

# SOLAR SPEC Pak<sup>®</sup>

Sealed Power For Environmental Connections



Solar Power | Wind Power | DC Lighting | Inverters | Micro Inverters | Battery Back up  
LED Lighting | Solar Panels | Combiner Boxes | Hydro-Electricity | Harsh Environments



**APP**  
Anderson Power Products<sup>®</sup>

# Rugged and Sealed (IP68) Plugs and Receptacles

For Use with APP® Powerpole® Signal, Power & Ground Contacts & Housings

APP's Solar SPEC Pak® Connector Series uses rugged and environmentally sealed (IP68) shells to protect industry leading APP® Powerpole® contacts and housing. Customer configured Solar SPEC Pak® is designed specifically to meet the requirements of the photovoltaic industry conforming to NEC 2008 requirements for first make/last break ground and a locking feature that require a tool to unlock. It's also the first multipole connector to conform to UL 6703A. The adaptive design lends itself towards use in other markets including wind power, fuel cells, mass transportation, off-road vehicles, agricultural equipment, oil and petro chemical exploration and many more.

The core APP® Powerpole® technology within the SPEC Pak® is proven reliable and cost effective. The broad selection of touch safe, color-coded Powerpole® housings with power, signal and ground contacts accept a broad range of wire gauges, #24 to #10 AWG (0.25 to 4.0 mm<sup>2</sup>), giving users thousands of flexible design solutions in a single interconnect.



## Configurable to 1000 Volts

### 1 - Chemical & UV Resistant Ruggedized Shells

- Wire to wire configurations
- Panel mount configurations

### 2 - Touch Safe Housings (UL1977, Section 10.2)

### 3 - IP68 Interfacial Sealing Gasket

### 4 - Locking Latch (NEC 2008, Section 690.33C)

### 5 - Power Contacts (up to 4) and / or Signal Contacts (up to 16)

### 6 - Uses Industry Standard Sealing Components

(PG gland compatible - size 16)

### 7 - First Mate / Last Break Ground Contacts

(NEC 2008, Section 690.33D)

### 8 - Housing Colors to Match Wire Colors for ease of Assembly

### 9 - Unlocking Tool

# Specifications

## ..... SPEC Pak® Shells Used With .....

| SPEC Pak® Shell  | Powerpole® Power Contacts & Housings (1327FP Series) | Powerpole® Ground Contacts & Housings (1827 Series) | PPMX <sup>1</sup> Signal Contacts & Housings (4800 Series) |
|--|--|---|--|
| <b>Electrical</b>  |  |   |  |
| Current Rating (Ampere)                                      |  |   |  |
| UL 1977  | 15 to 40   | 40  | 7  |
| UL 6703A   | 20   | -   | -  |
| CSA (30C Rise)   | 10 to 26   | 35  | 5  |
| <b>Voltage Rating</b>  |  |   |  |
| UL 1977 (AC/DC)  | 600  | 600   | 300  |
| UL 6703A (AC)  | 600  | 600   | -  |
| IEC 60664 (AC/DC)  | 1,000  | -   | -  |
| <b>Dielectric Withstanding (AC/DC)</b>                       |  |   |  |
|  | 2,200  | 2,200   | 1,600  |
| <b>Contact Resistance Ω (average)</b>                        |  |   |  |
|  | 525  | 525   | -  |
| <b>Hot Plug<sup>2</sup> (UL 1977)<br/>250 Cycles at 120V</b> |  |   |  |
|  | 30   | 30  | -  |
| <b>Mechanical</b>  |  |   |  |
| <b>Environmental Seal</b>                                    |  |   |  |
| IP rating  | IP68   | -   | -  |
| UL 50 Sec 36   | Pass   | -   | -  |
| <b>Wire Size</b>   |  |   |  |
|  | 20 to 10 AWG<br>0.5 to 4.0 mm <sup>2</sup>           | 14 to 10 AWG<br>1.5 to 4.0 mm <sup>2</sup>          | 24 to 20 AWG<br>0.25 to 0.5 mm <sup>2</sup>                |
| <b>Operating Temperature</b>                                 |  |   |  |
| UL 1977  | -40° to 105°C<br>-40° to 221°F                       | -20° to 105°C<br>-4° to 221°F                       | -20° to 105°C<br>-4° to 221°F                              |
| UL 6703A   | -35° to 65°C<br>-31° to 149°F                        | -   | -  |
| <b>Mating Cycles (no load)</b>                               |  |   |  |
| Tin  | 1,500  | 1,500   | -  |
| Silver   | 10,000   | -   | -  |
| Gold   | -  | -   | 5,000  |
| <b>Latch</b>   |  |   |  |
| Mating Cycles  | 200  | -   | -  |
| Lock (NEC 2008 Sec 690.33C)                                  | Pass   | -   | -  |
| <b>Contact Retention Force (lbf)<br/>(N)</b>                 |  |   |  |
|  | 25.0<br>111.0  | 25.0<br>111.0                                       | 12.0<br>53.0   |
| <b>Insertion Force (lbf)<br/>(N)</b>                         |  |   |  |
|  | -  | 3.0<br>13.3   | 4.5 max<br>20.0 max  |
| <b>Touch Safe (UL 1977 Sec 10.2)</b>                         |  |   |  |
|  | Pass   | -   | -  |
| <b>Mechanical Shock (50g) Mil Standard 202 213 Cond A</b>    |  |   |  |
|  | Pass   | -   | -  |
| <b>Vibration (10g) Mil Standard 202 204 Cond A</b>           |  |   |  |
|  | Pass   | -   | -  |
| <b>Materials</b>   |  |   |  |
| Shell / Housing  | PBT / PC   | PC  | PC   |
| Powerpole® Holder  | PC   | -   | -  |
| Latch  | PPE  | -   | -  |
| <b>Flammability (UL 94)</b>                                  |  |   |  |
|  | V0   | V0  | V0   |
| <b>Weatherability (UL 764C)</b>                              |  |   |  |
|  | F1   | -   | -  |
| <b>-35°C Impact Test (UL 6703A Sec 30)</b>                   |  |   |  |
|  | Pass   | -   | -  |
| <b>Thermal Cycle Test (UL 6703A Sec 35)</b>                  |  |   |  |
|  | Pass   | -   | -  |
| <b>Humidity Cycle Test (UL6703A Sec 36)</b>                  |  |   |  |
|  | Pass   | -   | -  |
| <b>Contacts</b>  |  |   |  |
| Base   | -  | Copper Alloy  | Copper Alloy   |
| Plating  | -  | Tin or Silver                                       | Gold, 50µ  |

