



Radiation Resistant/150°C Pre-Insulated Terminals and Splices

The line of Tyco Electronics radiation resistant/150°C pre-insulated terminals and splices includes terminals and splices of the well-known PIDG and PLASTI-GRIP terminal designs. Radiation resistant terminals are made of fine grade, high conductivity copper with either bright tin-lead or matte tin-plating and feature polyvinylidene fluoride (PVF₂) insulation for high resistance to radiation and solvents. PIDG terminals meet the performance requirements of SAE-AS7928. They are also tested by Tyco Electronics and an independent test facility and have fulfilled all requirements including radiation testing to 200 megarads and operating temperature range from -40°C to +150°C.

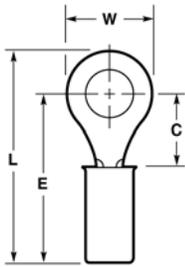
One outstanding quality of the standard Tyco Electronics terminals, such as tapered entry ramps, help eliminate bent wire strands and insulation support for stronger, more reliable connections. Serrated or dimpled wire barrels provide maximum contact and tensile strength after crimping, and color coded insulation with wire size stamped on the terminal tongue identifies the product and assists in proper terminal-wire match.

The radiation resistant/150°C terminals are designed and engineered to successfully withstand extreme vibration, shock and structural stresses, and other conditions which can adversely affect the critical circuit requirements in complex equipment. The matching Tyco Electronics tooling precisely crimps all terminations. This uniformity increases reliability and also serves as a built-in quality control factor.

Ring Tongue Terminals

Material and Finish:

- Terminal body : copper per ASTM-B152 with bright tin/lead (93/7) {3% MIN lead content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with bright tin/lead (93/7) {3% MIN lead content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe



Related Product Data

- Application tooling pages 8-11
- Technical documents page 8

PIDG Terminals - Whisker Mitigating

(Contains 3% Minimum Lead Content in Plating)

| Wire Range | | Tongue Thickness Maximum | Wire Ins. Diameter Maximum | Stripe Color Code | Stud Size | Dimensions | | | | Part Numbers | |
|------------|-------------------------|--------------------------|----------------------------|-------------------|-----------|---------------|---------------|---------------|----------------|--------------|---------|
| AWG | CMA [mm ²] | | | | | W | C' MIN. | E MAX. | L MAX. | Tin Plate | |
| | | | | | | | | | | Loose | Tape |
| 26-24 | 202-509 [10-.26] | .029 .74 | .082 2.09 | Yellow | 2 M2 | .203 5.16 | .211 5.35 | .632 16.06 | .736 18.70 | 53400-1 | - |
| | | | | | 4 | .203 5.16 | .211 5.35 | .632 16.06 | .736 18.70 | 53401-1 | - |
| | | | | | 6 M3.5 | .250 6.35 | .243 6.17 | .664 16.87 | .792 20.12 | 53402-1 | - |
| | | | | | 8 M4 | .281 7.13 | .250 6.35 | .671 17.05 | .814 20.68 | 53403-1 | - |
| | | | | | 10 | .312 7.92 | .281 7.13 | .702 17.84 | .861 21.87 | 53404-1 | - |
| 24-20 | 320-1,290 [16-.65] | .025 .64 | .100 2.54 | White | 6 M3.5 | .281 7.13 | .250 6.35 | .631 16.03 | .774 19.66 | 53809-2 | - |
| | | | | | 4 | .218 5.54 | .156 3.96 | .560 14.23 | .672 17.02 | 53405-1 | - |
| 22-16 | 509-3,250 [26-1.65] | .033 .84 | .125 3.18 | Red | 6 M3.5 | .218 5.54 | .156 3.96 | .560 14.23 | .672 17.07 | 53406-1 | - |
| | | | | | 6 M3.5 | .250 6.35 | .250 6.35 | .654 16.62 | .782 19.87 | 53407-1 | 53407-2 |
| | | | | | 8 M4 | .312 7.91 | .281 7.13 | .685 17.4 | .844 21.44 | 53408-1 | 53408-2 |
| | | | | | 10 | .312 7.92 | .281 7.13 | .685 17.4 | .844 21.44 | 53409-1 | - |
| | | | | | 1/4 M6 | .469 11.91 | .437 11.09 | .841 21.37 | 1.078 27.39 | 53410-1 | 53410-2 |
| | | | | | 5/16 M8 | .469 11.91 | .437 11.09 | .841 21.37 | 1.078 27.39 | 53411-1 | - |
| | | | | | 3/8 | .531 13.49 | .546 13.86 | .950 24.13 | 1.218 30.94 | 53412-1 | - |
| 16-14 | 2,050-5,180 [1.04-2.62] | .033 .84 | .150 3.81 | Blue | 1/2 M12 | .713 18.11 | .530 13.46 | .934 24.13 | 1.293 32.85 | 53413-1 | - |
| | | | | | 4 | .250 6.35 | .171 4.34 | .575 14.61 | .703 17.86 | 53414-1 | - |
| | | | | | 6 M3.5 | .250 6.35 | .171 4.34 | .575 14.61 | .703 17.86 | 53415-1 | - |
| | | | | | 6 M3.5 | .312 7.92 | .281 7.13 | .685 17.4 | .844 21.44 | 53416-1 | 53416-2 |
| | | | | | 8 M4 | .312 7.92 | .281 7.13 | .685 17.4 | .844 21.44 | 53417-1 | 53417-2 |
| | | | | | 10 | .312 7.92 | .281 7.13 | .685 17.4 | .844 21.44 | 53418-1 | 53418-2 |
| | | | | | 1/4 M6 | .469 11.91 | .437 11.09 | .841 21.37 | 1.078 27.39 | 53419-1 | - |
| | | | | | 5/16 M8 | .469 11.91 | .437 11.09 | .841 21.37 | 1.078 27.39 | 53420-1 | - |
| | | | | | 3/8 | .531 13.49 | .546 13.86 | .950 24.13 | 1.218 30.94 | 53421-1 | - |
| 1/2 M12 | .713 18.11 | .530 13.46 | .934 23.73 | 1.293 32.85 | 53422-1 | - | | | | | |

1-Dimension applies from edge of metal wire barrel to center of stud hole.

