

# 6 POSITION SPEC Pak®

Sealed Power For Environmental Connections



Marine | Wind Power | Lighting | Transportation | Pumps | Ground Support  
Machine Tool | Industrial Automation | Motor | Solar Power | Harsh Environments



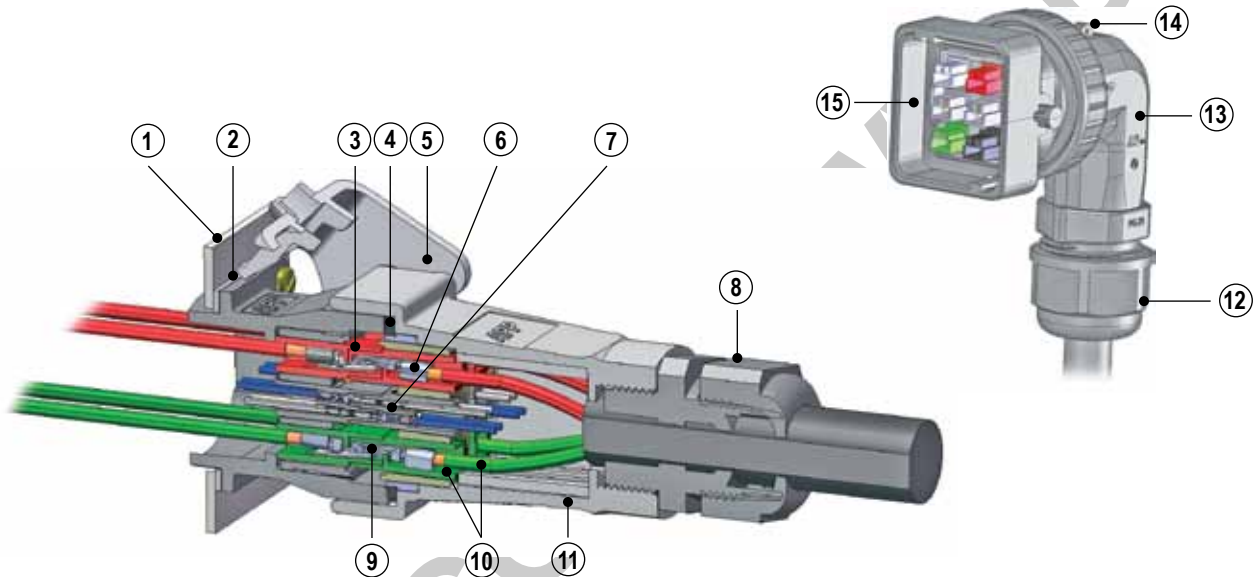
**APP**  
Anderson Power Products®

# Rugged and Sealed (IP68) Plugs and Receptacles

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

APP's SPEC Pak® Connector Series uses rugged and environmentally sealed (IP68) shells to protect existing APP® Powerpole® contacts and housings. Customer configured SPEC Pak® Connectors may be used anywhere a rugged and waterproof high-power interconnect with signal and ground capabilities is required such as in; mass transportation, off-road vehicles, factory automation, oil and petrochemical exploration, agricultural equipment, 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 mm²), giving users thousands of flexible design solutions in a single interconnect.



## 1 - Industry Standard Panel Cut Out

(Same as 26482 & 5015 shell size 24)

## 2 - IP68 Panel Mount Sealing Gasket

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

## 4 - IP68 Interfacial Sealing Gasket

## 5 - Latch (top or bottom of plug or receptacle)

## 6 - Power Contacts (up to 45 amps)

## 7 - Signal Contacts (4 contacts per PPMX housing)

## 8 - Uses Industry Standard Sealing Components

(PG gland compatible - size 21)

## 9 - First Mate / Last Break Ground Contacts

## 10 - Color Coded Housings to Match Wire Color

## 11 - UV & Chemical Resistant Ruggedized Shells

## Additional Features Available on the Right Angle Include:

## 12 - Uses Industry Standard PG Gland

(PG gland compatible - size 21 or 29)

## 13 - Right Angle Backshell Lockable in 8 Directions for Cable Routing

## 14 - Integrated Strain Relief

## 15 - Ruggedized Right Angle Plug Shell

# Specifications

## SPEC Pak® Shell / Components

### Electrical

|                                      |              |
|--------------------------------------|--------------|
| UL Voltage Rating (AC/DC)            | 600          |
| Dielectric Withstanding Voltage (AC) | 3000         |
| Operating Temperature (°C)           | -40° to 105° |
| (°F)                                 | -40° to 221° |
| Flammability Rating of SPEC Shells   | UL 94V-0     |

### Mechanical

|                                 |          |
|---------------------------------|----------|
| Shells / Latch Mating Cycles    | 1500 Min |
| Connect / Disconnect (lbf)      | 18 Max   |
| (N)                             | 80 Max   |
| IP Rating                       | IP68     |
| UL50 Sec 30 Sealing Requirement | Pass     |

### Material

|                            |               |
|----------------------------|---------------|
| Shells (Plug / Receptacle) | PBT           |
| Latch                      | Nylon         |
| Holder                     | Polycarbonate |

