

6 Pole Mini SPEC Pak® 50A Sealed Connector



Dust - Water - Shock

- E-Mobility • Lawn / Garden Equipment • Agricultural / Construction
- Material Handling / Automation • Industrial / Commercial



ANDERSON
POWER™

6 Pole Mini SPEC Pak®

The 6 Pole Mini SPEC Pak® waterproof connectors come in configurations of wire to wire or wire to panel mount offerings with up to a maximum of 50A of power and the durability of up to 10,000 mating cycles. The bayonet latch with locking identifications help safeguard against accidental disconnects that may be caused by vibrations, while the compression nut offers additional strain relief protection on wire cables. The compact sleek high-power design of these environmentally rugged connectors makes them ideal for outdoor applications including E-Mobility, Lawn and Garden, Power Equipment, Commercial and Industrial applications. Rated to IP68 with protective features to ensure that the connector will be free of water and dust in the mated conditions. Covers offer general finger proof IP20 protection in unmated conditions of connectors.



600 Volts / 50A



10,000 Mating Cycles



Operating Temperature
-20°C to 105°C / -4 °F to 221°F



Dust - Water - Shock

SPECIFICATIONS

Electrical	
Current Rating Amperes	50A, 2A Auxiliaries
Voltage Rating	600V
Dielectric Withstanding (AC)	2200

Creepage and Clearance			
Line of Sight	Material	Min. Creepage [mm]	Min. Clearance [mm]
Power to Power	PBT/PC	2.82	3.26
	PC	3.26	
Power to Signal	PBT/PC	2.89	3.79
	PC	3.79	
Signal to Signal	PBT/PC	1.1	1.62
	PC	1.62	