Ring Tongue Terminals
(continued)

PIDG Terminals - Whisker Mitigating
(Contains 3% Minimum Lead Content in Plating)

| Wire Range | | Tongue Thickness Maximum | Wire Ins. Diameter Maximum | Stripe Color Code | Stud Size | Dimensions | | | | Part Numbers | |
|------------------|--------------------------|--------------------------|----------------------------|-------------------|-----------|---------------|---------------|----------------|----------------|--------------|------|
| AWG | CMA [mm ²] | | | | | W | C' MIN. | E MAX. | L MAX. | Tin Plate | |
| | | | | | | | | | | Loose | Tape |
| 16-14 Heavy Duty | 2,050-5,180 [1.04-2.62] | .050 1.3 | .230 5.84 | Black | 4 | .281 7.14 | .219 5.56 | .810 20.57 | .955 24.26 | 53963-1 | - |
| | | | | | 6 M3.5 | .343 8.71 | .281 7.13 | .872 22.15 | 1.046 26.57 | 53964-1 | - |
| | | | | | 8 M4 | .343 8.71 | .281 7.13 | .872 22.15 | 1.046 26.57 | 53982-1 | - |
| | | | | | 10 | .343 8.71 | .281 7.13 | .872 22.15 | 1.046 26.57 | 53983-1 | - |
| | | | | | 1/4 M6 | .531 13.49 | .437 11.09 | 1.028 26.12 | 1.296 32.92 | 53984-1 | - |
| 12-10 | 5,180-13,100 [2.62-6.64] | .042 1.07 | .230 5.84 | Yellow | 6 M3.5 | .219 5.56 | .250 6.35 | .810 20.57 | .938 23.83 | 54593-1 | - |
| | | | | | 6 M3.5 | .375 9.53 | .302 7.67 | .893 22.69 | 1.083 27.51 | 53423-1 | - |
| | | | | | 8 M4 | .375 9.53 | .302 7.67 | .893 22.69 | 1.083 27.51 | 53424-1 | - |
| | | | | | 10 | .375 9.53 | .302 7.67 | .893 22.69 | 1.083 27.51 | 53425-1 | - |
| | | | | | 1/4 M6 | .531 13.48 | .468 11.88 | 1.054 26.78 | 1.322 33.58 | 53426-1 | - |
| | | | | | 5/16 M8 | .531 13.48 | .468 11.88 | 1.054 26.78 | 1.322 33.58 | 53427-1 | - |
| | | | | | 3/8 | .593 15.06 | .531 13.48 | 1.115 28.33 | 1.414 35.92 | 53428-1 | - |
| 1/2 M12 | .715 18.16 | .474 12.04 | 1.054 26.77 | 1.414 35.92 | 53429-1 | - | | | | | |

1-Dimension applies from edge of metal wire barrel to center of stud hole.

Butt Splices

PIDG Splices - Whisker Mitigating
(Contains 3% Minimum Lead Content in Plating)

Material and Finish:

- Splice body : copper per ASTM-B152 with bright tin/lead (93/7) {3% MIN lead content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with bright tin/lead (93/7) {3% MIN lead content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe



| Wire Range | | Barrel I.D. Minimum | Stripe Color Code | Wire Ins. Diameter Maximum | Dimension Length Maximum | Part Numbers | |
|------------|--------------------------|---------------------|-------------------|----------------------------|--------------------------|--------------|---------|
| AWG | CMA [mm ²] | | | | | Tin Plate | |
| | | | | | | Loose | Tape |
| 26-22 | 202-810 [1.10-.41] | .029 .73 | Yellow | .082 2.09 | .890 22.61 | 53546-1 | - |
| 24-20 | 320-1,290 [.16-.65] | .043 1.09 | White | .100 2.54 | 1.035 26.29 | 53547-1 | - |
| 22-16 | 509-3,250 [.26-1.65] | .061 1.54 | Red | .125 3.18 | 1.265 32.14 | 53548-1 | 53548-2 |
| 16-14 | 2,050-5,180 [1.04-2.62] | .085 2.15 | Blue | .150 3.81 | 1.265 32.14 | 53549-1 | - |
| 12-10 | 5,180-13,000 [2.62-6.64] | .129 3.27 | Yellow | .220 5.59 | .220 42.07 | 53550-1 | - |

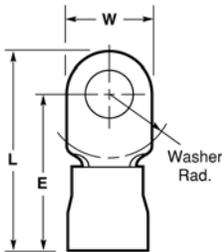
Related Product Data

- Application tooling pages 8-11
- Technical documents page 8

Ring Tongue Terminals

Material and Finish:

- Terminal body : copper per ASTM-B152 with bright tin/lead (93/7) {3% MIN lead content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe



Related Product Data

- Application tooling pages 8-11
- Technical documents page 8

PLASTI-GRIP Terminals - Whisker Mitigating

(Contains 3% Minimum Lead Content in Plating)