## PPMX (4800 Series) Powerpole® Signal Contact

### Ratings for SPEC Pak® Use

### Electrical

|                                |              |
|--------------------------------|--------------|
| UL Current Rating (Amperes)    | 7            |
| Voltage Rating (AC/DC)         | 300          |
| Contact Barrel Wire Size (AWG) | #20 to #24   |
| (mm²)                          | 0.5 to 0.25  |
| Contact Retention Force (lbf)  | 12.0         |
| (N)                            | 53.0         |
| Insertion Force (lbf)          | 4.5 Max      |
| (N)                            | 20.0 Max     |
| Operating Temperature (°C)     | -20° to 105° |
| (°F)                           | -4° to 221°  |

### Mechanical

|                         |      |
|-------------------------|------|
| Mating Cycles (No load) | 1500 |
|-------------------------|------|

### Material

|                  |                       |
|------------------|-----------------------|
| Housing Material | PBT                   |
| Contact Material | Copper Alloy          |
| Contact Plating  | Gold, 50 Micro-inches |

NOTE: PPMX Contacts, up to 4 per housing

## Powerpole® Power (1327FP Series) & Ground (1827 Series) Contacts

### Ratings for SPEC Pak® Use

### Electrical

|                                         |              |
|-----------------------------------------|--------------|
| UL Current Rating (Amperes)             | 15 to 45     |
| CSA (30°C Rise) (Amperes)               | 10 to 29     |
| Voltage Rating (AC/DC)                  | 600          |
| Contact Barrel Wire Size (AWG) - Power  | 20 to 10     |
| - Ground                                | 14 to 10     |
| (mm²) - Power                           | 0.5 to 4.0   |
| - Ground                                | 1.5 to 4.0   |
| Average Contact Resistance (micro-ohms) | 600          |
| Contact Retention Force (lbf)           | 25           |
| (N)                                     | 111          |
| Operating Temperature (°C)              | -20° to 105° |
| (°F)                                    | -4° to 221°  |
| Flammability Rating                     | UL94 V-0     |

### Mechanical

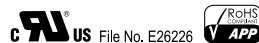
|                                                  |                 |
|--------------------------------------------------|-----------------|
| Mating Cycles                                    |                 |
| No Load                                          |                 |
| - Tin                                            | 1,500           |
| - Silver                                         | 10,000          |
| Under Load (Hot Plug 250 mating cycles @ 120V) * | 30A             |
| (Hot Plug 250 mating cycles @ 72V) *             | 45A             |
| Mechanical Shock (50 g)                          | Mil Standard    |
|                                                  | 202 213 Cond. A |
| Vibration (10 g)                                 | Mil Standard    |
|                                                  | 202 204 Cond. A |

### Material

|                                     |                  |
|-------------------------------------|------------------|
| Housing Material                    | Polycarbonate    |
| Touch Safe (Power / Signal Housing) | UL1977 Sec. 10.2 |
| Contact Material                    | Copper           |
| Contact Plating                     | Tin or Silver    |

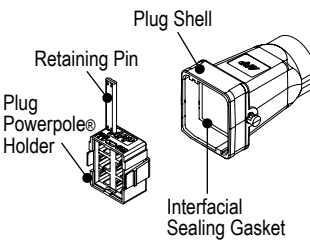
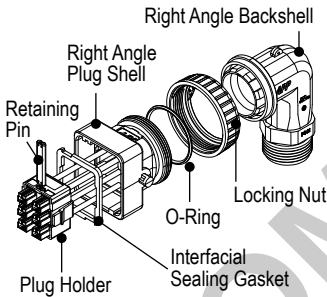
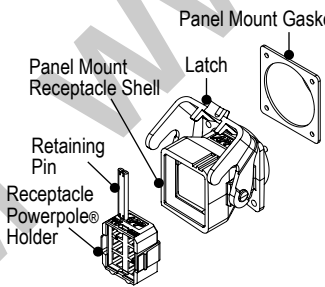
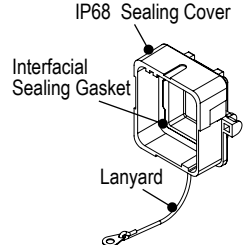
\* Hot Plug testing completed with individual Powerpole® housings

NOTE: Agency approvals - TUV (contact customer service) / Patents



# 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>S</b>                                                                                                                                                       | <b>K</b>                     | <b>2</b>                                                                             | <b>-</b> | <b>053</b>                                                                                                                         | <b>B06</b>                               |
| S = SPEC Pak® Series                                                                                                                                           | K = Black                    | 2 = Panel Mount Receptacle<br>6 = Straight Plug<br>8 = Right Angle Plug<br>9 = Cover |          | 053 = 53 mm - 6 Pole Shell<br>A53 = 53 mm - 6 Pole Right<br>Angle Shell, PG 21<br>B53 = 53 mm - 6 Pole Right<br>Angle Shell, PG 29 | B06 = PP15/45 Housing (any type), 6 Pole |
| <b>PLUG<br/>KIT</b>                                                                                                                                            |                              | <b>RIGHT ANGLE<br/>PLUG KIT</b>                                                      |          | <b>PANEL MOUNT<br/>RECEPTACLE KIT</b>                                                                                              |                                          |
|                                                                              |                              |    |          |                                                 |                                          |
|                                                                                                                                                                |                              |                                                                                      |          |                                                |                                          |
| <b>NOTE:</b><br>- Mounting hardware (4 each - M3.5 or #6 screws) not included<br>- Recommended torque for mounting hardware is 3½ to 5 in-lbf (0.4 to 0.56 Nm) |                              |                                                                                      |          |                                                                                                                                    |                                          |

