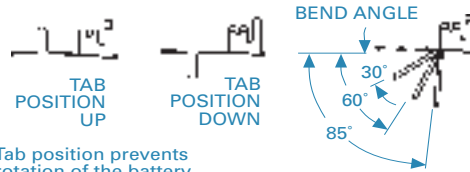




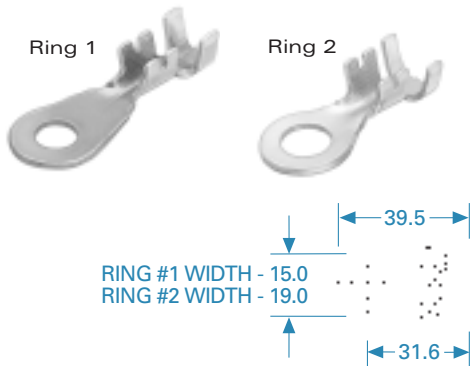
HEAVY DUTY TERMINALS

Delphi Connection Systems offers a complete line of top and side mounted battery terminals for all applications. Anti-rotation tabs are included for ease of installation and assembly. Stamped and serrated crimp wings offer unparalleled crimp reliability and durability.



Tab position prevents rotation of the battery terminal during installation.

Delphi Packard Electric offers **battery cable assemblies** for applications requiring an angled terminal. Contact your regional support representative at the number listed below.

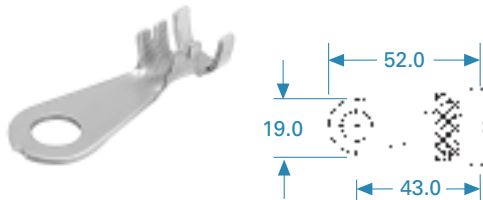


SHORT NECK RING TERMINALS

| Ring # | Stud Size | Hole Dia. | Cable Range (mm ²) | Part # | Width | Material | Plating | Stock Thickness (mm) |
|--------|-----------|-----------|--------------------------------|----------|-------|----------|---------|----------------------|
| 1 | M6 | 6.70 | 32.0 | 12146425 | 15.0 | Copper | Tin | 1.52 |
| 1 | M6 | 6.70 | 19.0-13.0 | 12146366 | 15.0 | Copper | Tin | 1.52 |
| 1 | M6 | 6.70 | 8.0 | 12146364 | 15.0 | Copper | Tin | 1.30 |
| 1 | M8 | 8.50 | 32.0 | 12191220 | 19.0 | Copper | Tin | 1.52 |
| 1 | M8 | 8.50 | 32.0 | 12146429 | 15.0 | Copper | Tin | 1.52 |
| 1 | M8 | 8.50 | 19.0-13.0 | 12146365 | 15.0 | Copper | Tin | 1.52 |
| 1 | M8 | 8.50 | 8.0 | 12146363 | 15.0 | Copper | Tin | 1.30 |
| 2 | M10 | 10.34 | 32.0 | 12146744 | 19.0 | Copper | Tin | 1.52 |
| 2 | M10 | 10.34 | 19.0-13.0 | 12146745 | 19.0 | Copper | Tin | 1.52 |

STANDARD NECK RING TERMINALS

| Stud Size | Hole Dia. | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------------------------|----------|----------|---------|----------------------|
| M6 | 6.70 | 32.0 | 12124276 | Copper | Tin | 1.52 |
| M6 | 6.70 | 19.0-13.0 | 12146713 | Copper | Tin | 1.52 |
| M6 | 6.70 | 8.0 | 12124296 | Copper | Tin | 1.52 |
| M8 | 8.50 | 62.0-50.0 | 12103014 | Copper | Tin | 1.83 |
| M8 | 8.50 | 32.0 | 12146361 | Copper | Tin | 1.52 |
| M8 | 8.50 | 19.0-13.0 | 12129598 | Copper | Tin | 1.52 |
| M8 | 8.50 | 8.0 | 12124297 | Copper | Tin | 1.52 |
| M10 | 10.34 | 62.0-50.0 | 12103010 | Copper | Tin | 1.83 |
| M10 | 10.34 | 50.0 | 12160231 | Copper | Tin | 1.83 |
| M10 | 10.34 | 32.0 | 12146360 | Copper | Tin | 1.52 |
| M10 | 10.34 | 19.0-13.0 | 12146362 | Copper | Tin | 1.52 |
| M10 | 10.34 | 8.0 | 12124295 | Copper | Tin | 1.30 |