| Wire Range | | Tongue Thickness Maximun | Wire Ins. Diameter Maximum | Stripe Color Code | Stud Size | Max. Washer Rad. | Dimensions | | | Part Numbers |
|------------|------------------------------|--------------------------|----------------------------|-------------------|-----------|------------------|---------------|----------------|----------------|--------------|
| AWG | CMA [mm ²] | | | | | | W | E MAX. | L MAX. | Loose |
| 8 | 13,100-20,800 [6.64-10.5] | .043 1.1 | .380 9.66 | Red | 10 | .437 11.1 | .431 10.95 | 1.344 34.13 | 1.562 39.68 | 53978-1 |
| | | | | | 1/4 M6 | .437 11.1 | .478 12.14 | 1.344 34.14 | 1.586 40.29 | 53943-1 |
| | | | | | 5/16 M8 | .500 12.7 | .587 14.91 | 1.402 35.62 | 1.702 43.24 | 54947-1 |
| | | | | | 3/8 | .500 12.7 | .587 14.91 | 1.406 35.72 | 1.702 43.24 | 53944-1 |
| | | | | | 1/2 M12 | .500 12.70 | .875 22.23 | 1.406 35.72 | 1.846 46.89 | 53945-1 |
| 6 | 20,800-33,100 [10.5-16.8] | .048 1.22 | .436 11.08 | Blue | 10 | .421 10.7 | .468 11.89 | 1.482 37.65 | 1.719 43.67 | 53975-1 |
| | | | | | 1/4 M6 | .421 10.7 | .500 12.7 | 1.622 41.2 | 1.898 46.42 | 53946-1 |
| | | | | | 3/8 | .515 13.09 | .625 15.88 | 1.591 40.42 | 1.905 48.42 | 53947-1 |
| 4 | 33,100-52,600 [16.8-26.7] | .051 1.3 | .515 13.09 | Yellow | 10 | .531 13.49 | .546 13.87 | 1.672 42.47 | 1.948 49.48 | 53949-1 |
| | | | | | 1/4 M6 | .531 13.49 | .546 13.87 | 1.672 42.47 | 1.948 49.48 | 53980-1 |
| | | | | | 3/8 | .531 13.49 | .546 13.87 | 1.672 42.47 | 2.014 51.16 | 53950-1 |
| | | | | | 1/2 M12 | .531 13.49 | .679 17.25 | 1.672 42.47 | 2.014 51.16 | 53951-1 |
| 2 | 52,600-83,700 [26.7-42.4] | .060 1.53 | .560 14.23 | Red | 1/4 M6 | .578 14.69 | .675 17.15 | 1.731 43.97 | 2.071 52.60 | 53977-1 |
| | | | | | 3/8 | .578 14.69 | .711 18.06 | 1.731 43.97 | 2.089 53.07 | 53953-1 |
| | | | | | 1/2 M12 | .578 14.69 | .855 21.72 | 1.731 43.97 | 2.161 54.9 | 53954-1 |

Wire Pins

Material and Finish:

- Terminal body : copper per ASTM-B152 with bright tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with bright tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe

PIDG PVF₂ Wire Pins - RoHS Compliant

Bright Tin Plated

| Wire Range | | Tongue Thickness Maximum | Wire Ins. Diameter Maximum | Stripe Color Code | Dimensions | | | Part Numbers | |
|------------|------------------------|--------------------------|----------------------------|-------------------|--------------|--------------|----------------|--------------|------|
| AWG | CMA [mm ²] | | | | W | X MIN. | L MAX. | Tin Plate | |
| | | | | | | | | Loose | Tape |
| 22-16 | 493-3,158 [1.25-1.6] | .033 .84 | .013 3.30 | Red | .071 1.80 | .390 9.90 | .903 22.93 | 737049-1 | - |
| 16-14 | 1,973-5,131 [1.0-2.60] | .033 .84 | .154 3.90 | Blue | .071 1.80 | .390 9.90 | .903 22.93 | 737051-1 | - |
| 12-10 | 5,131-13,025 [2.6-6.6] | .042 1.07 | .236 6.00 | Yellow | .102 1.80 | .390 9.90 | 1.128 28.65 | 737053-1 | - |

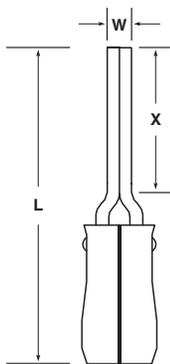
Wire Pins

Material and Finish:

- Terminal body : copper per ASTM-B152 with matte tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with matte tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe

Matte Tin Plated

| Wire Range | | Tongue Thickness Maximum | Wire Ins. Diameter Maximum | Stripe Color Code | Dimensions | | | Part Numbers | |
|------------|--------------------------|--------------------------|----------------------------|-------------------|--------------|--------------|----------------|--------------|------|
| AWG | CMA [mm ²] | | | | W | X MIN. | L MAX. | Tin Plate | |
| | | | | | | | | Loose | Tape |
| 22-16 | 509-3,250 [1.26-1.65] | .033 .84 | .014 3.56 | Red | .070 1.78 | .390 9.91 | .918 23.32 | 1958191-1 | - |
| 16-14 | 3,260-5,180 [1.04-2.62] | .033 .84 | .170 4.32 | Blue | .070 1.78 | .390 9.91 | .933 23.70 | 1958192-1 | - |
| 12-10 | 5,180-13,100 [2.62-6.64] | .041 1.04 | .250 6.35 | Yellow | .102 2.59 | .390 9.91 | 1.148 29.16 | 1958193-1 | - |

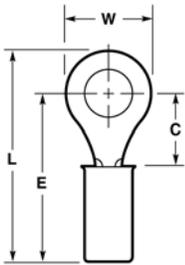


Ring Tongue Terminals

PIDG PVF₂ Rings - RoHS Compliant

Material and Finish:

- Terminal body: copper per ASTM-B152 with matte tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with matte tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe



Related Product Data

- Application tooling pages 8-11
- Technical documents page 8

| Wire Range | | Tongue Thickness Maximun | Wire Insulation OD MAX | Stripe Color Code | Stud Size | Dimensions | | | | Part Numbers | |
|------------|------------------------|--------------------------|------------------------|-------------------|-----------|-------------------------|---------------|---------------|----------------|--------------|--------------|
| AWG | CMA [mm ²] | | | | | W | C' MIN | E MAX | L MAX | Tin Plate | |
| | | | | | | | | | | Loose | Tape |
| 26-24 | 202-509 [10-.26] | .029 .74 | .082 2.09 | Yellow | 2 M2 | .203 5.16 | .211 5.36 | .632 16.05 | .741 18.82 | 696420-1 | - |
| | | | | | 4 | .203 5.16 | .211 5.36 | .632 16.05 | .741 18.82 | 696420-2 | - |
| | | | | | 6 M3.5 | .250 6.35 | .243 6.17 | .644 16.87 | .797 20.24 | 696420-3 | - |
| | | | | | 8 M4 | .281 7.14 | .250 6.35 | .671 17.04 | .819 20.80 | 696420-5 | - |
| | | | | | 10 | .312 7.92 | .281 7.14 | .702 17.83 | .866 22.00 | 696420-6 | - |
| 24-20 | 320-1,290 [16-.65] | .025 .64 | .100 2.54 | White | 4 | .281 7.14 | .250 6.35 | .631 16.03 | .779 19.79 | 696421-1 | 696421-3 |
| | | | | | 6 M3.5 | .281 7.14 | .250 6.35 | .631 16.03 | .779 19.79 | 696421-2 | 696421-4 |
| | | | | | 8 M4 | .312 7.92 | .281 7.14 | .662 16.81 | .826 20.98 | 696421-5 | 696421-7 |
| | | | | | 10 | .312 7.92 | .281 7.14 | .662 16.81 | .826 20.98 | 696421-6 | 696421-8 |
| 22-16 | 509-3,250 [26-1.65] | .033 .84 | .125 3.18 | Red | 4 | .218 5.54 | .156 .396 | .560 14.22 | .677 17.20 | 696422-2 | - |
| | | | | | 6 M3.5 | .218 5.54 | .156 3.96 | .560 14.22 | .677 17.20 | 696422-3 | - |
| | | | | | 6 M3.5 | .250 6.35 | .250 6.35 | .654 16.61 | .787 19.99 | 696422-4 | - |
| | | | | | 8 M4 | .312 7.92 | .281 7.14 | .685 17.40 | .849 21.56 | 696422-5 | - |
| | | | | | 10 | .312 7.92 | .281 7.14 | .685 17.40 | .849 21.56 | 696422-6 | - |
| | | | | | 1/4" M6 | .469 11.91 | .437 11.10 | .841 21.36 | 1.083 27.51 | 696422-7 | - |
| | | | | | 5/16" M8 | .469 11.91 | .437 11.10 | .841 21.36 | 1.083 27.51 | 696422-8 | - |
| | | | | | 3/8" | .531 13.49 | .546 13.87 | .950 24.13 | 1.223 27.51 | 696422-9 | - |
| | | | | | 1/2" M12 | .713 18.11 | .530 13.46 | .934 23.72 | 1.298 32.97 | 1-696422-0 | - |
| | | | | | 16-14 | 2,050-5,180 [1.04-2.62] | .033 .84 | .150 3.81 | Blue | 4 | .250 6.35 |
| 6 M3.5 | .250 6.35 | .171 4.34 | .575 14.61 | .708 17.98 | | | | | | 696423-3 | - |
| 6 M3.5 | .312 7.92 | .281 7.14 | .685 17.40 | .849 21.56 | | | | | | 696423-4 | - |
| 8 M4 | .312 7.92 | .281 7.14 | .685 17.40 | .849 21.56 | | | | | | 696423-5 | - |
| 10 | .312 7.92 | .281 7.14 | .685 17.40 | .849 21.56 | | | | | | 696423-6 | - |
| 1/4" M6 | .469 11.91 | .437 11.10 | .841 21.36 | 1.083 27.51 | | | | | | 696423-7 | - |
| 5/16" M8 | .469 11.91 | .437 11.10 | .841 21.36 | 1.083 27.51 | | | | | | 696423-8 | - |
| 3/8" | .531 13.49 | .546 13.87 | .950 24.13 | 1.223 31.06 | | | | | | 696423-9 | - |
| 1/2" M12 | .713 18.11 | .530 13.46 | .934 23.72 | 1.298 32.97 | | | | | | 1-696423-0 | - |

1-Dimension applies from edge of metal wire barrel to center of stud hole.

Ring Tongue Terminals
(continued)

PIDG PVF₂ Rings - RoHS Compliant

| Wire Range | | Tongue Thickness Maximun | Wire Insulation OD MAX | Stripe Color Code | Stud Size | Dimensions | | | | Part Numbers | |
|------------------|--------------------------|--------------------------|------------------------|-------------------|-----------|---------------|--------------------|----------------|----------------|--------------|------|
| AWG | CMA [mm ²] | | | | | W | C ¹ MIN | E MAX | L MAX | Tin Plate | |
| | | | | | | | | | | Loose | Tape |
| 16-14 Heavy Duty | 2,050-5,180 [1.04-2.62] | .050 1.27 | .230 5.84 | Yellow | 4 | .281 7.14 | .219 5.59 | .815 20.70 | .960 24.38 | 696430-2 | - |
| | | | | | 6 M3.5 | .343 8.71 | .281 7.14 | .877 22.28 | 1.051 26.70 | 696430-4 | - |
| | | | | | 8 M4 | .343 8.71 | .281 7.14 | .877 22.28 | 1.051 26.70 | 696430-5 | - |
| | | | | | 10 | .343 8.71 | .281 7.14 | .877 22.28 | 1.051 26.70 | 696430-6 | - |
| | | | | | 1/4" M6 | .531 13.49 | .437 11.10 | 1.033 26.24 | 1.301 33.05 | 696430-7 | - |
| | | | | | 5/16" M8 | .531 13.49 | .437 11.10 | 1.033 26.24 | 1.301 33.05 | 696430-8 | - |
| | | | | | 3/8" | .531 13.49 | .437 11.10 | 1.033 26.24 | 1.301 33.05 | 696430-9 | - |
| | | | | | 1/2" M12 | .750 19.05 | .625 15.88 | 1.221 31.01 | 1.599 40.61 | 1-696430-0 | - |
| 12-10 | 5,180-13,000 [2.62-6.64] | .041 1.04 | .230 5.84 | Yellow | 6 M3.5 | .375 9.53 | .302 7.67 | .893 22.68 | 1.088 27.64 | 696424-4 | - |
| | | | | | 8 M4 | .375 9.53 | .302 7.67 | .893 22.68 | 1.088 27.64 | 696424-5 | - |
| | | | | | 10 | .375 9.53 | .302 7.67 | .893 22.68 | 1.088 27.64 | 696424-6 | - |
| | | | | | 1/4" M6 | .531 13.49 | .468 11.89 | 1.054 26.77 | 1.327 33.71 | 696424-7 | - |
| | | | | | 5/16" M8 | .531 13.49 | .468 11.89 | 1.054 26.77 | 1.327 33.71 | 696424-8 | - |
| | | | | | 3/8" | .593 15.06 | .531 13.49 | 1.115 26.77 | 1.419 36.04 | 363424-9 | - |
| | | | | | 1/2" M12 | .715 18.16 | .474 12.04 | 1.054 26.77 | 1.419 36.04 | 1-696424-0 | - |

1-Dimension applies from edge of metal wire barrel to center of stud hole.

