

# SPEC PAK®

## Solar 5 Position Mid Power

- Solar Power • Wind Power • DC Lighting • Inverters • Battery Backup • IP68 Rated
- LED Lighting • Solar Panels • Combiner Boxes • Hydro-Electricity • Micro Inverters



**APP**  
Anderson Power Products®

An **IDEAL** Company

## SPECIFICATIONS

### UL6703 MECHANICAL

#### Operating Temperature

UL 6703	-40 to 90°C	-40 to 194°F
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#### Electrical

#### Current Rating (Amperes)

UL 6703	37A
8 AWG	37A

#### Voltage Rating

600V
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#### Grounding

UL 2238, Sec 37.8	UL Tested
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#### Environmental Seal

UL6703	IP68 (mated only)
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### UL1977 MECHANICAL

#### Environmental Seal

IEC 60529	IP 68
UL 50E	UL Approved

#### Wire Size

8 AWG	8.4 mm <sup>2</sup>
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#### Operating Temperature

UL 1977	-40 to 105°C	-40 to 221°F
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#### Mating Cycles (no load)

250 min
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#### Mating Force (nominal)

28 lbf	125 N
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#### Unmating Force

12 lbf	53 N
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#### Contact Retention Force (min)

50 lbf	222 N
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#### Touch Safe (IEC 60529)

IP 20 (female side only)
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#### Enclosure Ratings

UL 50E 4/4x *
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#### Electrical

#### Current Rating (Amperes)

UL 1977	CSA	
8 AWG	60A	40A

#### Voltage Rating

UL 1977 (AC/DC)	600V
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#### Grounding

UL 2238, Sec 37.8	Impedance
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#### Contact Resistance (average)

0.300 Milliohms
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\* Need stainless hardware- type 304 or 316

### MATERIALS

#### Shell, Housing & Sealing Nut

PC / PBT

#### Lanyard

Nylon / Polyester

#### Contact Holders

PBT- GF

#### Contact Retention Clip

Be-Cu

#### Latch / Screws

Stainless Steel

#### Panel Gasket

Silicone

#### Sealing Gland

EPDM

#### Flammability

UL94 V-0

#### Glow Wire

960°C (GWFI)

825°F (GWIT)

#### Weatherability

UL 746C F1

#### Sockets

Copper	
SC08-GH	Ag plating over Ni
SC08-SN	Ag plating over Ni

#### Pins

Copper	
PP08SGH	Ag plating over Ni
PC08SSN	Ag plating over Ni

Silver = Ag Nickel = Ni

## IEC 61984

### ATTRIBUTES

#### AMP Rating AC

60A

#### Voltage Rating AC

800V AC (operational)

#### Finger Safety \*\*

IEC 60529

#### Protection Degree

IP20 Unmated, IP68 Mated

#### Wire Size Tested

8 AWG

#### Contact Series Tested

PC08SSN, PP08SGH SC08-SN, SC08-GH

#### Climatic Testing (Cold, Heat & MFG)

IEC 60512 Test -11j, 11i & 11g

#### Cycle Life

IEC 60512 Test 9A- 5000 Cycles

#### Mechanical Strength Impact

IEC 60512 @ 29.5 Inches -  
dropped 8 times

#### Temperature Range

-40 to 105°C, -40 to 221°F

### PROTECTION

#### Touch Safety with Finger Proof Housings & Wire Contacts

\* In mated and unmated condition, for standard 8 AWG wire contacts (only)

\*\* Female side unmated

### IEC 60950-1

#### Creepage / Clearance per IEC 60950-1

9.55 (mated or unmated)

#### Material Group

IIIa

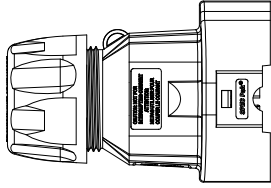
\* In mated and unmated condition, for standard 8 AWG wire contacts (only)

\*\* Female side unmated

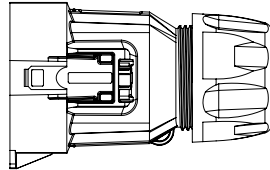
## ORDERING INFORMATION

SPEC Pak® is a highly configurable environmentally sealed connector. For convenience, follow the steps below to determine component part numbers.

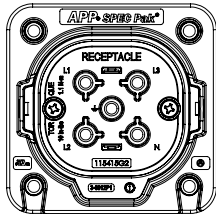
### Step 1: Select Shell



**PK1-076D05**  
Inline Receptacle Shell



**PK6-076D05**  
Plug Shell

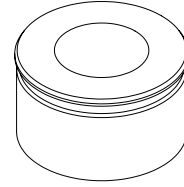


**PK2-076D05**  
Panel Mount Receptacle & Gasket

Description	Part Numbers
Minimum Quantity	25
Inline Receptacle Shell	PK1-076D05
Plug Shell	PK6-076D05
Panel Mount Receptacle & Gasket	PK2-076D05
Receptacle Cover Kit	PK9-076 (shown on back page)
Plug Cover Kit	PK9P-076 (shown on back page)

- Contact holders are available with multiple keys, please inquire.

