60C, BU-60S, BU-60X and BU-60CS purchase Black/Part #BU-72-0, Red/Part #BU-72-2, Yellow/Part #BU-72-4, Green/Part #BU-72-5, Blue/Part #BU-72-6 and White/Part #BU-72-9.



Large Insulated Safety Alligator Clips, 4mm Banana Plug Connection

Amps	Jaw Opening	Overall Length	Color	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
30	3/4"	3 1/4"	Black	-------	Nickel	BU-65-0	1
30	3/4"	3 1/4"	Red	-------	Nickel	BU-65-2	1
30	3/4"	3 1/4"	Yellow	-------	Nickel	BU-65-4	1
30	3/4"	3 1/4"	Green	-------	Nickel	BU-65-5	1
30	3/4"	3 1/4"	Blue	-------	Nickel	BU-65-6	1
30	3/4"	3 1/4"	White	-------	Nickel	BU-65-9	1



General Purpose Clip, Crimp or Screw Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
40	5/8"	2 7/16"	Up to 12	Solid Copper	BU-27C	1



Geophone Clip, Crimp or Screw Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
40	5/8"	2 13/32"	Up to 12	Solid Copper	BU-27CGW	1



Insulators: Purchase separately. (A) Yellow/Part #BU-29-4, Green/Part #BU-29-5, Blue/Part #BU-29-6 and White/Part #BU-29-9.

(B) for use with larger wires and cables. Black/Part #BU-90-0, Red/Part #BU-90-2, Yellow/Part #BU-90-4, Green/Part #BU-90-5, Blue/Part #BU-90-6 and White/Part #BU-90-9.



(A)

(B)

Automotive Analyzer Clips, Crimp or Screw Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
10	1/2"	2"	14-20	Zinc	BU-48B	1
20	1/2"	2"	14-20	Solid Copper	BU-48C	1



Insulators: Purchase separately. Black/Part #BU-49-0, Red/Part #BU-49-2, Yellow/Part #BU-49-4, Green/Part #BU-49-5, Blue/Part #BU-49-6 and White/Part #BU-49-9.

Pee-Wee Clips, Crimp or Screw Connection

Amps	Jaw Opening	Overall Length	Wire Size AWG	Plating Material	Part Number	Pkg. Qty.
5	5/16"	1 17/32"	16-22	Zinc	BU-45	1
10	5/16"	1 17/32"	16-22	Solid Copper	BU-45C	1



Insulators: Purchase separately. Black/Part #BU-47-0, Red/Part #BU-47-2, Yellow/Part #BU-47-4, Green/Part #BU-47-5, Blue/Part #BU-47-6 and White/Part #BU-47-9.

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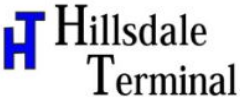

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Cole Hersee
A Littelfuse Brand


KLEIN
EST. 1857
TOOLS


DEUTSCH
CONNECTORS


Truck-Lite


PANDUIT


RENNSTEIG


ILSCO


AVERY
DENNISON


Pollak


ACT
ADVANCED CABLE TIES, INC.


BREEZE


SARGENT
QUALITY
TOOLS


ECCO


TECTRAN
Solutions for Transportation Equipment


DURHAM MFG
Est. 1922


PENNUNION


NORTH AMERICAN
SIGNAL COMPANY


WirthCo Engineering, Inc.


EASTPENN
Manufacturer of
Deka
Batteries & Accessories

Proud Distributor of These Great Vendors

TERMINALS

3M
Amphenol
Au-Ve-Co
Burndy
Delphi
Deutsch
East Penn Manufacturing
Grote Accessories Canada
Hillsdale Terminals & Tools
Ideal Industries
Ilsco
Metri-Pack
Molex
Nichifu
Panduit
Penn Union Corporation
Packard
Quick Cable
Superior Signals
Weather Pack
Wirthco

CABLE TIES

Advanced Cable Ties
All-States
American Elite Molding
Avery Dennison
Burndy
Grote Accessories Canada
Hellermann Tyton
Panduit
Thomas & Betts
Tyco Electronics