Butt Splices

Material and Finish:

- Splice body: copper per ASTM-B152 with matte tin {99.5% MIN Tin content} plating per ASTM-B545
- Insulation support sleeve : copper per ASTM-B152 with matte tin {99.5% MIN tin content} plating per ASTM-B545
- Insulation sleeve : PVF₂, natural with colored stripe



PIDG PVF₂ Splices - RoHS Compliant

| Wire Range | | Wire Insulation OD MAX | Stripe Color Code | L MAX | Part Numbers | |
|------------|--------------------------|------------------------|-------------------|----------------|--------------|------|
| AWG | CMA [mm ²] | | | | Tin Plate | |
| | | | | | Loose | Tape |
| 26-22 | 202-810 [10-.26] | .082 2.08 | Yellow | .082 22.61 | 696425-1 | - |
| 24-20 | 320-1,290 [16-.65] | .100 2.54 | White | 1.035 26.29 | 696426-1 | - |
| 22-16 | 509-3,250 [26-1.65] | .125 3.18 | Red | 1.265 32.13 | 696427-1 | - |
| 16-14 | 2,050-5,180 [1.04-2.62] | .150 3.81 | Blue | 1.265 32.13 | 696428-1 | - |
| 12-10 | 5,180-13,000 [2.62-6.64] | .220 5.59 | Yellow | 1.656 42.06 | 696429-1 | - |

Related Product Data

- Application tooling pages 8-11
- Technical documents page 8

PIDG PVF₂ Wire Pins

Material and Finish:

Loose form terminal and splice tooling for wire range 26-10 AWG [0.12-6.0 mm²]

Technical Documents

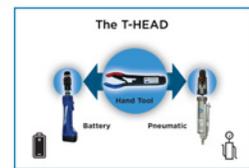
Instruction Sheets :

- 408-1559 CERTI-CRIMP hand crimp tools
- 408-1724 crimping dies for 8-2/0 AWG connectors

Application Tooling

| Wire Range | | Hand Tools | |
|---------------|-----------------|-------------|-------------|
| AWG | mm ² | Style | Part Number |
| 24-20 | .16-.65 | DAHT | 47907-1 |
| | | T-HEAD Tool | 59275 |
| | | T-HEAD Tool | 59300 |
| 26-22 | .1-4 | DAHT | 46121 |
| | | T-HEAD Tool | 59275 |
| 26-24 & 22-16 | .1-2 & .26-1.65 | DAHT | 47386 |
| | | T-HEAD Tool | 59250 |
| | | T-HEAD Tool | 59300 |
| 22-16 | .26-1.65 | DAHT | 69151-1 |
| 16-14 | 1.04-2.62 | DAHT | 47387 |
| | | T-HEAD Tool | 59250 |
| 16-14 HD | 1.04-2.62 | Heavy Head | 59239-4 |
| 12-10 | 2.62-6.64 | Heavy Head | 59239-4 |

CERTI-CRIMP Hand Tools



Battery Crimp Tool Kit

Take automatic crimping away from the bench to the product, with this convenient, portable, battery operated tool. It's at home in the factory or in the field. It performs approximately 100 crimps per charge. Request catalog 1773381 for more information.

626 Pneumatic Tool System

This versatile system provides the ultimate in wire range flexibility for higher volume operation. It's available with hand-or-foot operated configurations. Request catalog 124208 for more information.

Tooling for loose form terminals, wire range 8-2 AWG [6.64-42.4 mm²]

Ordering Information:

To insure that all applicable Tyco Electronics part numbers are specified in your order we recommend that you make note of the following information:

1. Select either Electric Hydraulic Tool 1804700-1, -2, Foot Operated Tool 1583659-1 or Hand Pump 1583661-1.
2. Powered systems require a pump, hand or foot control, hose, crimp head and die.
3. The portable battery pump, 1804111-1, includes a hand control
4. Manual systems require hand tools and the battery hand tool requires only dies.
5. Refer to matrix for die, head and hand tool options.

Application Tooling (continued)

Tyco Electronics continues the quality tradition of AMP crimping tools with a new line of industry-standard 10,000 psi (68,950 kPa) hydraulic compression crimp heads, pumps and interchangeable U-dies. A new battery-powered pump and tool options provide unprecedented portability for any crimping application.

Electric/Hydraulic Power Unit :

AWG [6.64-42.4 mm²]. Heads and dies are listed in the table below.

Part Numbers :

- Power Unit Only (Includes pressure release on unit)
 - 115 Volts 60 Hz—1804700-1 (10,000 psi)
 - 230 Volts 60 Hz—1804700-2 (10,000 psi)



Portable, Battery/Hydraulic Power Unit (Kit includes Hand Controller, 10,000 psi)—1804111-1
Hydraulic Hand Tool 1490749-1 is also available

Crimping Heads, Hand Tools or Dies

Hydraulic Crimping Tooling 10,000 psi Operating Pressure

| Wire Size in AWG (mm ²) | Hand-Tool | Hydraulic Head | Hydraulic Heads | |
|-------------------------------------|-----------|----------------------|----------------------|-----------|
| | | 1490749-1 | 1490746-1, 1976230-1 | 1752877-1 |
| | U-Dies | U-Dies | Shank Dies | |
| 8 [7-8.5] | 1490749-1 | 1490746-1, 1976230-1 | 1752877-1 | 1752787-1 |
| 6 [13-15] | 1490534-1 | 1490534-1 | 48858-1 | 48858-1 |
| 4 [21] | 1490535-1 | 1490536-1 | 48860-1 | 48860-1 |
| 2 [34-35] | 1490410-1 | 1490410-1 | 48861-1 | 48861-1 |

Accessory Power Controls and Hoses

- Control and hose accessories must be ordered separately.
- If electric hydraulic tool is to be used in portable applications, a handle control and hose assembly should be used.
- For stationary applications, a foot switch assembly and hose assembly will be necessary.
- Multidirectional valves are used when more than one crimping head is permanently attached to the tool.

