

# MINI 3 POLE 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's new SPEC Pak® Mini 3 position connector is a small, IP68 sealed interconnect solution that provides up to 3 contacts and is UL rated to carry up to 22 amps per contact at 600 volts. This connector is ideal for applications requiring power or power and signal combined in a compact environmentally sealed (IP68) package. Contacts are available for wires ranging from 24 AWG to 14 AWG. Contacts are 30μ gold plated to provide low resistance and up to 500 mating cycles. The male contacts are also available in 3 lengths to enable sequencing as required. The connectors meet the UL1977 Sec 10.2 touch safe requirements and have an integral latch to prevent accidental un-mating. The SPEC Pak® Mini 3 connectors are manufactured of durable polycarbonate material and meet UL94 V-0 flame resistance requirements.



## Features

- **Environmentally Sealed**  
- IP68 rated  
- Passes UL50 Sec. 36
- **High Power In Compact Housing**  
*Housings provide up to three contacts rated up to 22 amps at 600 volts*
- **Touch Safe Housings**  
*Meets UL1977 Sec.10.2*
- **Integral Latch**  
*Prevents accidental un-mating*
- **Male Contacts Available In 3 Lengths**  
*Allows sequencing of mating contacts*
- **Ruggedized Shells**  
*Manufactured of durable polycarbonate that meets UL94 V-0 flammability requirements*

## SPECIFICATIONS

		Max Amps Per Wire Size	
		UL	CSA
<b>Electrical</b>			
UL Voltage Rating	600V		
Operating Temperature (°C)	-20 to 105		
(°F)	-4 to 221		
Flammability Rating	UL94 V-0 UL746C (12mm)		
<b>Mechanical</b>			
Mating Cycles	500		
Submersion Test UL50 Sec. 36	Pass		
IP Rating	IP68		
Touch Safe	UL1977 Sec 10.2		
Contact Resistance (milliohms)	3		
Contact Retention (lbf)	18		
(N)	80		
Insertion / Extraction (lbf)	5		
(N)	22		
Mechanical Shock (50g)	EIA Standard 364-27 Test Condition A		
Vibration (7.5g)	EIA Standard 364-28 Test Condition VB		
<b>Wire Size</b>		<b>UL</b>	<b>CSA</b>
20AWG		16	10
18AWG		17	12
16AWG		20	12
14AWG		22	16
1.5mm		20 / 0.5	-
2.5mm		20 / 0.5	-

# Part Number Configurator

## PART NUMBER PLAN

SPEC Pak® Series (1 Fixed Character)	Shell Color (1 Character)	Shell Style (1 Character)	Dash	Style Size (3 Characters)	Insert Arrangement (3 Characters)
<b>S</b>	<b>K</b>	<b>1</b>	<b>-</b>	<b>016</b>	<b>M03</b>
S = SPEC Pak® Series	K = Black	1 = Inline Receptacle 6 = Straight Plug		016 = 16 mm	M03 = 3 Pole

## ORDERING INFORMATION

### SPEC Pak® Shell Kits Standard Pack Qty 25

APP®  
Part

Number	Description
SK1-016M03	Receptacle Shell Kit
SK6-016M03	Plug Shell Kit

### Wire Sealing Grommets (Required for IP68 Sealing)

---- APP® Part Number ----

Standard Qty 500	Packaged Qty 50	Description
114916P1	114916P1-50	24 - 20 - wire OD 0.047 - 0.075 (1.2 mm - 1.9mm) Orange
114916P2	114916P2-50	20 - 16 - wire OD 0.073 - 0.090 ( 1.86 mm - 2.4mm) Yellow
114916P3	114916P3-50	16 - 14 - wire OD 0.100 - 0.130 ( 2.5 mm - 3.2mm) Tan

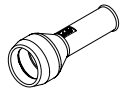
NOTE:

- For IP68 sealing of custom configurations, order 1 wire seal for every 1 pin and/or socket contact that is ordered.
- Maximum wire OD not to exceed 2.7 mm (0.105").

### Wire Protection (optional)

Not Required for IP68 Sealing

Standard Qty 500	Packaged Qty 50	Wire Protection Designation	Description
2-8703P3	2-8703P3-50	PB01	Max ID 0.217 ( 5.5 mm)
2-8703P4	2-8703P4-50	PB02	Max ID 0.256 ( 6.5 mm)



### Sealing Plug (optional)

---- APP® Part Number ----

Standard Qty 500	Packaged Qty 50	Description
114916P4	114916P4-50	Sealing Plug - white