## KIT ORDERING INFORMATION

| SPEC Pak® Kits |                                                                                                                                                                                                                                           | SPEC Pak® Kits |                                                                                                                                                                                                             | Component Replacement Parts |                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|
| Part Number    | Description                                                                                                                                                                                                                               | Part Number    | Description                                                                                                                                                                                                 | Part Number                 | Description                       |
| SK6-053B06     | Plug kit <ul style="list-style-type: none"><li>- Plug shell (includes interfacial sealing gasket)</li><li>- Powerpole® holder for plug</li><li>- Retaining pin</li></ul>                                                                  | SK2-053B06     | Receptacle kit <ul style="list-style-type: none"><li>- Panel mount gasket for receptacle</li><li>- Receptacle shell with latch</li><li>- Retention pin</li><li>- Powerpole® holder for receptacle</li></ul> | 114765P1                    | Panel mount gasket for receptacle |
| SK8-A53B06     | Right angle plug kit for PG 21 <ul style="list-style-type: none"><li>- Right angle backshell for PG 21</li><li>- Locking nut</li><li>- O-ring</li><li>- Plug shell</li><li>- Retaining pin</li><li>- Powerpole® holder for plug</li></ul> | SK9-053        | Cover kit (receptacle only) <ul style="list-style-type: none"><li>- Protective sealing (IP68) cover for receptacle with lanyard</li></ul>                                                                   | 2-8658P1                    | 6 position latch                  |
| SK8-B53B06     | Right angle plug kit for PG 29 <ul style="list-style-type: none"><li>- Right angle backshell for PG 29</li><li>- Locking nut</li><li>- O-ring</li><li>- Plug shell</li><li>- Retaining pin</li><li>- Powerpole® holder for plug</li></ul> |                |                                                                                                                                                                                                             | 2-8654P1                    | Right angle locking nut           |
|                |                                                                                                                                                                                                                                           |                |                                                                                                                                                                                                             | 114915P2                    | Right angle O-ring                |

## PART NUMBER PLAN

| Wire Protection<br>See pages 6 & 7<br>(4 characters)                                                                                                                                                                                                                                                                                            | Housing Arrangement<br>For more information see pages 8 & 9<br>(1 character)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contact<br>For more information see pages 8 & 9<br>(2 characters)                                                                                                                                                                                                                                                                                                                                                                                                                                                        | APP® Content<br>(3 characters)           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>PS</b>                                                                                                                                                                                                                                                                                                                                       | <b>0</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>00</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>A01</b>                               |
| 00 = None<br>PS = Plastic Short<br>PF = Plastic With Flex Spring<br>PM = Plastic Multi Hole<br>CT = Conduit Adapter Thread<br>CA = Conduit Adapter Push-in<br><br><b>NOTE:</b><br>(1) See PG Gland charts on page 6 & 7 for details.<br>(2) Panel mount receptacle side is always "00".<br>(3) For right angle, only PS and PM types available. | 0 = Custom Configuration - Use Next Section<br>A = AC, Single Phase<br>B = AC, 3 Phase, 3 Wire<br>C = DC, 2 Circuit, 4 Wire<br>D = DC, 2 Circuit, 4 Wire, With Ground<br>E = AC, 3 Phase, 4 Wire<br>F = AC, 3 Phase, 5 Wire<br>G = DC, 2 Circuit, 6 Wire<br>H = DC, 2 Circuit, 4 Wire With 8 Signal<br>J = AC, Single Phase With Signal<br>K = AC, 3 Phase, 3 Wire With 4 Signal<br>L = DC, 2 Circuit, 4 Wire, With 4 Signal<br>M = AC, 3 Phase, 3 Wire With 8 Signal<br>N = DC, 2 Circuit, 4 Wire, With Ground & 4 Signal<br>P = AC, 3 Phase, 4 Wire With 4 Signal<br>X = All Signal | 00 = Custom Configuration - Use Next Section<br>01 = 261G2 Contact for #10 to #14 AWG (4.0 to 1.5 mm²) Wire<br>02 = 200G1L Contact for #10 to #14 AWG (4.0 to 1.5 mm²) Wire<br>03 = 261G1 Contact for #12 to #16 AWG (2.5 to 1.0 mm²) Wire<br>04 = 1331 Contact for #12 to #16 AWG (2.5 to 1.0 mm²) Wire<br>05 = 262G1 Contact for #16 to #20 AWG (1.0 to 0.5 mm²) Wire<br>06 = 1332 Contact for #16 to #20 AWG (1.0 to 0.5 mm²) Wire<br>07 = 200G2L Contact for #16 to #20 AWG (1.0 to 0.5 mm²) Wire<br>99 = All Signal | Custom Configuration*<br>Contact Factory |

*Amperage Ratings are available on Page 9.*

### 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: SK6-053B06** Powerpole® housings, contacts and wire protection may be ordered separately, see pages 6, 7 and 10 for information.
- 2) To order complete standard configured SPEC Pak® connector kits (including internal Powerpole® housings and contacts) use Part Number Plan across the top of pages 4 and 5. **Standard SPEC Pak® Plug Connector Kit Configuration Example: SK6-053B06PS01-D02**
- 3) To order a custom configuration which is not listed on page 8 and 9, use APP® custom part number configurator on the APP® website, [www.andersonpower.com](http://www.andersonpower.com), or contact factory.