Accessories

| For use with Power Unit No. | Accessory Description | Accessory Part Number | Remarks |
|-----------------------------|---|-----------------------|---------------------|
| 1804700-1 1804700-2 | 7 ft. [2.13 m] handle control assembly - hose and cord | 1901775-1 | – |
| | 15 ft. [4.57 m] handle control assembly - hose and cord | 1901776-1 | |
| | 21 ft. [6.4 m] handle control assembly - hose and cord | 1901777-1 | |
| | 15 ft. [4.57] foot switch assembly | 68284-1 | need hose assembly |
| | 6 ft. [0.91 m] hose assembly | 1583662-1 | 68284-1 foot switch |
| | 10 ft. [2.13 m] hose assembly | 1583662-2 | assembly needed |
| 1804700-1 1804700-2 | 20 ft. [4.57 m] hose assembly | 1583662-3 | with hose |
| | 3-way multi-directional valve (manual) | 1901782-1 | – |

**DYNA-CRIMP Tooling for loose form terminals.
Wire range 8-2/O AWG [7-70 mm²]**

Ordering Information:

To insure that all applicable AMP part numbers are specified in your order, we recommend that you make your selection in four (4) steps:

1. Select either Electric **Hydraulic Tool 69120**, **Foot Operated Tool 69325-3** or **Hand Tool 59974-1**.
2. Select a head if using either the Electric Hydraulic or Foot Operated Tools.
3. Select dies from the table on this page.
4. Select control and hose mechanism from accessories list below when using **69120**.

Application Tooling (continued)

Electric/Hydraulic Power Unit :

This unit provides crimping for terminals in the wire range of 8-2/O AWG [7-70 mm²]. Heads and dies are listed in the table below.

Part Numbers :

- Power Unit Only (Includes pressure release on unit)
115 Volts 60 Hz : 69120
230 Volts 60 Hz : 69120-2



Crimping Heads and Dies for Tools 69120-1, 69325-3 and 59974-1

| Wire Range | | PLASTI-GRIP Style Terminals | |
|------------|-----------------|-----------------------------|---------------------------------|
| AWG | mm ² | Dies for Head 69066 | Dies for Head 69051 and 59974-1 |
| 8 | 7-8 | 48858-1 | 48752-1 47820* |
| 6 | 18-15 | 48859-1 | 48753-1* 47821* |
| 4 | 21 | 48860-1 | 48754-1 47822* |
| 2 | 34-35 | 48861-1 47239-1** | 48755-1 47823* |

*No insulation crimp.
 **Large expansion.

Accessory Power Controls and Hoses

- Control and hose accessories must be ordered separately.
- If electric hydraulic tool is to be used in portable applications, a handle control and hose assembly should be used.
- For stationary applications, a foot switch assembly and hose assembly will be necessary.
- Multidirectional valves are used when more than one crimping head is permanently attached to the tool.

Accessories

| For use with Power Unit No. | Accessory Description | Accessory Part Number | Remarks |
|-----------------------------|--|-----------------------|---------------------|
| 69120-1 69120-2 | 7 ft. [2.13 m] handle control assembly - hose and cord | 59907-7 | - |
| | 15 ft. [4.57 m] handle control assembly - hose and cord | 1-59907-5 | - |
| | 15 ft. [4.57 m] handle control assembly - cord (less hose) | 1-59908-5 | - |
| | 21 ft. [6.4 m] handle control assembly - hose and cord | 2-59907-1 | - |
| | 21 ft. [6.4 m] handle control assembly - cord (less hose) | 2-59908-1 | - |
| | 28 ft. [8.53 m] handle control assembly - hose and cord | 2-59907-8 | - |
| | 15 ft. [4.57 m] foot switch assembly | 68284-1 | need hose assembly |
| | 3 ft. [0.91 m] hose assembly | 59909-3 | 68284-1 foot switch |
| | 7 ft. [2.13 m] hose assembly | 59909-7 | assembly needed |
| | 15 ft. [4.57 m] hose assembly | 1-59909-5 | with these hose |
| 69120-1 69120-2 | 21 ft. [6.4 m] hose assembly | 2-59909-1 | assemblies |
| | 3-way multi-directional valve | 59220 | - |
| | 6-way multi-directional valve | 59221 | foot switch only |

Hydraulic Hand Tool for Wire Range 8-2 AWG [7-35 mm²]

Application Tooling (continued)

Hydraulic Hand Tool
Part No. 1490749-1
Dies for this tool are listed in the table on page 9.



Hydraulic Hand Tool
Part No. 59974-1
Dies for this tool are listed in the table on page 10 under head No. **69051**.



Tape Form Terminal and Splice Tooling for Wire Range 24-10 AWG [0.2-6 mm²]

Model G Terminating Machine
Part No. 354500-1
Applicator : 567200-3

TAPETRONIC Machine
Part No. 69875
Requires dies. No applicator required.

Tyco Electronics application tools are designed to produce a carefully controlled, uniform pressure crimp, whether manually or pneumatically powered. All tools feature matching dies that fully “bottom” at the completion of the crimp, resulting in a proper crimp height. These dies are color coded to aid in matching tool to wire size.