### Step 2: Select Sealing Gland



\* Define:

	Number of Wires	Wire OD
Wires		
- Discrete	_____	_____
- Bundled	_____	_____

- \* Select wire protection that will accommodate the number of wires and outer diameter (OD) of the wire used in your application.
- \* Wire protection is required for use with inline receptacle shell (PK1-076D05) and plug shell (PK6-076D05) to obtain IP68 seal.

Number of Holes	Cable Range Wire Outer Diameter mm (in)	Sealing Grommet Part Number Only
Minimum Quantity		10
1	20 mm (0.79)	B02266P7

- For other wire configurations contact manufacturer

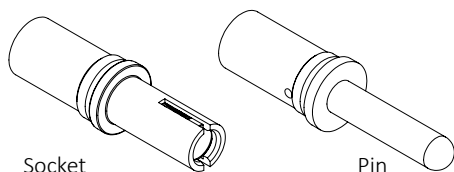
#### Wire Test Approval

- Type TC-ER, 8 AWG 5/C sunlight resistant
- Rated minimum 90°C dry: 90°C wet
- 600V with outer diameter of cord 20 mm (0.79)

#### Torque Requirements

- Hand tighten. Using a 44 mm wrench or strap wrench, tighten an additional 3/4—1 turn.
- 7.9 Nm (70 in-lb)

### Step 3: Select Contacts



\* Define:

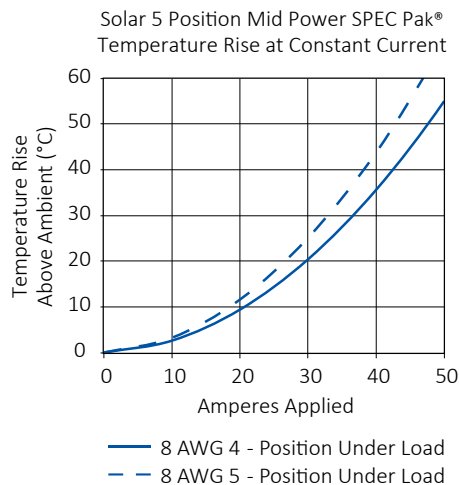
	Number of Circuits	Wire Gauge
Contacts		
- Power	_____	_____
- Other	_____	_____

Amps (continuous): \_\_\_\_\_ Max amps at \_\_\_\_\_ Volts

\* Select power and/or ground contacts appropriate for your wire size (AWG or mm<sup>2</sup>)

- Sockets are used in the receptacles (part numbers PK1-076D05 & PK2-076D05)
- Pins are used in the plug (part number PK6-076D05)
- Solid wires not recommended

### TEMPERATURE CHART - PER UL 1977



Description	Part Numbers
Minimum Quantity	10
Power Drawer® 8 AWG Socket Crimp, Hot Plug/Ground	SC08-GH
Power Drawer® 8 AWG Socket Crimp, Standard Mate	SC08-SN
Power Drawer® 8 AWG Pin Crimp, Hot Plug/Ground	PP08SGH
Power Drawer® 8 AWG Pin Crimp, Standard Mate	PC08SSN

### TOOLING INFORMATION

Wire Size		Part Number	Description	Crimp Tools						
AWG	MM <sup>2</sup>	Power Contact		Pneumatic Bench Tool	+ Die	+ Locator	OR	Daniels Mfg Tool *		
								Tool	Die	Locator
8 to 10	8.4 to 6.0	SC08-GH	POWER DRAWER CONT. 8 AWG SOC.CRIMP, FIRST MATE GROUND	1387G1	1388G6	1389G19	OR	M22520/23-01	M22520/23-2	M22520/23-9
		SC08-SN	POWER DRAWER CONT. 8 AWG SOC.CRIMP, STD.MATE					M22520/23-01	M22520/23-2	M22520/23-9
		PP08SGH	POWER DRAWER CONT. 8 AWG PIN,CRIMP, STD.MATE, FIRST MATE GROUND					M22520/23-01	M22520/23-2	M22520/23-9
		PC08SSN	POWER DRAWER CONT. 8 AWG PIN,CRIMP, STD.MATE					M22520/23-01	M22520/23-2	M22520/23-9
		M81969/14-06	INSERT AND EXTRACT TOOL							
N/A		PKT-076TO1	MID POWER SOLAR SPEC PAK RELEASE TOOL							

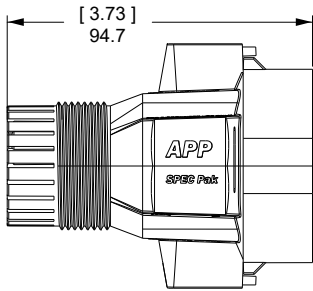
\* Must contact Daniels directly for this tooling option, [www.dmctools.com](http://www.dmctools.com)