\* Custom configurations may not be UL Recognized.

# Wire Protection - PG Gland

## SPECIFICATIONS

| Material (Push-in Conduit) |                                 | Material (All Others) |                                 | Torque Requirements                                                                                          |
|----------------------------|---------------------------------|-----------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------|
| Shell                      | Nylon PA                        | Shell                 | Nylon PA 66 (UL94 V-2)*         | Cable Gland Body to Plug Housing<br>- Hand tighten until snug, tighten additional 1/8 - 1/4 turn with wrench |
| Gasket                     | TPE                             | Gasket                | EPDM                            |                                                                                                              |
| Color                      | Black                           | Color                 | Black                           |                                                                                                              |
| Mechanical                 |                                 | Mechanical            |                                 | Sealing Nut to Cable<br>- Hand tighten until snug, tighten additional 1/2 - 3/4 turn with wrench             |
| Operating Temp             | -30°C to 100°C (-22°F to 212°F) | Operating Temp        | -40°C to 105°C (-40°F to 221°F) |                                                                                                              |
| IP Rating                  | IP68                            | IP Rating             | IP68                            |                                                                                                              |
| Thread Type                | PG                              | UV Rating             | Equivalent to UL746C F1         |                                                                                                              |
|                            |                                 | Thread Type           | PG                              |                            |

\* Contact factory for UL94 V-0 material

NOTE: Only UL listed cable glands are UL recognized components when used with SPEC Pak® connector(s).

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

|             |             | Straight Gland Kit                               |                  |                    |                                        |                            |                                | Right Angle Gland Kit          |                              |                                    |
|-------------|-------------|--------------------------------------------------|------------------|--------------------|----------------------------------------|----------------------------|--------------------------------|--------------------------------|------------------------------|------------------------------------|
|             |             | Lock Nut                                         | Washer           | Body               | Seal                                   | Sealing Nut                |                                | Seal                           | Claw                         | Sealing Nut                        |
| APP®<br>P/N | APP®<br>P/N | Wire Protection<br>Designation<br>(4 Characters) | PG Gland<br>Size | Number<br>of Holes | Cable Range<br>Wire Outer Dia. mm (in) | Thread O. D.<br>C1 mm (in) | Panel Mounting<br>Hole mm (in) | Thread<br>Length<br>C2 mm (in) | Wrench Size<br>Lock Nut (mm) | Wrench Size<br>Sealing<br>Nut (mm) |
| Right Angle | Straight    |                                                  |                  |                    |                                        |                            |                                |                                |                              |                                    |
| RPS1P21-16X | PS1P21-16X  | PS01                                             | 21               | 1                  | 16.2 - 10.5 (0.64 - 0.41)              | 28.3 (1.11)                | 28.3 - 28.7 (1.11 - 1.13)      | 12 (0.47)                      | 36                           | 33                                 |
| RPS1P21-18X | PS1P21-18X  | PS02                                             | 21               | 1                  | 18.5 - 13 (0.73 - 0.51)                | 28.3 (1.11)                | 28.3 - 28.7 (1.11 - 1.13)      | 12 (0.47)                      | 36                           | 33                                 |
| RPS1P29-22X | N/A         | PS11                                             | 29               | 1                  | 22 - 16 (0.86 - 0.63)                  | 37 (1.46)                  | 37 - 37.4 (1.46 - 1.47)        | 12 (0.47)                      | 46                           | 42                                 |
| RPS1P29-25X | N/A         | PS12                                             | 29               | 1                  | 25 - 18 (0.98 - 0.71)                  | 37 (1.46)                  | 37 - 37.4 (1.46 - 1.47)        | 12 (0.47)                      | 46                           | 42                                 |

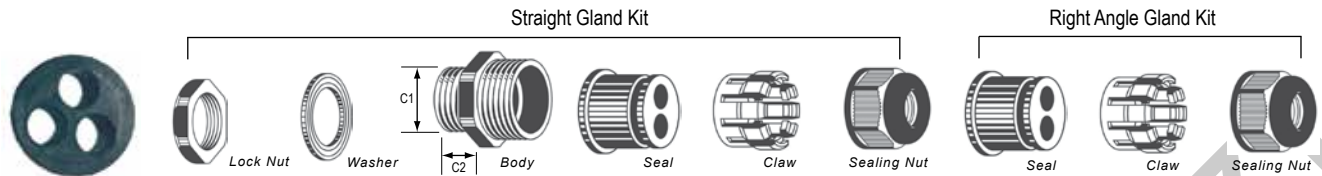
## STRAIGHT PLASTIC WITH FLEX SPRING - STD PACK 50 / UL LISTED

| APP®<br>P/N | Wire Protection<br>Designation<br>(4 Characters) | Cable Range<br>Wire Outer Dia. mm (in) | Thread O. D.<br>C1 mm (in) | Panel Mounting<br>Hole mm (in) | Thread<br>Length<br>C2 mm (in) | Wrench Size<br>Lock Nut (mm) | Wrench Size<br>Sealing Nut (mm) |
|-------------|--------------------------------------------------|----------------------------------------|----------------------------|--------------------------------|--------------------------------|------------------------------|---------------------------------|
| Straight    |                                                  |                                        |                            |                                |                                |                              |                                 |
| PF1P21-16X  | PF01                                             | 15.8 - 10.5 (0.62 - 0.41)              | 28.3 (1.11)                | 28.3 - 28.7 (1.11 - 1.13)      | 12 (0.47)                      | 36                           | 33                              |