Dies for Tape Mounted Terminals

| Wire Range | | Dies |
|------------|-----------------|-------|
| AWG | mm ² | |
| 22-16 | 0.3 - 1.4 | 69872 |
| 16-14 | 1.25 - 2.0 | 69873 |
| 12-10 | 3.0 - 6.0 | 69874 |

For AMP-O-ELECTRIC Machine 565435-5, use applicator 567200-2

Part Number Index

| Part No. | Page | RoHS Code |
|----------|------|-----------|
| 53400-1 | 2 | L |
| 53401-1 | 2 | L |
| 53402-1 | 2 | L |
| 53403-1 | 2 | L |
| 53404-1 | 2 | L |
| 53405-1 | 2 | L |
| 53406-1 | 2 | L |
| 53407-1 | 2 | L |
| 53407-2 | 2 | L |
| 53408-1 | 2 | L |
| 53408-2 | 2 | L |
| 53409-1 | 2 | L |
| 53410-1 | 2 | L |
| 53410-2 | 2 | L |
| 53411-1 | 2 | L |
| 53412-1 | 2 | L |
| 53413-1 | 2 | L |
| 53414-1 | 2 | L |
| 53415-1 | 2 | L |
| 53416-1 | 2 | L |
| 53416-2 | 2 | L |
| 53417-1 | 2 | L |
| 53417-2 | 2 | L |
| 53418-1 | 2 | L |
| 53418-2 | 2 | L |
| 53419-1 | 2 | L |
| 53420-1 | 2 | L |
| 53421-1 | 2 | L |
| 53422-1 | 2 | L |
| 53423-1 | 3 | L |
| 53424-1 | 3 | L |
| 53425-1 | 3 | L |
| 53426-1 | 3 | L |
| 53427-1 | 3 | L |
| 53428-1 | 3 | L |
| 53429-1 | 3 | L |
| 53546-1 | 3 | L |
| 53547-1 | 3 | L |
| 53548-1 | 3 | L |
| 53548-2 | 3 | L |
| 53549-1 | 3 | L |
| 53550-1 | 3 | L |

| Part No. | Page | RoHS Code |
|----------|------|-----------|
| 53809-2 | 2 | L |
| 53943-1 | 4 | L |
| 53944-1 | 4 | L |
| 53945-1 | 4 | L |
| 53946-1 | 4 | L |
| 53947-1 | 4 | L |
| 53949-1 | 4 | L |
| 53950-1 | 4 | L |
| 53951-1 | 4 | L |
| 53953-1 | 4 | L |
| 53954-1 | 4 | L |
| 53963-1 | 3 | L |
| 53964-1 | 3 | L |
| 53975-1 | 4 | L |
| 53977-1 | 4 | L |
| 53978-1 | 4 | L |
| 53980-1 | 4 | L |
| 53982-1 | 3 | L |
| 53983-1 | 3 | L |
| 53984-1 | 3 | L |
| 54593-1 | 3 | L |
| 54947-1 | 4 | L |
| 696420-1 | 6 | R |
| 696420-2 | 6 | R |
| 696420-3 | 6 | R |
| 696420-5 | 6 | R |
| 696420-6 | 6 | R |
| 696421-1 | 6 | R |
| 696421-2 | 6 | R |
| 696421-3 | 6 | R |
| 696421-4 | 6 | R |
| 696421-5 | 6 | R |
| 696421-6 | 6 | R |
| 696421-7 | 6 | R |
| 696421-8 | 6 | R |
| 696422-2 | 6 | R |
| 696422-3 | 6 | R |
| 696422-4 | 6 | R |
| 696422-5 | 6 | R |
| 696422-6 | 6 | R |
| 696422-7 | 6 | R |
| 696422-8 | 6 | R |

| Part No. | Page | RoHS Code |
|------------|------|-----------|
| 696422-9 | 6 | R |
| 1-696422-0 | 6 | R |
| 696423-2 | 6 | R |
| 696423-3 | 6 | R |
| 696423-4 | 6 | R |
| 696423-5 | 6 | R |
| 696423-6 | 6 | R |
| 696423-7 | 6 | R |
| 696423-8 | 6 | R |
| 696423-9 | 6 | R |
| 1-696423-0 | 6 | R |
| 696424-4 | 7 | R |
| 696424-5 | 7 | R |
| 696424-6 | 7 | R |
| 696424-7 | 7 | R |
| 696424-8 | 7 | R |
| 696424-9 | 7 | R |
| 1-696424-0 | 7 | R |
| 696425-1 | 7 | R |
| 696426-1 | 7 | R |
| 696427-1 | 7 | R |
| 696428-1 | 7 | R |
| 696429-1 | 7 | R |
| 696430-2 | 7 | R |
| 696430-4 | 7 | R |
| 696430-5 | 7 | R |
| 696430-6 | 7 | R |
| 696430-7 | 7 | R |
| 696430-8 | 7 | R |
| 696430-9 | 7 | R |
| 1-696430-0 | 7 | R |
| 737049-1 | 5 | R |
| 737051-1 | 5 | R |
| 737053-1 | 5 | R |
| 1958191-1 | 5 | R |
| 1958192-1 | 5 | R |
| 1958193-1 | 5 | R |

Americas

Argentina (Buenos Aires)
Phone: +54-11-4733-2200
Fax: +54-11-4733-2211

Brasil (São Paulo)
Phone: +55-11-2103-6000
Fax: +55-11-2103-6030

Chile (Santiago)
Phone: +56-2-345-0361
Fax: +56-2-223-1477

Canada (Toronto)
Phone: +905-475-6222
Fax: +905-474-5520
Product Information Center:
Phone: +905-470-4425
Fax: +905-474-5525

Colombia (Bogota)
Phone: +57-1-319-8959
Fax: +57-1-319-8960

Mexico (Mexico City)
Phone: +52-55-1106-0800
+01-800-733-8926
Fax: +52-55-1106-0901

For Latin/South American
(Countries not shown)
Phone: +54-11-4733-2015
Fax: +54-11-4733-2083

United States
(Harrisburg, PA)
Phone: +1-717-564-0100
Fax: +1-717-986-7575
Product Information Center:
Phone: +1-800-522-6752
Fax: +1-717-986-7575

(Troy, MI)
Phone: +1-248-273-3359
Fax: +1-248-273-3322

Asia/Pacific

Australia (Sydney)
Phone: +61-2-9554-2600
Fax: +61-2-9502-2556
Product Information Center:
Phone: +61-2-9840-8200
Fax: +61-2-9634-6188