TAPE

3M
Electro-tape Specialties
Hellermann Tyton
Loctite
Panduit

ELECTRICAL PROTECTION

3M
Burndy
Bussmann
Buyers Products Company
Cole Hersee
Ericson Manufacturing
Iboco Corporation
Littlefuse
Marinco
Panduit
Pollak
Wirthco

RELAYS / SWITCHES / SOLENOIDS

Cole Hersee
Bussmann
Littlefuse
Pollak

TOOLS

3M
Blazer Products
Burndy
Deutsch
Eclipse Enterprises
Fulton Industries
GM Tools
Hellermann
Ideal Industries
Ilsco
Klein Tool
Knipex
Metri-Pack Tools
Oetiker
Panduit
Rennsteig Tools
S&G Tool Aid
Sargent
Solder-It
Weather Pack Tools
Wezag Tools

WIRE

East Penn Manufacturing
Betts Industries
Tectran Manufacturing
Welding Cable

CLIPS / CLAMPS

Breeze / Norma
Burndy
Drossbach
Hellermann Tyton
Ideal Tridon
M M Newman
Mueller Electric Company
Panduit
Tectran Manufacturing

AUTOMOTIVE BULBS

Automotive Bulbs 12/24v
CEC Industries
Hella Incorporated
Sylvania
Wagner

SHRINK TUBING

3M
Burndy
Canusa
Hellermann Tyton
Ideal Industries
Ilsco

ABRASIVES / ADHESIVES

3M
Alfa Tools
Consolidated/Toledo Drill
Loctite
Shark Industries

TRUCK LIGHTING

Alt Enterprises
Arrow Safety
Betts Industries
Buyers Products Company
Federal Signal/Target Tech
Federal-Mogul Corporation
Grote
North American Signal
Optronics International
Peterson Mfg. Company
Preco
Star Headlight & Lantern
Superior Signals
Tecniq Incorporated
Truck-Lite Company
UB Lights/Martec
Unity Manufacturing
Vehicle Safety Manufacturing

TRAILER CONNECTORS

Buyers Products Company
Cole Hersee
Grote
Grote Accessories Canada
Haldex Brake Products
Pollak
Tectran Manufacturing
Truck-Lite Company

MISC.

Duracell Batteries
Durham Manufacturing
FTZ Industries
Flambeau Inc. / boxes
Hellermann Tyton / labels
Panduit / safety signage
Tectran Manufacturing / brass
WirthCo

Customer Service is at Our Core

Over $2 million in inventory.
Orders received by 4:30PM EST ship same business day.
90% of orders ship with 1-3 day delivery from coast to coast
No order minimums. / Smallest package quantities in the industry.
Open accounts available upon request.
No machines here - knowledgeable humans answer the phones.

Our digital catalog: http://www.electerm.com/catalog/ets.pdf

Products We Offer

TERMINALS
- 26awg-750mcm
- Butt Splices, Rings and Forks
- Flags and Quick Connects
- High Temp Terminals
- Shrink Terminals
- Solder Shrink Terminals
- Wire Nuts
- Quick Splices
- Ferrules
- Compression Lugs
- Terminal Adapters
- Split bolts
- Bullets
- Knife Connectors
- Copper Post Connectors
- Flag Terminals 22awg-4/0
- Aluminum Mechanical Lugs
- Packard 56 Series
- Packard Weather Pack
- Packard Metri-Pack
- Deutsch Terminals
- Terminal Kits
- Boxes & Racks

TOOLS
- Crimpers 26awg - 250mcm
- Crimping
- Stripping & Cutting
- Packard Tools
- Deutsch Tools
- Ferrule Tools
- Picks & Removal Tools
- Torches & Heat Guns
- Testing Tools
- Fuse Pullers

SHRINK TUBING
- 7 Colors Available
- Standard 2:1
- Adhesive Lined 3:1
- Adhesive Lined 4:1
- Heavy Duty Adhesive
- Color Coded Adhesive
- Economy Shrink / PVC
- Shrink Tube Kits
- Shrink Tape

TAPE
- Electrical Tape
- Duct Tape
- 3M Specialty Tapes
- Safety Tapes
- Bonding Tape
- Shrink Tape
- VHB, Very High Bonding