## LOCK NUT FOR PG 21 CABLE GLANDS

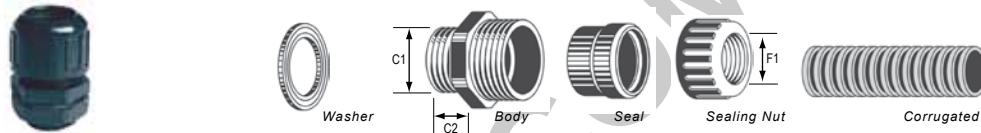
| APP® P/N | Wrench Size<br>Lock Nut (mm) | Std. Pkg.<br>Size |
|----------|------------------------------|-------------------|
| 124G30   | 36                           | 50                |

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



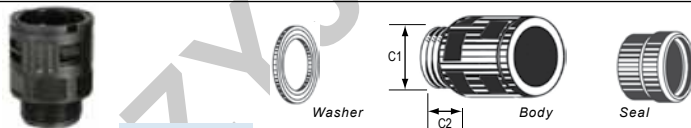
| APP® P/N    | APP® P/N  | Wire Protection Designation (4 Characters) | PG Gland Size | Number of Holes | Cable Range Wire Outer Dia. mm(in) | Thread O.D. C1 mm (in) | Panel Mounting Hole mm (in) | Thread Length C2 mm (in) | Wrench Size Lock Nut (mm) | Wrench Size Sealing Nut (mm) |
|-------------|-----------|--------------------------------------------|---------------|-----------------|------------------------------------|------------------------|-----------------------------|--------------------------|---------------------------|------------------------------|
| Right Angle | Straight  |                                            |               |                 |                                    |                        |                             |                          |                           |                              |
| RPS2P21-5X  | PS2P21-5X | PM21                                       | 21            | 2               | 5.2 - 3.6 (0.20 - 0.14)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS2P21-6X  | PS2P21-6X | PM22                                       | 21            | 2               | 6.5 - 5.1 (0.26 - 0.20)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS2P21-8X  | PS2P21-8X | PM23                                       | 21            | 2               | 8.7 - 6.4 (0.34 - 0.25)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS3P21-5X  | PS3P21-5X | PM31                                       | 21            | 3               | 5.2 - 3.6 (0.20 - 0.14)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS3P21-6X  | PS3P21-6X | PM32                                       | 21            | 3               | 6.2 - 4.8 (0.24 - 0.19)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS3P21-8X  | PS3P21-8X | PM33                                       | 21            | 3               | 8.0 - 6.2 (0.31 - 0.24)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS4P21-3X  | PS4P21-3X | PM41                                       | 21            | 4               | 3.1 - 2.0 (0.12 - 0.08)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS4P21-4X  | PS4P21-4X | PM42                                       | 21            | 4               | 4.1 - 3.0 (0.16 - 0.12)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS4P21-5X  | PS4P21-5X | PM43                                       | 21            | 4               | 5.2 - 3.8 (0.20 - 0.15)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS4P21-7X  | PS4P21-7X | PM44                                       | 21            | 4               | 7.3 - 5.6 (0.29 - 0.22)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS5P21-3X  | PS5P21-3X | PM51                                       | 21            | 5               | 3.6 - 2.6 (0.14 - 0.10)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS5P21-4X  | PS5P21-4X | PM52                                       | 21            | 5               | 4.6 - 3.6 (0.18 - 0.14)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS5P21-6X  | PS5P21-6X | PM53                                       | 21            | 5               | 6.0 - 4.6 (0.24 - 0.18)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS6P21-3X  | PS6P21-3X | PM61                                       | 21            | 6               | 3.6 - 2.6 (0.14 - 0.10)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |
| RPS6P21-5X  | PS6P21-5X | PM62                                       | 21            | 6               | 5.2 - 3.6 (0.20 - 0.14)            | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12.5 (0.49)              | 36                        | 33                           |

## 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 O. D. |
|------------|--------------------------------------------|-----------------------|------------------------|-----------------------------|--------------------------|---------------------------|------------------|---------------|
| CT1P21-21X | CT02                                       | 22.0 (0.87)           | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12 (0.47)                | 36                        | NGN - 17B        | 21.2 (0.83)   |
| CT1P21-26X | CT03                                       | 26.5 (1.04)           | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12 (0.47)                | 36                        | NGN - 22B        | 26.2 (1.03)   |
| CT1P21-28X | CT04                                       | 28.5 (1.12)           | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12 (0.47)                | 36                        | NGN - 23B        | 28.5 (1.12)   |

## 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) | APP® Conduit P/N | Conduit O. D. |
|-----------|--------------------------------------------|------------------------|-----------------------------|--------------------------|---------------------------|------------------|---------------|
| CAP21-28X | CA04                                       | 28.3 (1.11)            | 28.3 - 28.7 (1.11 - 1.13)   | 12 (0.5)                 | 36                        | NGN - 23B        | 28.5 (1.12)   |