**Notes:**

1. PPMX housing holds up to 2 pin and 2 sockets.
  2. Hot Plug testing completed using individual Powerpole® housings and contacts, not installed in SPEC Pak® shells.
- For other industry test and/or agency approvals, contact customer service.



# Part Number Configurator

## PART NUMBER PLAN

| SPEC Pak® Series<br>(1 Fixed Character) | Shell Color<br>(1 Character) | Shell Style<br>(1 Character)  | Dash     | Shell Size<br>(mm) (3 Characters) | Insert Arrangement<br>(3 Characters)     |
|---|------------------------------|---|----------|-----------------------------------|--|
| <b>P</b>                                | <b>K</b>                     | <b>2</b>  | <b>-</b> | <b>050</b>                        | <b>B04</b>                               |
| P = Solar SPEC Pak®                     | K = Black                    | 1 = Inline Receptacle<br>2 = Panel Mount Receptacle<br>6 = Straight Plug<br>9 = Panel Mount Receptacle Cover<br>9R = Inline Receptacle Cover<br>9P = Plug Cover |          | 050 = 50 mm - 4 Pole Shell        | B04 = PP15/45 Housing (any type), 4 Pole |

### PLUG KIT



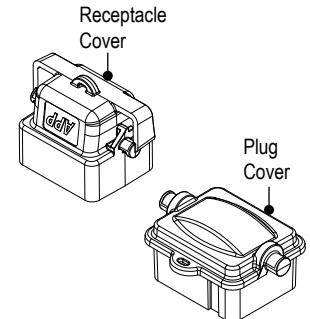
### PANEL MOUNT RECEPTACLE KIT



### INLINE RECEPTACLE KIT



### IP68 SEALING COVER KIT



**NOTE:**

- Mounting hardware (4 each - M3 or #4 screws) not included
- Recommended torque for mounting hardware is 2½ to 4 in-lbf (0.28 to 0.45 N)

## ORDERING INFORMATION

### SPEC Pak® Shell Kits

| Part Number | Description  |
|-------------|--|
| PK6-050B04  | Plug shell kit<br>- Plug shell (includes interfacial sealing gasket)<br>- Powerpole® holder for plug   |
| PK2-050B04  | Panel mount receptacle shell kit<br>- Panel mount receptacle shell with locking latch<br>- Powerpole® holder for receptacle<br>- Panel mount gasket for receptacle |
| PK1-050B04  | Inline receptacle shell kit<br>- Inline receptacle shell with locking latch<br>- Powerpole® holder for receptacle  |
| PK9P-050    | Cover kit for plug<br>- Protective sealing (IP68) cover with lanyard<br>- With locking latch   |
| PK9-050     | Cover kit for panel mount receptacle<br>- Protective sealing (IP68) cover with lanyard   |
| PK9R-050    | Cover kit for inline receptacle<br>- Protective sealing (IP68) cover with lanyard  |