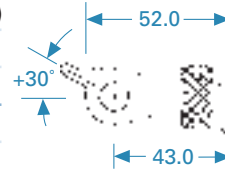
<http://delphi.com/products/connect>

HEAVY DUTY TERMINALS



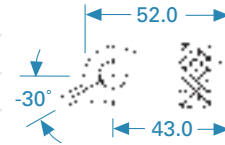
STANDARD NECK STARTER TERMINALS

| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | 30° Up | 32.0 | 12146506 | Copper | Tin | 1.52 |
| M10 | 10.34 | 30° Up | 32.0 | 12146401 | Copper | Tin | 1.52 |
| M8 | 8.50 | 30° Down | 32.0 | 15317798 | Copper | Tin | 1.52 |
| M8 | 8.50 | 30° Down | 19.0-13.0 | 12110246 | Copper | Tin | 1.52 |



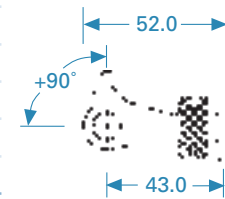
STANDARD NECK STARTER TERMINALS

| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | -30° Up | 50.0 | 12161119 | Copper | Tin | 1.83 |
| M8 | 8.50 | -30° Up | 32.0 | 12129433 | Copper | Tin | 1.52 |
| M8 | 8.50 | -30° Up | 19.0-13.0 | 12146579 | Copper | Tin | 1.52 |
| M10 | 10.34 | -30° Up | 50.0 | 12146471 | Copper | Tin | 1.83 |
| M10 | 10.34 | -30° Up | 32.0 | 12146487 | Copper | Tin | 1.52 |
| M8 | 8.50 | -30° Down | 32.0 | 12129651 | Copper | Tin | 1.52 |
| M8 | 8.50 | -30° Down | 19.0-13.0 | 12160443 | Copper | Tin | 1.52 |
| M10 | 10.34 | -30° Down | 32.0 | 12160281 | Copper | Tin | 1.52 |



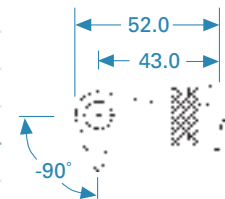
STANDARD NECK STARTER TERMINALS

| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | 90° Up | 50.0 | 15305504 | Copper | Tin | 1.83 |
| M8 | 8.50 | 90° Up | 32.0 | 12129437 | Copper | Tin | 1.52 |
| M8 | 8.50 | 90° Up | 19.0-13.0 | 12129435 | Copper | Tin | 1.52 |
| M10 | 10.34 | 90° Up | 50.0 | 12160229 | Copper | Tin | 1.83 |
| M10 | 10.34 | 90° Up | 32.0 | 15304850 | Copper | Tin | 1.52 |
| M8 | 8.50 | 90° Down | 32.0 | 12161133 | Copper | Tin | 1.52 |
| M8 | 8.50 | 90° Down | 19.0-13.0 | 12161170 | Copper | Tin | 1.52 |



STANDARD NECK STARTER TERMINALS

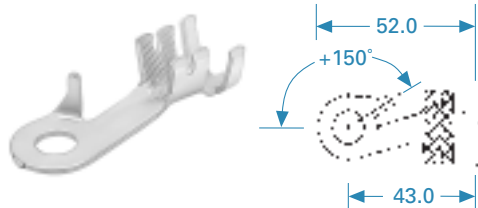
| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | -90° Up | 32.0 | 12176593 | Copper | Tin | 1.52 |
| M8 | 8.50 | -90° Up | 19.0-13.0 | 12160242 | Copper | Tin | 1.52 |
| M10 | 10.34 | -90° Up | 50.0 | 12129222 | Copper | Tin | 1.83 |
| M10 | 10.34 | -90° Up | 32.0 | 12129628 | Copper | Tin | 1.52 |
| M8 | 8.50 | -90° Down | 50.0 | 12160233 | Copper | Tin | 1.83 |
| M8 | 8.50 | -90° Down | 32.0 | 12160232 | Copper | Tin | 1.52 |
| M8 | 8.50 | -90° Down | 19.0-13.0 | 12146999 | Copper | Tin | 1.52 |
| M10 | 10.34 | -90° Down | 19.0-13.0 | 12146736 | Copper | Tin | 1.52 |



