# MINSPECTATE Sealed Power For Environmental Connections

Marine | Wind Power | Lighting | Machine Tool | Industrial Automation |

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

TransportationPumpsGround SupportMotorSolar PowerHarsh Environments



## SPECIFICATIONS

	Electrical	600)/	Wire	Max Am Wire S	-
	UL Voltage Rating	600V	Size	UL	CSA
	Operating Temperature (°C) (°F)	-20 to 105 -4 to 221	20AWG	16	10
2	Flammability Rating	UL94 V-0	18AWG 16AWG	17 20	12 12
	Mechanical	UL746C (12mm)	14AWG	22	16
	Mating Cycles	500	1.5mm	20/0.5	-
	Submersion Test UL50 Sec. 36	Pass	2.5mm	20 / 0.5	-
	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			

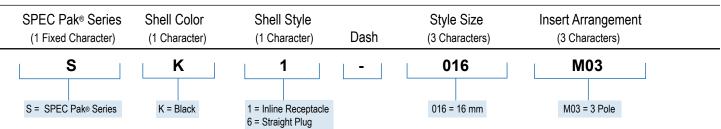
Test Condition VB





## Part Number Configurator

## PART NUMBER PLAN



## ORDERING INFORMATION

## EXPLODED PLUG CONNECTOR

#### 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	Packaged	
Qty 500	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:

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

2. Maximum wire OD not to exceed 2.7 mm (0.105").

## Wire Protection (optional)

#### Not Required for IP68 Sealing

APP® F	Part Number	Wire	
Standard	Packaged	Protection	
Qty 500	Qty 50	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)

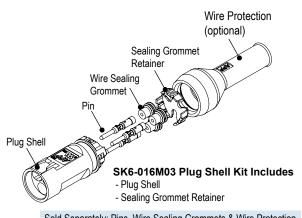
### Sealing Plug (optional)

APP® F	Part Number	Ŵ	
Standard Packaged		O De	
Qty 500	Qty 50	Description	
114916P4	114916P4-50	Sealing Plug	- white

### **Cover Kit**

APP®	
Part Number	Description
SK9-016	Receptacle Cove

Cover	Kit

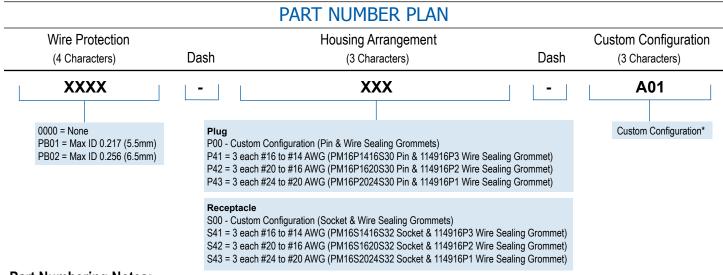


Sold Separately: Pins, Wire Sealing Grommets & Wire Protection.

## EXPLODED RECEPTACLE CONNECTOR



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



## Part Numbering Notes:

1. 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.

2. 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. <u>Customer configured Mini 3 Pole SPEC Pak® Plug connector example: SK6-016M03PB01-P41</u> \* <u>Custom configured Mini 3 Pole SPEC Pak® Plug connector example: SK6-016M03PB01-P00-A01</u>

\* Custom configuration may not be UL recognized.

## ORDERING INFORMATION

## **Pin Contacts**

		Housing		
APP® Part Number		Arrangement	- Wire -	
Standard Qty 500	Packaged Qty 50	Designation	AWG	mm²
Standard Length 7.7	mm			
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

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:

1. Pre-mate 9.3 contacts can not be used.

2. For IP68 sealing of custom configurations, order 1 wire seal for every 1

pin and/or socket contact that is ordered.

## **Socket Contacts**

		Housing Arrangement	- Wire -	
Standard Qty 500	Packaged Qty 50	Designation	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 :

1. 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

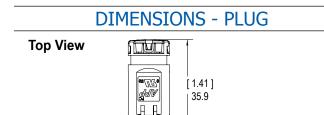
PM1000G1



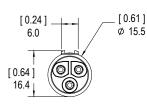
TM0001



## Dimensions



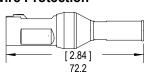
### **Front View**



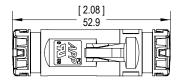
#### Side View

Side View With Optional Wire Protection



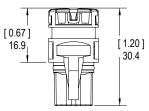


## Mated View - Plug & Receptacle

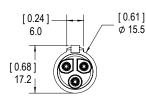


## **DIMENSIONS - RECEPTACLE**

**Top View** 



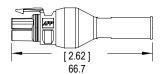
**Front View** 



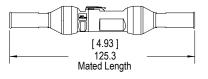
Side View

## Side View With Optional Wire Protection

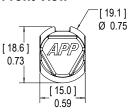




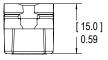
## Mated View - Plug & Receptacle With Optional Wire Protection



#### Receptacle Cover Kit Front View



Side View



All Data Subject To Change Without Notice Patents Pending

DS-MINISPAK REV 01

HEADQUARTERS: Anderson Power Products®, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA T:978-422-3700 EUROPE: Anderson Power Products® Ltd., Unit 3, Europa Court, Europa Boulevard, Westbrook, Warrington, Cheshire, WA5 7TN United Kingdom T: +44 (0) 1925 428390 F: +44 (0) 1925 520203 ASIA / PACIFIC: IDEAL Anderson Asia Pacific Ltd., Unit 922-928 Topsail Plaza, 11 On Sum Street, Shatin N.T., Hong Kong T:+(852) 2636 0836 F:+(852) 2635 9036 CHINA: IDEAL Anderson Technologies (Shenzhen) Ltd., Block A8 Tantou Western Industrial Park, Songgang Baoan District, Shenzhen, PR. China 518105 T: +(86) 755 2768 2118 F:+(86) 755 2768 2218 TAIWAN: IDEAL Anderson Asia Pacific Ltd., Taiwan Branch, 4F.-2, No.116, Dadun 20th St, Situn District, Taichung City 407, Taiwan (R.O.C.) T: +(886) 4 2310 6451 F:+(886) 4 2310 6460

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Punches & Dies category:

Click to view products by Anderson Power Products manufacturer:

Other Similar products are found below :

 58510-1
 63454-1601
 63457-0056
 63457-3401
 730-5/8
 730BB-1-3/8
 734410
 PV-670508-001
 1328
 1338
 13782656
 13782673
 AR-19
 AR-20

 24
 1528-TL
 1583609-1
 1720
 1762951-1
 2063500-2
 19031-0168
 AR-20
 AR-23
 CD5-8
 313336-3
 11-19-3122
 539663-1
 63446-2241
 TL 

 11
 TL-18
 0634451912
 1762674-1
 63454-0123
 68240-1
 68247-1
 734252
 313183-1
 PA2029
 119174-001
 23846-1
 11-40-5342
 68010-2

 690370015
 730BB-1-1/8
 730BB-1-1/16
 19032-0048
 63465-0023
 11-40-4438
 63457-0041
 19032-0202
 11-11-0054