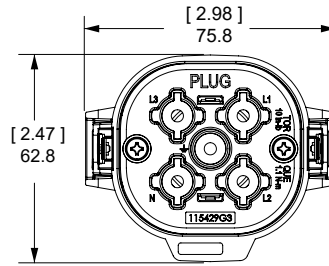
# DIMENSIONS

## Plug Shell | PK6-076D05

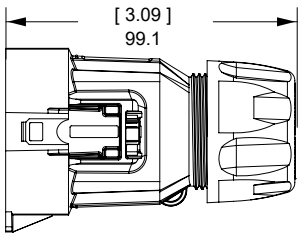
Top View



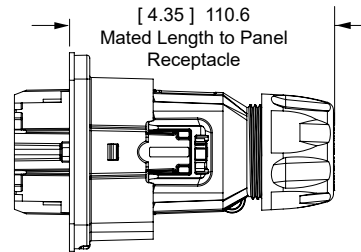
Front View



Side View

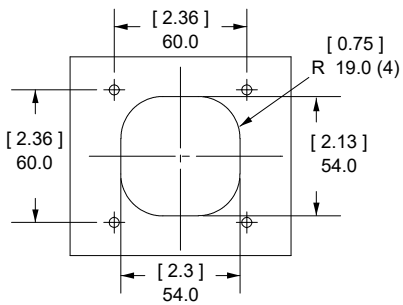


Mated View

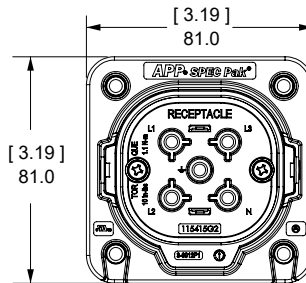


## Panel Mount Receptacle & Gasket | PK2-076D05

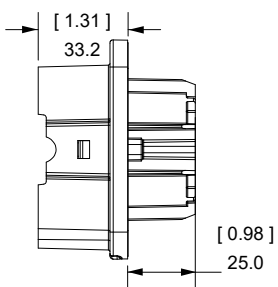
Panel Cut Out



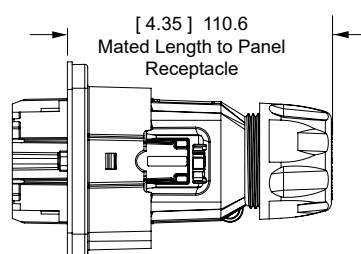
Front View



Side View

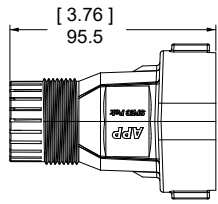


Mated View

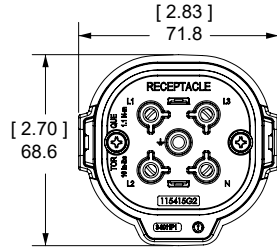


## Inline Receptacle Shell | PK1-076D05

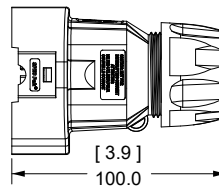
Top View



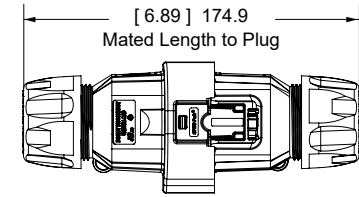
Front View



Side View

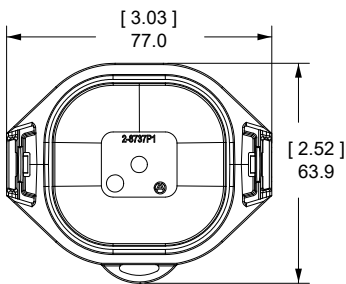


Mated View



## Plug Cover Kit | PK9P-076

Front View

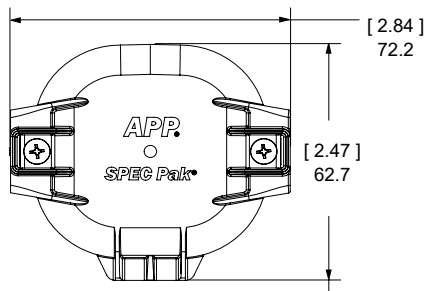


Side View

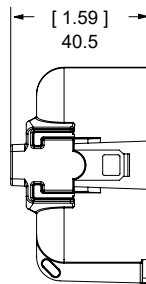


## Receptacle Cover Kit | PK9-076

Front View



Side View



\* Covers are only for transporting conditions; not UL6703 approved.

## Your Best Connection™

All Data Subject To Change Without Notice 2020-0110 DS-MPSPAK5P-S REV 1

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