

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
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8 AWG	37A
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Voltage Rating

600V

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 ²
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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

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)

Enclosure Ratings

UL 50E 4/4x *

Electrical

Current Rating (Amperes)

UL 1977	CSA
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8 AWG	60A	40A
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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

* 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

SC08-GH Ag plating over Ni

SC08-SN Ag plating over Ni

Pins

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

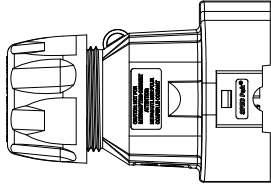
* In mated and unmated condition, for standard 8 AWG wire contacts (only)

** Female side unmated

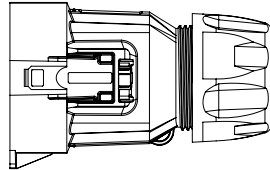
ORDERING INFORMATION

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

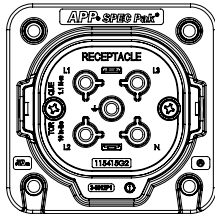
Step 1: Select Shell



PK1-076D05
Inline Receptacle Shell



PK6-076D05
Plug Shell

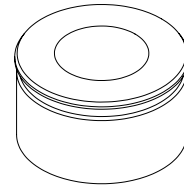


PK2-076D05
Panel Mount Receptacle & Gasket

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

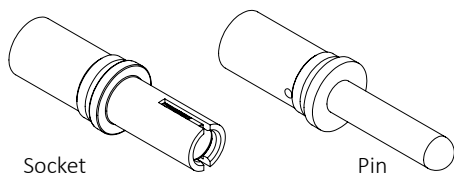
Wire Test Approval

- 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:

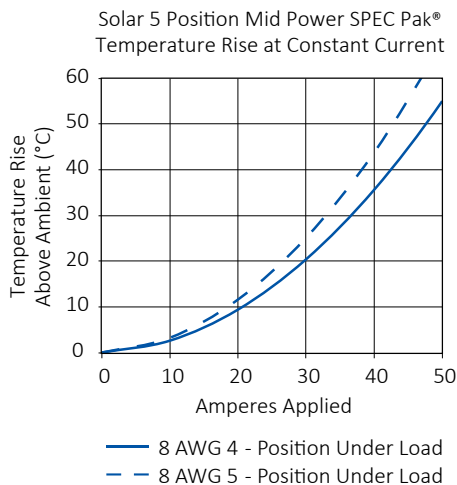
	Number of Circuits	Wire Gauge
Contacts		
- Power		
- Other		

Amps (continuous): ____ Max amps at ____ Volts

* Select power and/or ground contacts appropriate for your wire size (AWG or mm²)

- 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

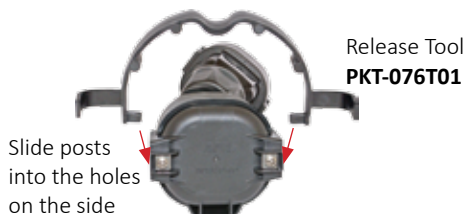


Description	Part Numbers
Minimum Quantity	10
Power Drawer® 8 AWG Socket Crimp, Hot Plug/Ground	SC08-GH
Power Drawer® 8 AWG Socket Crimp, Standard Mate	SC08-SN
Power Drawer® 8 AWG Pin Crimp, Hot Plug/Ground	PP08SGH
Power Drawer® 8 AWG Pin Crimp, Standard Mate	PC08SSN

TOOLING INFORMATION

Wire Size		Part Number		Crimp Tools								
AWG	MM²	Power Contact	Description	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		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									

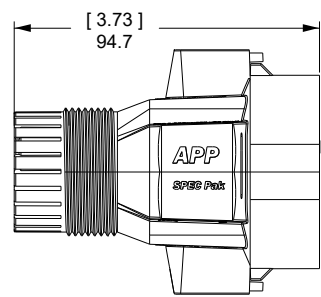
* Must contact Daniels directly for this tooling option, www.dmctools.com