## 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 - 17B | 16.7 (0.66)           | 21.2 (0.83)           | 1/2"         | OD21.2          | 50 (164)                |
| NGN - 22B | 21.2 (0.83)           | 26.2 (1.03)           | -            | -               | 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 configurations 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

|   |          |        |
|---|----------|--------|
| A | 1327G6FP | E      |
|   | E        | 1827G1 |
|   | 1327G7FP | E      |

#### AC 3 Phase, 3 Wire

|   |          |        |
|---|----------|--------|
| B | 1327G6FP | E      |
|   | 1327G7FP | 1827G1 |
|   | 1327FP   | E      |

#### DC 2 Circuit, 4 Wire

|   |          |          |
|---|----------|----------|
| C | 1327G6FP | 1327G6FP |
|   | E        | E        |
|   | 1327FP   | 1327FP   |

#### DC 2 Circuit, 4 Wire With Ground

|   |          |          |
|---|----------|----------|
| D | 1327G6FP | 1327G6FP |
|   | E        | 1827G1   |
|   | 1327FP   | 1327FP   |

#### AC 3 Phase, 4 Wire

|   |          |          |
|---|----------|----------|
| E | 1327G6FP | 1327G8FP |
|   | 1327G7FP | 1827G1   |
|   | 1327FP   | E        |

#### AC 3 Phase, 5 Wire

|   |          |           |
|---|----------|-----------|
| F | 1327G6FP | 1327G8FP  |
|   | 1327G7FP | 1827G1    |
|   | 1327FP   | 1327G16FP |

#### DC 2 Circuit, 6 Wire

|   |        |          |
|---|--------|----------|
| G | 1327FP | 1327G6FP |
|   | 1327FP | 1327G6FP |
|   | 1327FP | 1327G6FP |

#### DC 2 Circuit, 4 Wire With 8 Signal

|   |          |          |
|---|----------|----------|
| H | 1327G6FP | 1327G6FP |
|   | 4827G6   | 4827G6   |
|   | 1327FP   | 1327FP   |

#### AC Single Phase With 4 Signal

|   |          |        |
|---|----------|--------|
| J | 1327G6FP | E      |
|   | E        | 1827G1 |
|   | 1327G7FP | 4827G6 |

#### AC 3 Phase, 3 Wire With 4 Signal

|   |          |        |
|---|----------|--------|
| K | 1327G6FP | E      |
|   | 1327G7FP | 1827G1 |
|   | 1327FP   | 4827G6 |

#### DC 2 Circuit, 4 Wire With 4 Signal

|   |          |          |
|---|----------|----------|
| L | 1327G6FP | 1327G6FP |
|   | E        | 4827G6   |
|   | 1327FP   | 1327FP   |

#### AC 3 Phase, 3 Wire With 8 Signal

|   |          |          |
|---|----------|----------|
| M | 1327FP   | 1327G7FP |
|   | 4827G6   | 4827G6   |
|   | 1327G6FP | 1827G1   |

#### DC 2 Circuit, 4 Wire With Ground & 4 Signal

|   |          |          |
|---|----------|----------|
| N | 1327G6FP | 1327G6FP |
|   | 4827G6   | 1827G1   |
|   | 1327FP   | 1327FP   |

#### AC 3 Phase, 4 Wire With 4 Signal

|   |          |          |
|---|----------|----------|
| P | 1327G6FP | 1327G8FP |
|   | 1327G7FP | 1827G1   |
|   | 1327FP   | 4827G6   |

#### All Signal

|   |        |        |
|---|--------|--------|
| X | 4827G6 | 4827G6 |
|   | 4827G6 | 4827G6 |
|   | 4827G6 | 4827G6 |

## CONTINUOUS CURRENT RATINGS - POWER CONTACT CODE SELECTION

| Contact Code | Power Contacts                | Housing Configuration | Wire Size / Current Rating |       |       |       |       |      |
|--------------|-------------------------------|-----------------------|----------------------------|-------|-------|-------|-------|------|
|              |                               |                       | #10                        | #12   | #14   | #16   | #18   | #20  |
| 00           | Contacts Purchased Separately |                       |                            |       |       |       |       |      |
| 01           | 261G2                         | A - C                 | 29/40                      | 20/33 | 15/23 | —     | —     | —    |
|              |                               | D - G                 | 24/36                      | 20/25 | 15/21 | —     | —     | —    |
|              |                               | H - P                 | 29/40                      | 20/33 | 15/22 | —     | —     | —    |
| 02           | 200G1L                        | A - C                 | 27/37                      | 20/32 | 15/22 | —     | —     | —    |
|              |                               | D - G                 | 22/33                      | 18/25 | 15/20 | —     | —     | —    |
|              |                               | H - P                 | 27/37                      | 20/32 | 15/22 | —     | —     | —    |
| 03           | 261G1                         | A - C                 | —                          | 20/33 | 15/23 | 12/18 | —     | —    |
|              |                               | D - G                 | —                          | 20/25 | 15/21 | 12/18 | —     | —    |
|              |                               | H - P                 | —                          | 20/33 | 15/22 | 12/18 | —     | —    |
| 04           | 1331                          | A - C                 | —                          | 17/25 | 15/25 | 13/20 | —     | —    |
|              |                               | D - G                 | —                          | 15/25 | 15/22 | 13/18 | —     | —    |
|              |                               | H - P                 | —                          | 17/25 | 15/20 | 13/20 | —     | —    |
| 05           | 262G1                         | A - C                 | —                          | —     | —     | 12/18 | 10/15 | 7/10 |
|              |                               | D - G                 | —                          | —     | —     | 12/18 | 8/13  | 6/9  |
|              |                               | H - P                 | —                          | —     | —     | 12/18 | 10/15 | 7/10 |
| 06           | 1332                          | A - C                 | —                          | —     | —     | 13/20 | 9/14  | 6/9  |
|              |                               | D - G                 | —                          | —     | —     | 13/18 | 7/12  | 5/8  |
|              |                               | H - P                 | —                          | —     | —     | 13/20 | 9/14  | 6/9  |