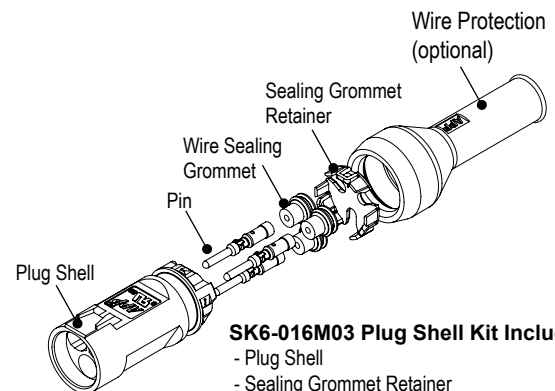
### Cover Kit

APP®

Part Number	Description
SK9-016	Receptacle Cover Kit



## EXPLODED PLUG CONNECTOR

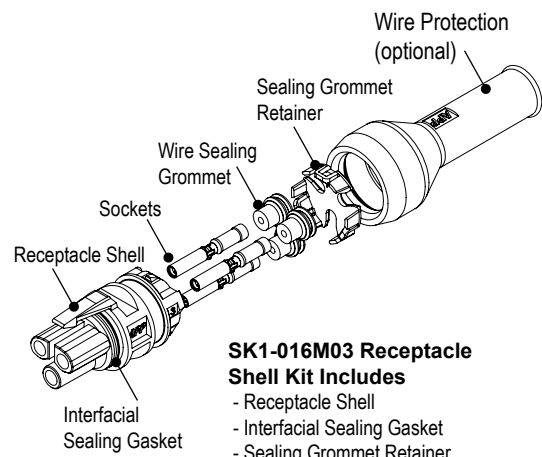


### SK6-016M03 Plug Shell Kit Includes

- Plug Shell
- Sealing Grommet Retainer

Sold Separately: Pins, Wire Sealing Grommets & Wire Protection.

## EXPLODED RECEPTACLE CONNECTOR



### SK1-016M03 Receptacle Shell Kit Includes

- Receptacle Shell
- Interfacial Sealing Gasket
- Sealing Grommet Retainer

Sold Separately: Sockets, Wire Sealing Grommets & Wire Protection.

## PART NUMBER PLAN

Wire Protection (4 Characters)	Dash	Housing Arrangement (3 Characters)	Dash	Custom Configuration (3 Characters)
<b>XXXX</b>	-	<b>XXX</b>	-	<b>A01</b>
0000 = None PB01 = Max ID 0.217 (5.5mm) PB02 = Max ID 0.256 (6.5mm)		<b>Plug</b> P00 - Custom Configuration (Pin & Wire Sealing Grommets) P41 = 3 each #16 to #14 AWG (PM16P1416S30 Pin & 114916P3 Wire Sealing Grommet) P42 = 3 each #20 to #16 AWG (PM16P1620S30 Pin & 114916P2 Wire Sealing Grommet) P43 = 3 each #24 to #20 AWG (PM16P2024S30 Pin & 114916P1 Wire Sealing Grommet)		Custom Configuration*
		<b>Receptacle</b> S00 - Custom Configuration (Socket & Wire Sealing Grommets) S41 = 3 each #16 to #14 AWG (PM16S1416S32 Socket & 114916P3 Wire Sealing Grommet) S42 = 3 each #20 to #16 AWG (PM16S1620S32 Socket & 114916P2 Wire Sealing Grommet) S43 = 3 each #24 to #20 AWG (PM16S2024S32 Socket & 114916P1 Wire Sealing Grommet)		

### Part Numbering Notes:

- To Order Mini 3 Pole SPEC Pak® shell kits only (no contacts or wire sealing grommets), use part numbering on page 2 only. Contacts, wire seals and wire protection may be ordered separately.
- To order customer configured Mini 3 Pole SPEC Pak® connectors (including contacts, wire sealing grommet and wire protection) use Part Number Plan across the top of page 2 and 3. **Customer configured Mini 3 Pole SPEC Pak® Plug connector example: SK6-016M03PB01-P41**  
**\* Custom configured Mini 3 Pole SPEC Pak® Plug connector example: SK6-016M03PB01-P00-A01**

\* Custom configuration may not be UL recognized.

## ORDERING INFORMATION

### Pin Contacts

APP® Part Number		Housing Arrangement Designation	- Wire -	
Standard Qty 500	Packaged Qty 50		AWG	mm²
Standard Length 7.7mm				
PM16P2024S30	PM16P2024S30-50	P43	#24 / 20	0.50 / 0.75
PM16P1620S30	PM16P1620S30-50	P42	#20 / 16	0.50 / 1.5
PM16P1416S30	PM16P1416S30-50	P41	#16 / 14	1.5 / 2.5

### When purchasing the following part numbers, it will be considered a custom configuration

APP® Part Number		Housing Arrangement Designation	- Wire -	
Standard Qty 500	Packaged Qty 50		AWG	mm²
Pre-Mate 8.5mm				
PM16P2024B30	PM16P2024B30-50	P00	#24 / 20	0.50 / 0.75
PM16P1620B30	PM16P1620B30-50	P00	#20 / 16	0.50 / 1.5
PM16P1416B30	PM16P1416B30-50	P00	#16 / 14	1.5 / 2.5
Post-Mate 6.6mm				
PM16P2024C30	PM16P2024C30-50	P00	#24 / 20	0.50 / 0.75
PM16P1620C30	PM16P1620C30-50	P00	#20 / 16	0.50 / 1.5
PM16P1416C30	PM16P1416C30-50	P00	#16 / 14	1.5 / 2.5

#### NOTE:

- Pre-mate 9.3 contacts can not be used.
- For IP68 sealing of custom configurations, order 1 wire seal for every 1 pin and/or socket contact that is ordered.