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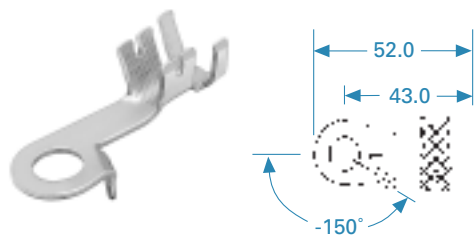


HEAVY DUTY TERMINALS



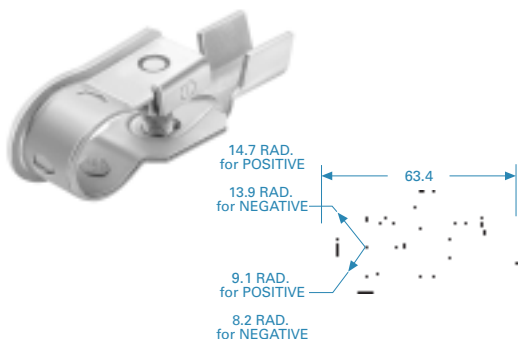
STANDARD NECK STARTER TERMINALS

| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | 150° Up | 50.0 | 15305508 | Copper | Tin | 1.83 |
| M8 | 8.50 | 150° Up | 32.0 | 12191773 | Copper | Tin | 1.52 |
| M10 | 10.34 | 150° Up | 50.0 | 12191005 | Copper | Tin | 1.83 |
| M8 | 8.50 | 150° Down | 19.0-13.0 | 12146718 | Copper | Tin | 1.52 |
| M10 | 10.34 | 150° Down | 32.0 | 12191461 | Copper | Tin | 1.52 |



STANDARD NECK STARTER TERMINALS

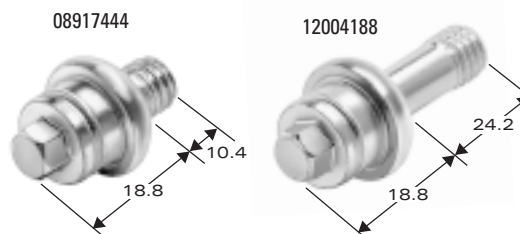
| Stud Size | Hole Dia. | Tab Position | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------|--------------------------------|----------|----------|---------|----------------------|
| M8 | 8.50 | -150° Up | 50.0 | 12191787 | Copper | Tin | 1.83 |
| M10 | 10.34 | -150° Down | 32.0 | 15318209 | Copper | Tin | 1.52 |



TOP POST BATTERY TERMINALS

| Application | Cable Range (mm ²) | Part # | Material | Plating | Stock Thickness (mm) |
|-------------|--------------------------------|----------|----------|---------|----------------------|
| Negative | 50.0 | 12177299 | Copper | Tin | 1.52 |
| Positive | 50.0 | 12177296 | Copper | Tin | 1.52 |
| Negative | 32.0 | 12177297 | Copper | Tin | 1.52 |
| Positive | 32.0 | 12177298 | Copper | Tin | 1.52 |
| Positive | 19.0 | 15305118 | Copper | Tin | 1.52 |
| Negative | 19.0 | 15305119 | Copper | Tin | 1.52 |

Fastener Bolt (12177293) and nut (12177294) are available from the manufacturer.



BATTERY BOLTS & SPACER

| Part # | Material | Plating | Spacer |
|----------|----------|--------------------|----------|
| 08917444 | Steel | Zinc Gold Chromate | - |
| 12004188 | Steel | Zinc Gold Chromate | 12004189 |

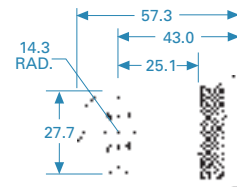
Coated with "Pavco" sealer to provide corrosion protection.