### Component Replacement Parts

| Part Number | Description  |
|-------------|--|
| 114805P1    | Panel mount gasket for receptacle                            |
| 2-8709P1    | 4 position solar locking latch                               |
| PKT-050T01  | 4 position solar unlocking tool (for use with locking latch) |

## PART NUMBER PLAN



### Part Numbering Notes:

1. To order SPEC Pak® Shell Kits Only (no internal Powerpole® housings or contacts), use part numbering on page 4 only. **Plug Shell Kit Example: PK6-050B04.** Powerpole® housings, contacts and wire protection may be ordered separately, see pages 6, 7 and 10 for information.
2. To order SPEC Pak® connectors kits (including internal Powerpole® housings and contacts) use Part Number Plan across the top of pages 4 and 5. **Standard SPEC Pak® Plug Configuration Example: PK6-050B04PS01-B01**
3. To order a custom configuration which is not listed on page 8 and 9, use custom part number configurator on the APP® website, [www.andersonpower.com](http://www.andersonpower.com) or contact factory.

\* Custom configuration may not be UL Recognized.

# Wire Protection - PG Gland

## SPECIFICATIONS

| Gland Styles                            | Straight Plastic<br>Straight Plastic With Flex Spring<br>Right Angle<br>Straight Plastic Multi-Hole<br>Straight Conduit | Straight Conduit Push-In       |
|---|---|--------------------------------|
| <b>Mechanical</b>                       |   |                                |
| IP Rating                               | IP68  | IP68                           |
| <b>Operating Temperature</b><br>UL 1977 | -40° to 105°C<br>-40° to 221°F  | -31° to 100°C<br>-22° to 212°F |
| UL 6703A                                | -35° to 65°C<br>-31° to 149°F   | -                              |
| Thread Type                             | PG  | PG                             |
| Thread Size                             | 16  | 16                             |
| Flammability (UL 94)                    | V2 1  | -                              |
| Weatherability (UL 764C)                | F1  | -                              |
| <b>Material</b>                         |   |                                |
| Shell                                   | Nylon PA 66   | Nylon PA 66                    |
| Gasket                                  | EPDM  | TPE                            |
| Color                                   | Black   | Black                          |

### Torque Requirement

Cable Gland Body to Connector Shell  
• Hand tighten until snug, tighten additional 1/8 to 1/4 turn with wrench

### Sealing Nut to Cable

• Hand tighten until snug, tighten additional 1/2 to 3/4 turn with wrench

### Notes:

1. For V0 material, contact the factory.

SPEC Pak® connectors are not UL recognized components when used with cable glands that are not UL listed.



## STRAIGHT PLASTIC SHORT THREAD TYPE - STD PACK 50 / UL LISTED

| APP® P/N   | Wire Protection Designation (4 Characters) | Cable Range<br>Wire Outer Dia.<br>mm (in) | Thread O. D.<br>C1<br>mm (in) | Panel<br>Mounting Hole<br>mm (in) | Thread Length<br>C2<br>mm (in) | Wrench Size<br>Lock Nut<br>(mm) | Wrench Size<br>Sealing Nut<br>(mm) |
|------------|--|---|-------------------------------|-----------------------------------|--------------------------------|---------------------------------|------------------------------------|
| PS1P16-10X | PS01                                       | 11.2 - 5.5 (0.44 - 0.22)                  | 22.5 (0.89)                   | 22.5 - 22.8 (0.89 - 0.90)         | 10.0 (0.39)                    | 30                              | 27                                 |
| PS1P16-14X | PS02                                       | 14.1 - 8.0 (0.56 - 0.31)                  | 22.5 (0.89)                   | 22.5 - 22.8 (0.89 - 0.90)         | 10.0 (0.39)                    | 30                              | 27                                 |

## STRAIGHT PLASTIC WITH FLEX SPRING - STD PACK 50 / UL LISTED

| APP® P/N   | Wire Protection Designation (4 Characters) | Cable Range<br>Wire Outer Dia.<br>mm (in) | Thread O.D.<br>C1<br>mm (in) | Panel<br>Mounting Hole<br>mm (in) | Thread Length<br>C2<br>mm (in) | Wrench Size<br>Lock Nut<br>(mm) | Wrench Size<br>Sealing Nut<br>(mm) |
|------------|--|---|------------------------------|-----------------------------------|--------------------------------|---------------------------------|------------------------------------|
| PF1P16-10X | PF01                                       | 11.2 - 5.5 (0.44 - 0.22)                  | 22.5 (0.89)                  | 22.5 - 22.8 (0.89 - 0.90)         | 11.0 (0.43)                    | 30                              | 27                                 |
| PF1P16-13X | PF02                                       | 13.8 - 8.0 (0.54 - 0.31)                  | 22.5 (0.89)                  | 22.5 - 22.8 (0.89 - 0.90)         | 11.0 (0.43)                    | 30                              | 27                                 |