ELECTRICAL PROTECTION
- Glass Fuses
- Automotive Fuses
- Industrial Fuses
- Add-A-Fuse
- Fuse Kits
- Circuit Breakers
- Fuse Holders
- Fuse Panels
- Fuse Blocks
- Terminal Blocks
- Relays
- Switches
- Solenoids
- Neutral Bars
- Power Distribution Blocks
- Power Feeds
- Pilot Lights

CLIPS / CLAMPS
- Hose Clamps
- Vinyl Coated Clamps
- Nylon Clamps
- Constant Torque Clamps
- Cushion Clamps
- Ratchet P Clamps
- Cable Management
- Spiral Wrap
- Split Loom
- Mesh Sleeving
- Hose Protectors
- Hose Organization
- Hose Spacers
- Wire Duct
- Rubber Straps

FASTENERS
- Hex Head Cap Screws
- Hex Nuts
- Flat Washers
- Split-Lock Washers
- Metric Screws/Nuts/Washers
- Stainless Nuts & Washers
- Machine Screws
- Rivets
- Abrasives
- Loctite:
  - Threadlockers
  - Sticks
  - Epoxy
  - Super Glues
  - Gasketing
  - Lubricants
  - Navel Jelly

WIRE
- GPT
- GXL
- Boat Cable
- Bonded
- Duplex
- Trailer Cable
- Welding Cable
- Bonded Welding
- MTW/THHN Wire
- High Temp Wire/392°F-868°F
- Mechanics Wire
- SJO, SO, STO
- Lamp Cord
- Cord Ends
- Jumper Cable Ends
- Grommet Kit
- Extensions Cords

CABLE TIES
- Standard Ties
- T&B Ties
- Hellermann Tyton Ties
- Panduit Ties
- Specialty Ties
- Edge Clip Ties
- Cable Tie Tools
- Cable Tie Mounts
- Adhesive Mounts
- Saddles

BATTERY MAINTENTANCE
- Copper & 90° Copper Lugs
- Battery Terminals
- Terminal Covers
- Battery Adapters
- Battery Cleaners
- Battery Isolators
- Through Wall Powerbolts
- Anderson Connectors
- Solder Slugs
- Shrink Tube with Adhesive
- Ground Straps
- Jumpers Studs
- Welding Cable
- Crimpers and Cutters

PIPE, TUBE AND HOSE FITTINGS
- Air Brake Fittings
- Nylon/Copper/Composite
- Air Brake Tubing
- Air Brake Hose
- Air Coils
- Airline Hose Assemblies
- Hose Fittings

TRUCK LIGHTING
- Stop, Tail, Turn Lights
- Marker & License Plate
- Light Bar Strobes
- ID Bars
- Strobe Light Beacons
  (Available strobe colors: red, white, blue, green & amber)
- LED String Lights
- Grill Lights
- Snow Plow Lights
- Work Lights
- Back-Up Alarms
- Drop Lights
- Pigtails
- Mirrors

AUTOMOTIVE BULBS
- 6 volt / 12 volt / 24 volt
- Incandescent Bulbs
- Rough Service Bulbs
- Bulb Pigtails
- Halogen Capsules
- Sealed Beams
- LED Headlights
- Flashers / Relays
- Pilots Lights
- Cigarette Plug Adapters

TRAILER CONNECTORS
- Trailer Plugs & Receptacles
- Connector Adapters
- Junction Boxes
- Air & Power Cords
- Air Brake Hoses
- Tarping Plugs
- Glad Hands & Grips
- Pogo Sticks
- Tender Kits
- Plug Checker
- Plug Cleaner

MISC.
- Alligators Clips
- Din Rail
- Drill Bits
- Ear Plugs & Earmuffs
- Flashlights
- Grommets
- Labels
- Mud Flaps
- Razor Blades
- Safety Signage
- Solder
- Work Gloves

Common Conductor Size Chart (Stranded Wire)