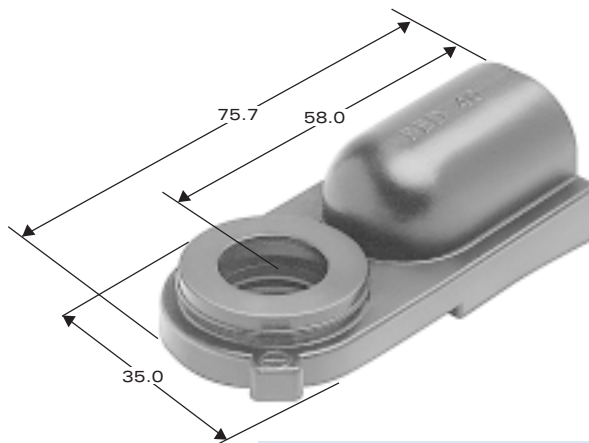
SIDE POST BATTERY TERMINALS & COVERS

SIDE POST BATTERY TERMINALS

| Stud Size | Hole Dia. | Cable Range (mm ²) | Part # | Barbs* | Material | Plating | Stock Thickness (mm) |
|-----------|-----------|--------------------------------|----------|--------|----------|---------|----------------------|
| M10 | 9.90 | 62.0 | 12129221 | Yes | Copper | Tin | 1.83 |
| M10 | 9.90 | 50.0 | 12129465 | Yes | Copper | Tin | 1.83 |
| M10 | 9.90 | 32.0 | 12146466 | Yes | Copper | Tin | 1.52 |
| M10 | 9.90 | 19.0 | 12146467 | Yes | Copper | Tin | 1.52 |
| M10 | 9.90 | 13.0 | 12146464 | Yes | Copper | Tin | 1.52 |



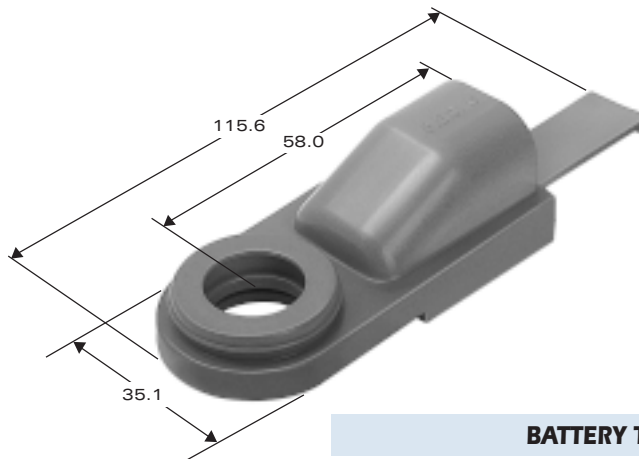
*Barbs (indentations in center hole) in terminals are used to prevent rotation after assembly. Bolts ordered separately.



BATTERY TERMINAL COVERS

| Part # | Color | Overall Length | Height | Width | Application | Material |
|----------|-------|----------------|--------|-------|-------------|----------|
| 12160209 | Black | 75.7 | 25.5 | 35.0 | Single | Vinyl |
| 12160210 | Red | 75.7 | 25.5 | 35.0 | Single | Vinyl |

Used with battery bolt 08917444 or equivalent



SECTION NOTES:

Contact your regional support representative at the number listed below.

- Covers protect the interface between the cable and the battery.

BATTERY TERMINAL COVER ASSEMBLY*

| Part # | Color | Overall Length | Height | Width | Application | Material |
|----------|-------|----------------|--------|-------|---------------|----------|
| 15304878 | Black | 115.6 | 27.5 | 35.1 | (2) Stackable | Vinyl |
| 15304876 | Red | 115.6 | 27.5 | 35.1 | (2) Stackable | Vinyl |

Used with battery bolt 12004188 or equivalent.

* Includes 12004189 Spacer.

<http://delphi.com/products/connect>