## RIGHT ANGLE - STD PACK 50 / UL LISTED

| APP® P/N   | Wire Protection Designation (4 Characters) | Cable Range<br>Wire Outer Dia.<br>mm (in) | Thread O.D.<br>C1<br>mm (in) | Panel<br>Mounting Hole<br>mm (in) | Thread Length<br>C2<br>mm (in) | Wrench Size<br>Lock Nut<br>(mm) | Wrench Size<br>Sealing Nut<br>(mm) |
|------------|--|---|------------------------------|-----------------------------------|--------------------------------|---------------------------------|------------------------------------|
| PR1P16-10X | PR01                                       | 11.0 - 7.0 (0.43 - 0.28)                  | 22.5 (0.89)                  | 22.5 - 22.8 (0.89 - 0.90)         | 12.0 (0.47)                    | 30                              | 27                                 |
| PR1P16-13X | PR02                                       | 13.0 - 8.0 (0.51 - 0.31)                  | 22.5 (0.89)                  | 22.5 - 22.8 (0.89 - 0.90)         | 12.0 (0.47)                    | 30                              | 27                                 |

## LOCK NUT FOR PG 16 CABLE GLANDS



Lock Nut

| APP® P/N | Wrench Size<br>Lock Nut (mm) | Std. Pkg.<br>Size |
|----------|------------------------------|-------------------|
| 124G31   | 30                           | 50                |

## STRAIGHT PLASTIC MULTI-HOLE TYPE - STD PACK 50 / NOT UL LISTED



| APP® P/N  | Wire Protection Designation (4 Characters) | Number of Holes | Cable Range Wire Outer Dia. mm (in) | Thread O.D. C1 mm (in) | Panel Mounting Hole mm (in) | Thread Length C2 mm (in) | Wrench Size Lock Nut (mm) | Wrench Size Sealing Nut (mm) |
|-----------|--|-----------------|-------------------------------------|------------------------|-----------------------------|--------------------------|---------------------------|------------------------------|
| PS2P16-3X | PM21                                       | 2               | 3.5 - 2.5 (0.14 - 0.10)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS2P16-4X | PM22                                       | 2               | 4.3 - 3.3 (0.17 - 0.13)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS2P16-6X | PM23                                       | 2               | 6.1 - 4.3 (0.24 - 0.17)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS3P16-3X | PM31                                       | 3               | 3.6 - 2.6 (0.14 - 0.10)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS3P16-5X | PM32                                       | 3               | 5.2 - 3.5 (0.20 - 0.14)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS4P16-2X | PM41                                       | 4               | 2.5 - 1.6 (0.10 - 0.06)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS4P16-3X | PM42                                       | 4               | 3.6 - 2.5 (0.14 - 0.10)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS4P16-4X | PM43                                       | 4               | 4.8 - 3.4 (0.19 - 0.13)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS5P16-2X | PM51                                       | 5               | 2.1 - 1.3 (0.08 - 0.05)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS5P16-3X | PM52                                       | 5               | 3.1 - 2.0 (0.12 - 0.08)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS5P16-4X | PM53                                       | 5               | 4.1 - 3.0 (0.16 - 0.12)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS6P16-2X | PM61                                       | 6               | 2.0 - 1.3 (0.08 - 0.05)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |
| PS6P16-3X | PM62                                       | 6               | 3.0 - 2.0 (0.12 - 0.08)             | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | 27                           |

## STRAIGHT CONDUIT ADAPTER THREAD TYPE - STD PACK 50 / NOT UL LISTED



| APP® P/N   | Wire Protection Designation (4 Characters) | Max. Joint F1 mm (in) | Thread O.D. C1 mm (in) | Panel Mounting Hole mm (in) | Thread Length C2 mm (in) | Wrench Size Lock Nut (mm) | APP® Conduit P/N | Conduit Trade Size |
|------------|--|-----------------------|------------------------|-----------------------------|--------------------------|---------------------------|------------------|--------------------|
| CT1P16-15X | CT01                                       | 16.0 (0.63)           | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | NGN - 12B        | OD15.8             |
| CT1P16-18X | CT02                                       | 18.3 (0.72)           | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | NGN - 14B        | -                  |
| CT1P16-21X | CT03                                       | 22.0 (0.87)           | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 11.0 (0.43)              | 30                        | NGN - 17B        | OD21.2             |