Size	Conductor Size	
	Inches (mm) width	Circular Mil Area (mm²) width
22 AWG	0.029 (0.74)	640 (0.324)
20 AWG	0.038 (0.97)	1020 (0.519)
18 AWG	0.048 (1.22)	1620 (0.823)
16 AWG	0.060 (1.52)	2580 (1.310)
14 AWG	0.073 (1.85)	4110 (2.080)
12 AWG	0.092 (2.34)	6530 (3.310)
10 AWG	0.116 (2.95)	10,380 (5.261)
8 AWG	0.146 (3.71)	16,510 (8.367)
6 AWG	0.184 (4.67)	26,240 (13.30)
4 AWG	0.232 (5.89)	41,740 (21.15)
2 AWG	0.292 (7.42)	66,360 (33.62)
1 AWG	0.332 (8.43)	83,690 (42.41)
1/0 AWG	0.373 (9.47)	105,600 (53.49)
2/0 AWG	0.418 (10.62)	133,100 (67.43)
3/0 AWG	0.470 (11.94)	167,800 (85.01)
4/0 AWG	0.528 (13.41)	211,600 (107.2)
250 MCM	0.575 (14.61)	250,000 (127)
300 MCM	0.630 (16.00)	300,000 (152)
350 MCM	0.681 (17.29)	350,000 (177)
400 MCM	0.728 (18.49)	400,000 (203)
500 MCM	0.813 (20.65)	500,000 (253)
600 MCM	0.893 (22.68)	600,000 (304)
750 MCM	0.998 (25.35)	750,000 (380)
800 MCM	1.031 (26.19)	800,000 (405)
1000 MCM	1.152 (29.26)	1,000,000 (507)

Common Stud Sizes

Standard Stud Size US (metric)	Stud Diameter Inches (mm)	Terminal Hole Diameter Inches (mm)
#2 (M2)	0.086 (2.18)	0.090 (2.29)
#4 (M2.5)	0.112 (2.84)	0.118 (3.00)
#5 (M3)	0.125 (3.18)	0.127 (3.23)
#6 (M3.5)	0.138 (3.51)	0.146 (3.71)
#8 (M4)	0.164 (4.17)	0.173 (4.39)
#10 (M5)	0.190 (4.83)	0.198 (5.03)
1/4" (M6)	0.250 (6.35)	0.270 (6.86)
5/18" (M8)	0.312 (7.92)	0.330 (8.38)
3/8" (M10)	0.375 (9.53)	0.385 (9.78)
1/2" (M12)	0.500 (12.7)	0.520 (13.21)
5/8" (M16)	0.625 (15.88)	0.650 (16.51)
3/4" (M18)	0.750 (19.05)	0.810 (20.57)

Primary Wire Ampacity / 12 Volt Circuits

	Distance				
Amps	10'	20'	30'	50'	100'
2	18 Ga.	18 Ga.	18 Ga.	18 Ga.	16 Ga.
6	18 Ga.	18 Ga.	16 Ga.	14 Ga.	12 Ga.
12	18 Ga.	16 Ga.	14 Ga.	12 Ga.	8 Ga.
20	16 Ga.	12 Ga.	12 Ga.	10 Ga.	6 Ga.
36	14 Ga.	10 Ga.	8 Ga.	8 Ga.	4 Ga.
40	12 Ga.	10 Ga.	8 Ga.	6 Ga.	2 Ga.
50	12 Ga.	10 Ga.	8 Ga.	6 Ga.	2 Ga.
100	10 Ga.	6 Ga.	4 Ga.	2 Ga.	1/0 Ga.
150	8 Ga.	4 Ga.	2 Ga.	1 Ga.	2/0 Ga.
200	6 Ga.	4 Ga.	2 Ga.	1/0 Ga.	4/0 Ga.

Welding Cable Ampacity

	Distance				
Amps	50'	75'	100'	125'	150'
100	4	4	2	2	1
150	3	2	1	1/0	2/0
200	2	1	1/0	2/0	3/0
250	1	1/0	2/0	3/0	4/0
300	1	2/0	3/0	4/0	
350	1/0	3/0	4/0		
400	2/0	3/0	4/0		
450	2/0	4/0			
500	3/0	4/0			
550	4/0				
600	4/0				



Electrical Terminal Service

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