### NOTES:

#### 1. Current ratings:

- First number represents current rating per pole for 30°C temperature rise (29 / 40)
- Second number is the maximum recommended current per pole based on a 25°C ambient (29 / 40)

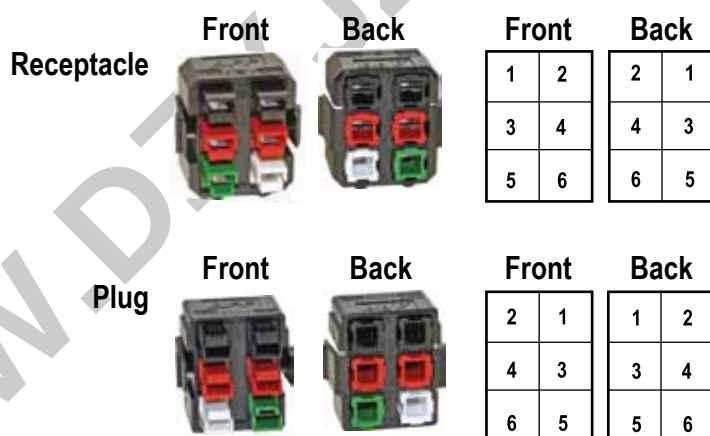
#### 2. Configuration H - P based on signal contacts crimped to #20 AWG wire and carrying 1 amp

#### 3. — Denotes wire size not appropriate for power contact

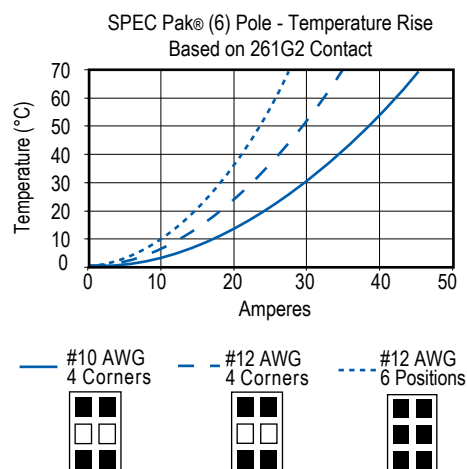
#### 4. Shaded boxes are cULus File No. E26226 pending.

#### 5. 1827G1 housing with 1830G1 or 1830G2 ground contact depending on primary contacts (see chart above). All signal housing kits (4850G6) come with two 4802G3 and two 4802G3 contacts.

## HOLDER LOCATIONS (VIEWS)



## TEMPERATURE CHART



# Individual Components

## POWERPOLE® HOUSINGS & CONTACTS

### Fingerproof PP15/45 Housing Only

Package Quantity:

Standard, 100 pieces - Bulk, 1,000 pieces

| Standard    | Bulk         |                |
|-------------|--------------|----------------|
| Part Number | 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, 100 pieces - Bulk, 1,000 pieces

| Standard    | Bulk        |                |
|-------------|-------------|----------------|
| Part Number | 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, 100 pieces - Bulk, 1,000 pieces

| Standard    | Bulk        |               |
|-------------|-------------|---------------|
| Part Number | Part Number | Description   |
| 1827G1      | 1827G1-BK   | Green Housing |

### Premate Ground Contacts

Loose Piece

Package Quantity 100

| 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, 100 pieces - Bulk, 1,000 pieces

| Standard                                     | Bulk        |                                 |
|----------------------------------------------|-------------|---------------------------------|
| Part Number                                  | 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

For additional housing colors please contact customer service.

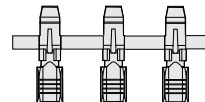
## CONTACT STYLES



Individual



Singulated Open Barrel



On a Reel

## PPMX (4800 SERIES) HOUSING & CONTACTS

### PPMX 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 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 Housing & Contact Kits

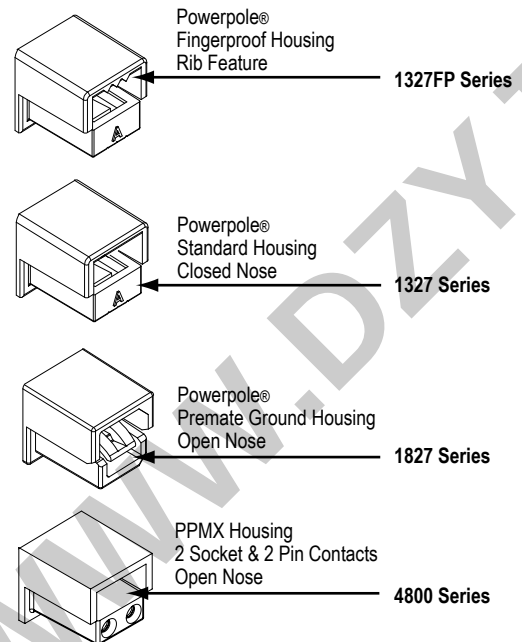
#### Package Quantity

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            |  | 1367G1 | N/A                    | N/A                       | N/A            |
| N/A                         | 1331                           |                             |  |        | N/A                    | N/A                       | N/A            |
| 262G1-LPBK                  | 262G2-LPBK                     | 1309G3 or 1309G8            |  | 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          |
| 200G1L-LPBK                 | 200G3L-LPBK                    |                             |  |        | 200G1L                 | 200G3L                    | 1385460        |
| 1830G1-LPBK                 | 1830G2-LPBK                    |                             |  |        |                        | 1830G1                    | 1830G2         |