## STRAIGHT CONDUIT PUSH-IN TYPE - STD PACK 50 / NOT UL LISTED



| APP® P/N  | Wire Protection Designation (4 Characters) | Thread O.D. C1 mm (in) | Panel Mounting Hole mm (in) | Thread Length C2 mm (in) | Wrench Size Lock Nut (mm) | Wrench Size Sealing Nut (mm) | APP® Conduit P/N | Conduit Trade Size |
|-----------|--|------------------------|-----------------------------|--------------------------|---------------------------|------------------------------|------------------|--------------------|
| CAP16-15X | CA01                                       | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 10.0 (0.39)              | 30                        | 21                           | NGN - 12B        | OD15.8             |
| CAP16-18X | CA02                                       | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 10.0 (0.39)              | 30                        | 21                           | -                | OD18.5             |
| CAP16-21X | CA03                                       | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 10.0 (0.39)              | 30                        | 27                           | NGN - 17B        | OD21.2             |
| CAP16-28X | CA04                                       | 22.5 (0.89)            | 22.5 - 22.8 (0.89 - 0.90)   | 12.0 (0.47)              | 30                        | 34                           | NGN - 23B        | OD28.5             |

For R/A versions contact Factory

## CORRUGATED NYLON PLASTIC TUBING



| APP® P/N  | Conduit I. D. mm (in) | Conduit O. D. mm (in) | Conduit Size | Trade Size (mm) | Std. Pkg. Meters (Feet) |
|-----------|-----------------------|-----------------------|--------------|-----------------|-------------------------|
| NGN - 12B | 11.8 (0.46)           | 15.8 (0.62)           | 3/8"         | OD15.8          | 50 (164)                |
| NGN - 14B | 13.8 (0.54)           | 17.8 (0.70)           | -            | -               | 50 (164)                |
| NGN - 17B | 16.7 (0.66)           | 21.2 (0.83)           | 1/2"         | OD21.2          | 50 (164)                |
| NGN - 23B | 21.7 (0.85)           | 28.5 (1.12)           | 3/4"         | OD28.5          | 50 (164)                |

## TUBING CUTTER



| APP® P/N | Description                      | Range (mm)    |
|----------|----------------------------------|---------------|
| TM0002   | Corrugated Plastic Tubing Cutter | Up to OD 34.5 |

# Standard Housing Arrangements & Contacts

## HOUSING ARRANGEMENTS FOR POWER, SIGNAL & GROUND CONNECTORS ARRANGEMENTS REPRESENT FRONT VIEW OF RECEPTACLE

Custom configuration may be created using APP's part number configurator at [www.andersonpower.com](http://www.andersonpower.com)

E = Empty

1327 Series = Power

1827 Series = Ground

4800 Series = Signal

**0** Custom Configuration

### AC Single Phase

|          |          |        |
|----------|----------|--------|
| <b>A</b> | 1327G6FP | E      |
|          | 1327G7FP | 1827GA |

### AC 3 Phase, 3 Wire

|          |          |        |
|----------|----------|--------|
| <b>B</b> | 1327G6FP | 1327FP |
|          | 1327G7FP | 1827GA |

### DC 2 Circuit, 4 Wire

|          |          |          |
|----------|----------|----------|
| <b>C</b> | 1327G6FP | 1327G6FP |
|          | 1327FP   | 1327FP   |

### DC 2 Wire With Ground

|          |          |        |
|----------|----------|--------|
| <b>D</b> | 1327G6FP | E      |
|          | 1327FP   | 1827GA |

### DC 2 Wire With 8 Signal

|          |          |        |
|----------|----------|--------|
| <b>H</b> | 4827G6   | 4827G6 |
|          | 1327G6FP | 1327FP |

### AC Single Phase With 4 Signal

|          |          |        |
|----------|----------|--------|
| <b>J</b> | 1327G6FP | 4827G6 |
|          | 1327G7FP | 1827GA |

### DC 2 Wire With 4 Signal

|          |          |        |
|----------|----------|--------|
| <b>L</b> | 1327G6FP | 1327FP |
|          | E        | 4827G6 |

### DC 2 Wire With Ground & 4 Signal

|          |          |        |
|----------|----------|--------|
| <b>N</b> | 1327G6FP | 1327FP |
|          | 4827G6   | 1827GA |

### DC 2 Wire

|          |          |        |
|----------|----------|--------|
| <b>U</b> | 1327G6FP | E      |
|          | E        | 1327FP |

### All Signal

|          |        |        |
|----------|--------|--------|
| <b>X</b> | 4827G6 | 4827G6 |
|          | 4827G6 | 4827G6 |

#### Notes:

600 Volt Rating

- UL 1977 - All Configurations
- UL 6703A - Configuration B
- IEC 60664 - All Configurations