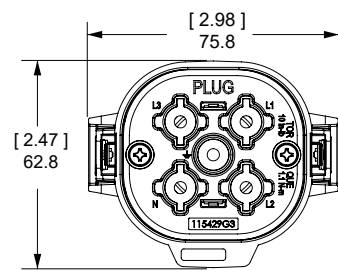
DIMENSIONS

Plug Shell | PK6-076D05

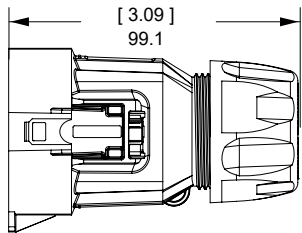
Top View



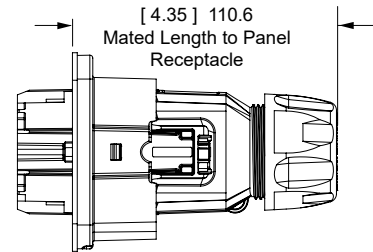
Front View



Side View

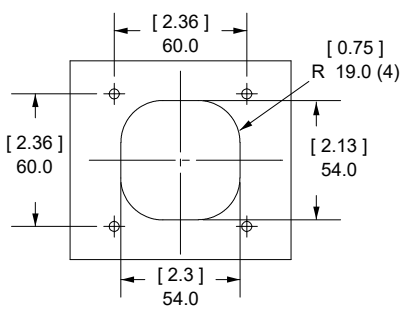


Mated View

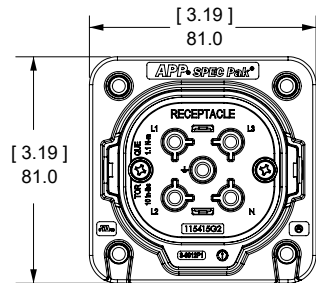


Panel Mount Receptacle & Gasket | PK2-076D05

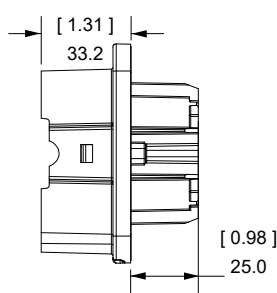
Panel Cut Out



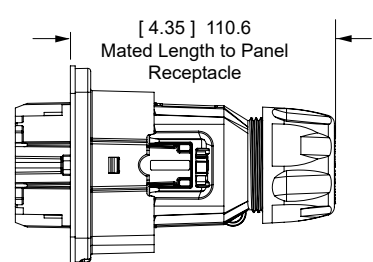
Front View



Side View

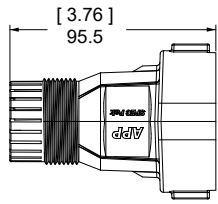


Mated View

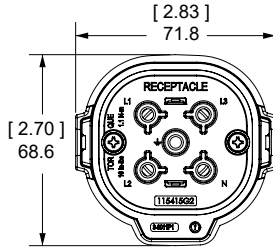


Inline Receptacle Shell | PK1-076D05

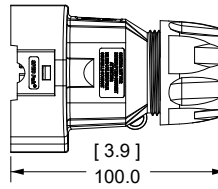
Top View



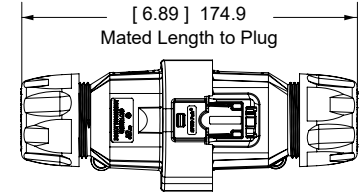
Front View



Side View

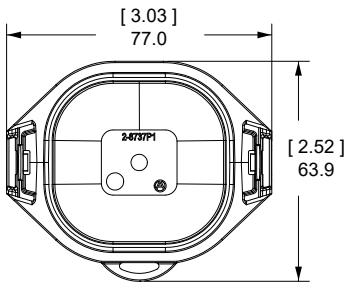


Mated View



Plug Cover Kit | PK9P-076

Front View

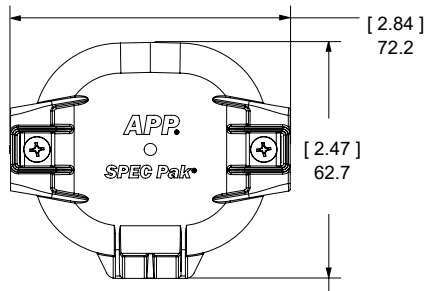


Side View

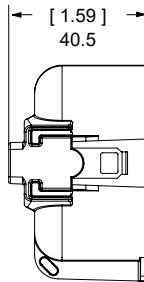


Receptacle Cover Kit | PK9-076

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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