### Socket Contacts

APP® Part Number		Housing Arrangement Designation	- Wire -	
Standard Qty 500	Packaged Qty 50		AWG	mm²
PM16S2024S32	PM16S2024S32-50	S43	#24 / 20	0.50 / 0.75
PM16S1620S32	PM16S1620S32-50	S42	#20 / 16	0.50 / 1.5
PM16S1416S32	PM16S1416S32-50	S41	#16 / 14	1.5 / 2.5

#### NOTE :

- For IP68 sealing of custom configurations, order 1 wire seal for every 1 pin and/or socket contact that is ordered.

### Tooling

Part Number	Description
PM1000G1	Four Indent Hand Crimp Tool for Pins and Sockets
TM0001	Mil Standard Hand Crimp Tool (Locator/Turret Required)
TP0001	Pneumatic Crimp Tool (Locator/Turret Required)
TL0001	Pin Locator/Turret for TM0001 or TP0001
TL0002	Socket Locator/Turret for TM0001 or TP0001
PM1001G1	Loose Piece Crimp Machine (Semi automatic)
PM1002G1	Contact Insertion Tool
PM1003G1	Contact Extraction Tool

**PM1000G1**



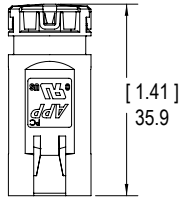
**TM0001**



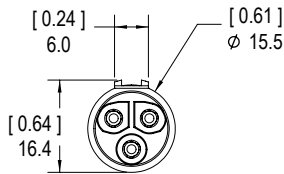
# Dimensions

## DIMENSIONS - PLUG

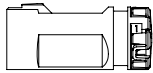
Top View



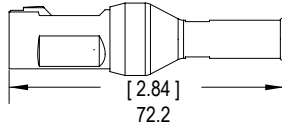
Front View



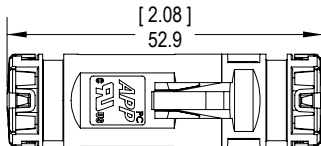
Side View



Side View With Optional Wire Protection

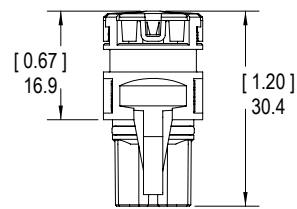


Mated View - Plug & Receptacle

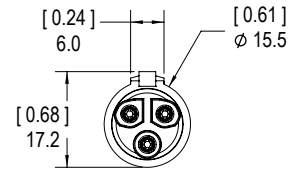


## DIMENSIONS - RECEPTACLE

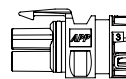
Top View



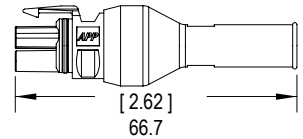
Front View



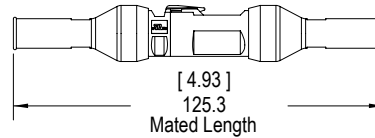
Side View



Side View With Optional Wire Protection

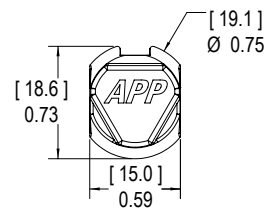


Mated View - Plug & Receptacle With Optional Wire Protection

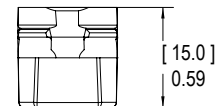


Receptacle Cover Kit

Front View



Side View



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Anderson Power Products:

[114916P4-50](#) [114916P1](#) [114916P1-50](#) [114916P2](#) [114916P2-50](#) [114916P3](#) [114916P3-50](#) [114916P4](#) [2-8703P3](#)  
[2-8703P3-50](#) [2-8703P4](#) [2-8703P4-50](#) [SK1-016M03](#) [SK6-016M03](#) [SK9-016](#) [PM16P1416B30-50](#) [PM16P1620B30-50](#)  
[PM16P2024B30-50](#) [SK6-A95H03PM21-R20](#) [SK6-076C04PS01-B70](#) [SK1-016M03PB02-S42](#) [SK6-053B06CA04-L01](#)  
[SK1-A95H02PM21-R84](#) [SK1-050B04PS01-B05](#) [SK6-B95H03PS03-A22](#) [SK6-053B06PS01-D02](#) [SK6-016M03PB02-](#)  
[P42](#) [SK6-076C04PS01-000-B01](#) [SK6-076C04PM23-Z70](#) [SK6-A95H03PS05-A29](#) [SK1-A95H03PM21-R20](#)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.