1000 Volt Rating

- IEC 60664 - Configuration U



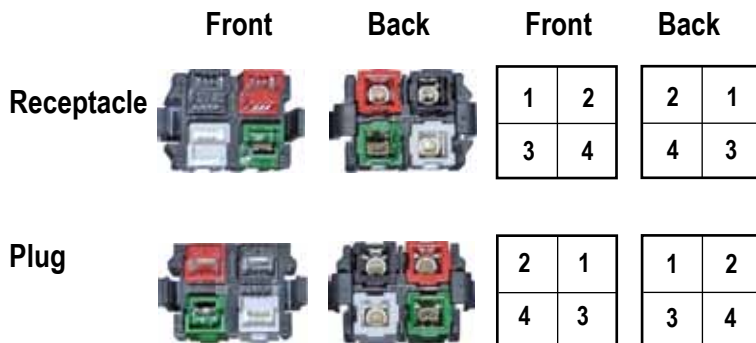
## CONTINUOUS CURRENT RATINGS - POWER CONTACT CODE SELECTION

| Contact Code | Power Contact                 | Housing Configuration | Wire Size / Current Rating |       |       |       |       |      |
|--------------|-------------------------------|-----------------------|----------------------------|-------|-------|-------|-------|------|
|              |                               |                       | #10                        | #12   | #14   | #16   | #18   | #20  |
| 00           | Contacts Purchased Separately |                       |                            |       |       |       |       |      |
| 01           | 261G2                         | A - D                 | 25/38                      | 20/30 | 15/25 | -     | -     | -    |
|              |                               | H,J,L,N               | 26/40                      | 25/35 | 17/27 | -     | -     | -    |
| 02           | 200G1L                        | A - D                 | 23/35                      | 18/28 | 15/23 | -     | -     | -    |
|              |                               | H,J,L,N               | 24/37                      | 23/32 | 15/25 | -     | -     | -    |
| 03           | 261G1                         | A - D                 | -                          | 20/30 | 15/25 | 11/16 | -     | -    |
|              |                               | H,J,L,N               | -                          | 25/35 | 17/27 | 13/20 | -     | -    |
| 04           | 1331                          | A - D                 | -                          | 16/25 | 15/23 | 12/18 | -     | -    |
|              |                               | H,J,L,N               | -                          | 17/27 | 17/25 | 13/20 | -     | -    |
| 05           | 262G1                         | A - D                 | -                          | -     | -     | 11/16 | 8/13  | 6/9  |
|              |                               | H,J,L,N               | -                          | -     | -     | 13/20 | 10/15 | 7/10 |
| 06           | 1332                          | A - D                 | -                          | -     | -     | 12/18 | 8/13  | 6/9  |
|              |                               | H,J,L,N               | -                          | -     | -     | 13/20 | 10/15 | 7/10 |

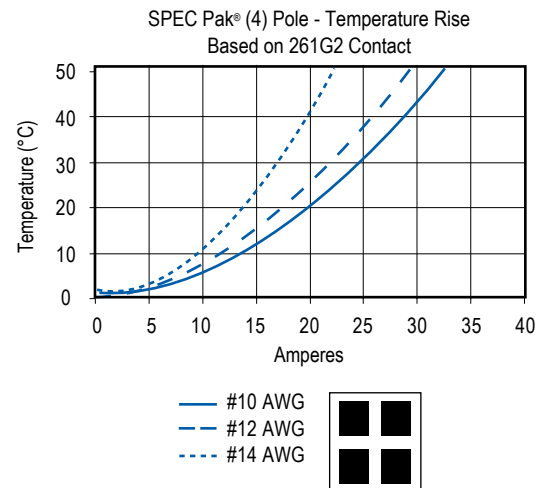
**NOTES:**

- Current ratings under UL1977:
  - First number represents current rating per pole for 30°C temperature rise (25 / 38)
  - Second number is the maximum recommended current per pole based on a 25°C ambient (25 / 38)
 (Current ratings under UL 6703A, contact the factory)
- Configuration H - N based on signal contacts crimped to #20 AWG wire and carrying 1 amp.
- ☐ Denotes wire size not appropriate for power contact.
- Shaded boxes  are US File No. E26226 pending.
- 1827GA housing should be used with 1830G1 or 1830G2 ground contact, depending on primary contacts. All signal housings (4850) available with up to two 4802G3 and two 4803G3 contacts.

### HOLDER LOCATIONS (VIEWS)



### TEMPERATURE CHART



# Individual components

## POWERPOLE® HOUSINGS & CONTACTS

### Fingerproof PP15/45 Housing Only

Package Quantity:

Standard, 200 pieces - Bulk, 2,500 pieces

| Standard Part Number | Bulk Part Number | Description    |
|----------------------|------------------|----------------|
| 1327FP               | 1327FP-BK        | Red Housing    |
| 1327G5FP             | 1327G5FP-BK      | Green Housing  |
| 1327G6FP             | 1327G6FP-BK      | Black Housing  |
| 1327G7FP             | 1327G7FP-BK      | White Housing  |
| 1327G8FP             | 1327G8FP-BK      | Blue Housing   |
| 1327G16FP            | 1327G16FP-BK     | Yellow Housing |

### Standard PP 15/45 Housing Only

Package Quantity:

Standard, 200 pieces - Bulk, 2,500 pieces

| Standard Part Number | Bulk Part Number | Description    |
|----------------------|------------------|----------------|
| 1327                 | 1327-BK          | Red Housing    |
| 1327G5               | 1327G5-BK        | Green Housing  |
| 1327G6               | 1327G6-BK        | Black Housing  |
| 1327G7               | 1327G7-BK        | White Housing  |
| 1327G8               | 1327G8-BK        | Blue Housing   |
| 1327G16              | 1327G16-BK       | Yellow Housing |
| 1327G17              | 1327G17-BK       | Orange Housing |
| 1327G18              | 1327G18-BK       | Gray Housing   |
| 1327G21              | 1327G21-BK       | Brown Housing  |
| 1327G22              | 1327G22-BK       | Pink Housing   |
| 1327G23              | 1327G23-BK       | Purple Housing |

### Premate Ground PP15/45 Housing Only

Package Quantity:

Standard, 200 pieces - Bulk, 2,500 pieces

| Standard Part Number | Bulk Part Number | Description   |
|----------------------|------------------|---------------|
| 1827GA               | 1827GA-BK        | Green Housing |

### Premate Ground Contacts

Loose Piece

Package Quantity 200

| Part Number                                | Description                |
|--|----------------------------|
| #10 to #14 AWG (4 to 1.5 mm <sup>2</sup> ) |                            |
| 1830G1-LPBK                                | Singulated-LD-Tin Plate    |
| 1830G2-LPBK                                | Singulated-LD-Silver Plate |

Reel

Package Quantity 5,000

| Part Number                                | Description          |
|--|----------------------|
| #10 to #14 AWG (4 to 1.5 mm <sup>2</sup> ) |                      |
| 1830G1                                     | Reel-LD-Tin Plate    |
| 1830G2                                     | Reel-LD-Silver Plate |

### 15/45 Powerpole® Contacts

Loose Piece

Package Quantity:

Standard, 200 pieces - Bulk, 5,000 pieces

| Standard Part Number                         | Bulk Part Number | Description                        |
|--|------------------|------------------------------------|
| #16 to #20 AWG (1.0 to 0.5 mm <sup>2</sup> ) |                  |                                    |
| 1332   | 1332-BK          | Individual-LD-Silver Plate         |
| 262G1-LPBK                                   | -                | Singulated Reel-LD-Tin Plate       |
| 262G2-LPBK                                   | -                | Singulated Reel-LD-Silver Plate    |
| #12 to #16 AWG (2.5 to 1.0 mm <sup>2</sup> ) |                  |                                    |
| 1331   | 1331-BK          | Individual-LD-Silver Plate         |
| 261G1-LPBK                                   | -                | Singulated Reel-LD-Tin Plate       |
| #10 to #14 AWG (4 to 1.5 mm <sup>2</sup> )   |                  |                                    |
| 261G2-LPBK                                   | -                | Singulated Reel-LD-Tin Plate       |
| 261G3-LPBK                                   | -                | Singulated Reel-LD-Silver Plate    |
| 200G1L-LPBK                                  | -                | Superflex, Sing. Reel-LD-Tin Plate |

Reel - 15/45 Powerpole® Contacts

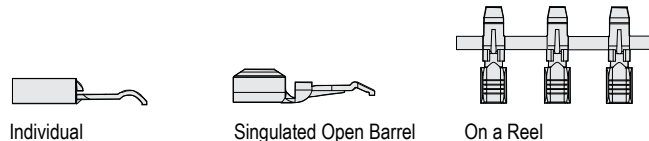
Package Quantity 5,000

| Part Number                                  | Description                  |
|--|------------------------------|
| #16 to #20 AWG (1.0 to 0.5 mm <sup>2</sup> ) |                              |
| 262G1  | Reel-LD-Tin Plate            |
| 262G2  | Reel-LD-Silver Plate         |
| #12 to #16 AWG (2.5 to 1.0 mm <sup>2</sup> ) |                              |
| 261G1  | Reel-LD-Tin Plate            |
| #10 to #14 AWG (4 to 1.5 mm <sup>2</sup> )   |                              |
| 261G2  | Reel-LD-Tin Plate            |
| 261G3  | Reel-LD-Silver Plate         |
| #10 to #14 AWG (6 to 1.5mm <sup>2</sup> )    |                              |
| 200G1L                                       | SuperFlex, Reel-LD-Tin Plate |

NOTE:

LD - Low Detent

## CONTACT STYLES



## PPMX (4800 SERIES) HOUSING & CONTACTS

### PPMX Signal Housing

#### Package Quantity

Standard, 25 pieces - Bulk, 1,000 pieces

| Standard    | Bulk        |                         |
|-------------|-------------|-------------------------|
| Part Number | Part Number | Description             |
| 4827G6      | 4827G6-BK   | Black two piece housing |