\* 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

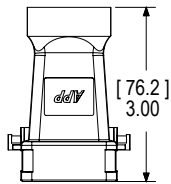
## APPLICATION TOOLING - PPMX CONTACTS

| 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              |                   |                                 |   |                      |   |                                     |

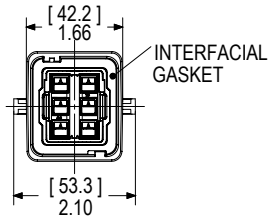
# Dimensions

## PLUG 6 POSITION FOR PP15/45 HOUSINGS

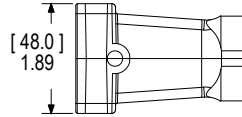
Top View



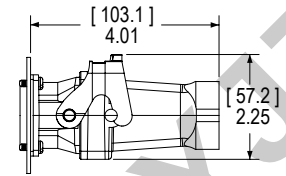
Front View



Side View

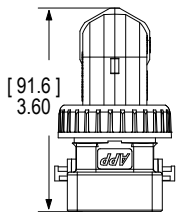


Mated Side View

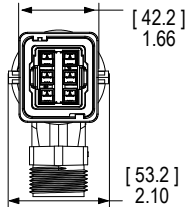


## RIGHT ANGLE PLUG 6 POSITION FOR PP15/45 - GLAND SIZE PG 21

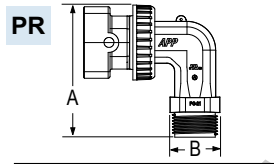
Top View



Front View

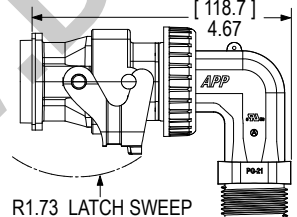


Side View



| PG Gland | - A -<br>mm | - A -<br>in. | - B -<br>mm | - B -<br>in. |
|----------|-------------|--------------|-------------|--------------|
| PG 21    | 104.7       | 4.12         | 36.4        | 1.43         |
| PG 29    | 105.5       | 4.15         | 47.4        | 1.86         |

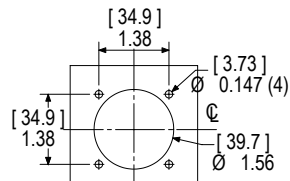
Mated Side View



For PG 29 dimensions, please see APP website

## RECEPTACLE 6 POSITION FOR PP15/45 HOUSINGS

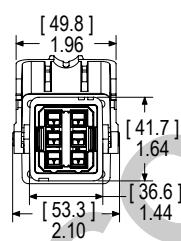
Panel Cut Out



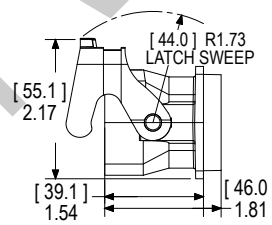
PANEL CUT OUT  $\varnothing$

(SAME AS 26482 & 5015 SHELL SIZE 24)

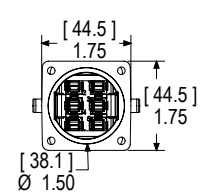
Front View



Side View



Back View

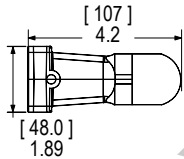


NOTE: Mounting hardware #6 screw / torque receptacle to panel 3/4 to 5 in-lbf (0.4 to 0.56 Nm)

## PG GLANDS

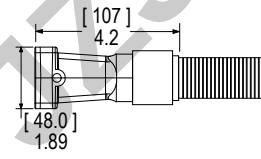
PS

Plastic Short



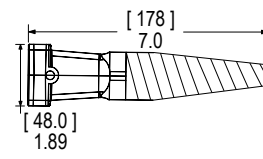
CT

Thread Conduit Adapter



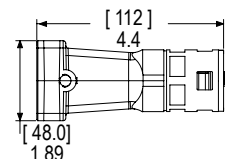
PF

Plastic Flex PG



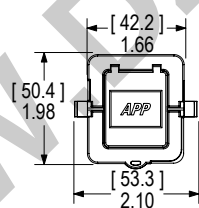
CA

Push-in Conduit Adapter

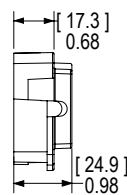


## RECEPTACLE COVER KIT

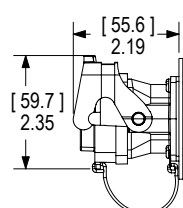
Front View



Side View



Mated Side View



All Data Subject To Change Without Notice

Patents

15052 DS-SPAK REV06

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