India (Bangalore)
Phone: +91-80-285-40800
Fax: +91-80-285-40820

Indonesia (Jakarta)
Phone: +65-6482-0311
Fax: +65-6482-1012

Japan (Kawasaki, Kanagawa)
Phone: +81-44-844-8111
Fax: +81-44-812-3207
Product Information Center:
Phone: +81-44-844-8013
Fax: +81-44-812-3200

Korea (Seoul)
Phone: +82-2-3415-4500
Fax: +82-2-3486-3810

Malaysia (Selangor)
Phone: +60-3-7805-3055
Fax: +60-3-7805-3066

New Zealand (Auckland)
Phone: +64-9-634-4580
Fax: +64-9-634-4586

Philippines (Makati City)
Phone: +632-848-0171
Fax: +632-867-8661

People's Republic of China
(Hong Kong)
Phone: +852-2735-1628
Fax: +852-2735-0243
(Shanghai)
Phone: +86-21-2407-1588
Fax: +86-21-2407-1599

Singapore (Singapore)
Phone: +65-6482-0311
Fax: +65-6482-1012

Taiwan (Taipei)
Phone: +886-2-8768-2788
Fax: +886-2-8768-2268

Thailand (Bangkok)
Phone: +66-2-955-0500
Fax: +66-2-955-0505

Vietnam (Ho Chi Minh City)
Phone: +84-8-930-5546
Fax: +84-8-930-3443

Europe/Middle East/Africa

Austria (Vienna)
Phone: +43-1-905-60-0
Fax: +43-1-905-60-1333
Product Information Center:
Phone: +43-1-905-60-1249
Fax: +43-1-905-60-1251

Belarus (Minsk)
Phone: +375 17 237 47 94
Fax: +375 17 237 47 94

Belgium (Kessel-Lo)
Phone: +32-16-352-300
Fax: +32-16-352-355

Bulgaria (Sofia)
Phone: +359-2-971-2152
Fax: +359-2-971-2153

Czech Republic and Slovakia
Czech Republic (Kurim)
Phone: +420-541-162-111
Fax: +420-541-162-223
Product Information Center:
Phone: +420-541-162-113
Fax: +420-541-162-132

Denmark (Glostrup)
Phone: +45-43-48-04-00
Fax: +45-43-44-14-14

Egypt (Cairo)
Phone: +202-419-2334
Fax: +202-417-7647

Estonia (Tartu)
Phone: +372-5138-274
Fax: +372-7400-779

Finland (Helsinki)
Phone: +358-95-12-34-20
Fax: +358-95-12-34-250

France (Cergy-Pontoise Cedex)
Phone: +33-1-3420-8888
Fax: +33-1-3420-8600
Product Information Center:
Phone: +33-1-3420-8686
Fax: +33-1-3420-8623

France Export Divisions
(Cergy-Pontoise Cedex)
Phone: +33-1-3420-8804
Fax: +33-1-3420-8699

Germany (Bensheim)
Phone: +49-6251-133-0
Fax: +49-6251-133-1600
Product Information Center:
Phone: +49-6251-133-1999
Fax: +49-6251-133-1988

Greece (Athens)
Phone: +30-210-9370-396/397
Fax: +30-210-9370-655

Hungary (Budapest)
Phone: +36-1-289-1000
Fax: +36-1-289-1010
Product Information Center:
Phone: +36-1-289-1016
Fax: +36-1-289-1017

Ireland (Dublin)
Phone: +353-1-866-5612
Fax: +353-1-866-5714

Israel (Petach-Tikva)
Phone: +972-3-929-0999
Fax: +972-3-919-1088

Italy (Collegno (Torino))
Phone: +39-011-4012-111
Fax: +39-011-4031-116
Product Information Center:
Phone: +39-011-4012-428
Fax: +39-011-40-287-428

Lithuania and Latvia
Lithuania (Vilnius)
Phone: +370-5-213-1402
Fax: +370-5-213-1403
Product Information Center:
Phone: +370-5-211-3016
Fax: +370-5-213-1403

Netherlands ('s-Hertogenbosch)
Phone: +31-73-6246-246
Fax: +31-73-6212-365
Product Information Center:
Phone: +31-73-6246-999
Fax: +31-73-6246-998

Norway (Nesbru)
Phone: +47-66-77-88-50
Fax: +47-66-77-88-55

Poland (Warsaw)
Phone: +48-22-4576-700
Fax: +48-22-4576-720
Product Information Center:
Phone: +48-22-4576-704
Fax: +48-22-4576-720

Romania (Bucharest)
Phone: +40-21-311-3479/3596
Fax: +40-21-312-0574

Russia (Moscow)
Phone: +7-495-790-7902
Fax: +7-495-721-1893
Product Information Center:
Phone: +7-495-790-7902-404
Fax: +7-495-790-7902-401

Russia (St. Petersburg)
Phone: +7-812-718-8192
Fax: +7-812-718-8193

Slovenia (Ljubljana)
Phone: +386-1561-3270
Fax: +386-1561-3240

South Africa (Port Elizabeth)
Phone: +27-41-503-4500
Fax: +27-41-581-0440

Spain (Barcelona)
Phone: +34-93-291-0330
Fax: +34-93-201-7879

Sweden (Upplands Väsby)
Phone: +46-8-50-72-50-00
Fax: +46-8-50-72-50-01

Switzerland (Steinach)
Phone: +41-71-447-0447
Fax: +41-71-447-0444

Turkey (Istanbul)
Phone: +90-212-281-8181/2/3
+90-212-282-5130/5430
Fax: +90-212-281-8184

Ukraine (Kiev)
Phone: +380-44-206-2265
Fax: +380-44-206-2264
Product Information Center:
Phone: +380-44-206-2265
Fax: +380-44-206-2264

United Kingdom
(Stanmore, Middlesex)
Phone: +44-8706-080208
Fax: +44-208-954-6234
Product Information Center:
Freephone (UK only):
+0800-267-666
Phone: +44-8706-080208
Fax: +44-208-420-8095

Tyco Electronics Corporation
Harrisburg, PA

www.tycoelectronics.com

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