### PPMX Signal Contacts

#### Package Quantity

Standard, 50 pieces - Bulk, 2,000 pieces

#### Loose Piece

#20 to #24 AWG (0.50 to 0.25 mm<sup>2</sup>)

| Standard    | Bulk        |                               |
|-------------|-------------|-------------------------------|
| Part Number | Part Number | Description                   |
| 4802G3      | 4802G3-BK   | Socket, Gold, 50 Micro-inches |
| 4803G3      | 4803G3-BK   | Pin, Gold, 50 Micro-inches    |

### PPMX Signal Housing & Contact Kits

#### Package Quantity

Standard, 100 pieces

1 Black two piece housing, 2 Male Contacts,  
2 Female Contacts

| Standard    | Bulk        |   |
|-------------|-------------|---|
| Part Number | Part Number | Description   |
| 4850G6      | -           | 50 Micro-inches Gold Plated Contacts - Pin & Socket |

## PP15/45 POWERPOLE® HOUSING STYLES



## APPLICATION TOOLING - POWERPOLE® 15 / 45 CONTACTS

| Loose Piece Tin Part Number | Loose Piece Silver Part Number | Hand Tool* or Pneumatic Tool* | Reeled Tin Part Number | Reeled Silver Part Number | ATS Applicator |
|-----------------------------|--------------------------------|-------------------------------|------------------------|---------------------------|----------------|
| N/A                         | 1332                           | 1309G2 or 1309G8**            | N/A                    | N/A                       | N/A            |
| N/A                         | 1331                           |                               | N/A                    | N/A                       | N/A            |
| 262G1-LPBK                  | 262G2-LPBK                     | N/A                           | 261G1                  | 262G2                     | 1385520        |
| 200G2L-LPBK                 | 200G4L-LPBK                    |                               | 200G2L                 | 200G4L                    | TBD            |
| 261G1-LPBK                  | 261G4-LPBK                     |                               | 261G1                  | 261G4                     | 1385520        |
| 261G2-LPBK                  | 261G3-LPBK                     |                               | 261G2                  | 261G3                     | 1385458        |
| 200G1L-LPBK                 | 200G3L-LPBK                    |                               | 200G1L                 | 200G3L                    | 1385460        |
| 1830G1-LPBK                 | 1830G2-LPBK                    |                               | 1830G1                 | 1830G2                    | 1385460        |

\* All Hand and Pneumatic Tools for use with Loose Piece contacts only. All reeled contacts can be ordered singulated, (Loose Piece) with the suffix "- LPBK"

\*\* 1309G8 is a hand tool kit- includes dies and locators to make up 1309G2, 1309G3, & 1309G6

## APPLICATION TOOLING - PPMX CONTACTS

| Contact Part Number | APP® Hand Tool or | Mil Std. Hand Tool (APP Part #) | Positioner           | Pneumatic Tool for Locator / Turret |
|---------------------|-------------------|---------------------------------|----------------------|-------------------------------------|
| 4802G3              | PM1000G1          | M22520/1-01 (TM0001)            | No Mil Std. (TL0005) | TP0001                              |
| 4803G3              |                   |                                 |                      |                                     |

# Dimensions

## PLUG 4 POSITION FOR PP15/45 HOUSINGS

**Top View**



**Front View**



**Side View**



**Mated Side View**



## PANEL MOUNT RECEPTACLE 4 POSITION FOR PP15/45 HOUSINGS

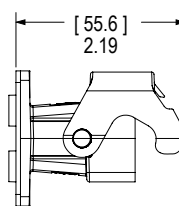
**Panel Cut Out**



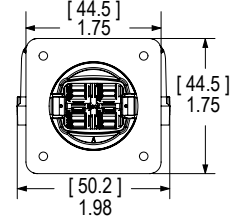
**Front View**



**Side View**



**Back View**



## INLINE RECEPTACLE 4 POSITION FOR PP15/45 HOUSINGS

**Top View**



**Front View**



**Side View**



**Mated Side View**



## PG GLANDS

**PS - Plastic Short**



**CT - Threaded Conduit Adapter**



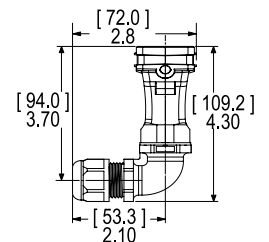
**CA - Push-in Conduit Adapter**



**PF - Plastic Flex PG**



**PR - Right Angle**



## RECEPTACLE COVER KIT

**Front View**



**Side View**

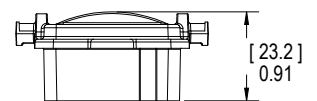


## PLUG COVER KIT

**Front View**



**Side View**



All Data Subject To Change Without Notice Patents with Patents Pending

15145\_DS-SOLARSPAK\_REV 02

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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