Dust - Water - Shock Protection

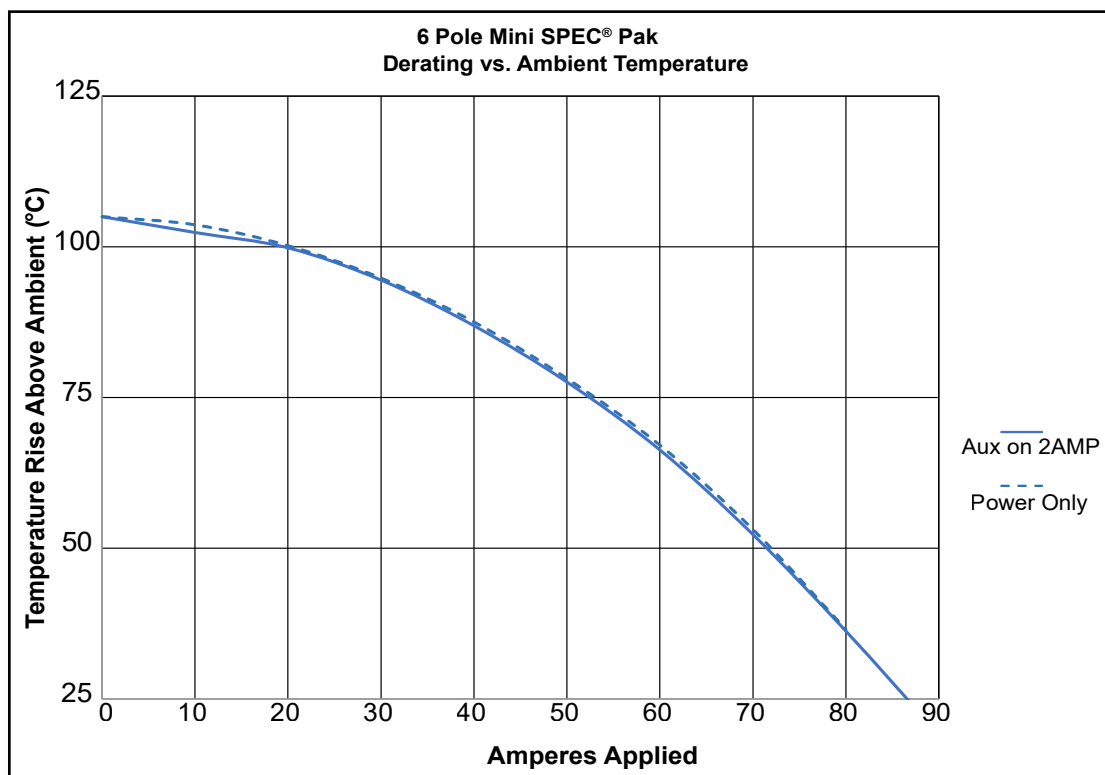
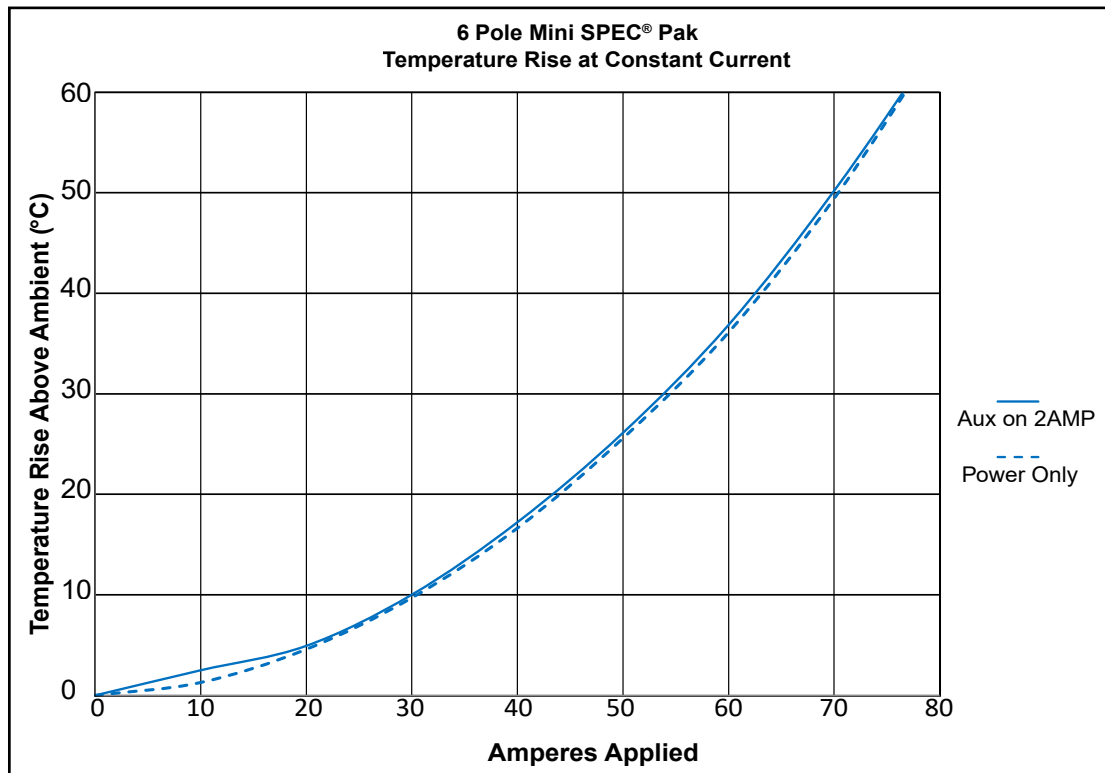
Materials	
Housing Shells	PBT/PC
Contact Retainer	PC
Power Contacts (Pin/Socket)	Copper Alloy AG over Ni
Auxiliary Contacts (Pin/Socket)	Copper Alloy Au over Ni
Weatherability	Plastic material rated to F1 ratings

Mechanical	
Environmental Protection	IP68 per UL50E in mated condition for submersion at 6' or 1.5M for 30 mins, IP20 with use of covers
Wire Specifications	
Power	8 AWG (10mm ²)
Auxiliary	20 to 24 AWG (0.50 to 0.25mm ²)
Operating Temperature	-20 to 105°C (-4 to 221°F)
Mating Cycles	10,000
Mating Force	8lbs (36 N)
Touch Safe	IP20 with covers / without covers pass UL 1977 Sec. 10.2
Contact Retainer Pushout	30lbs
Contact Pullout (Crimp)	Power 90lbs (401N), Auxiliary 8lbs (36N) refer to crimp spec document 1S6910
Bayonet Lock Strength	40lbs (178 N)



600 Volts / 50A

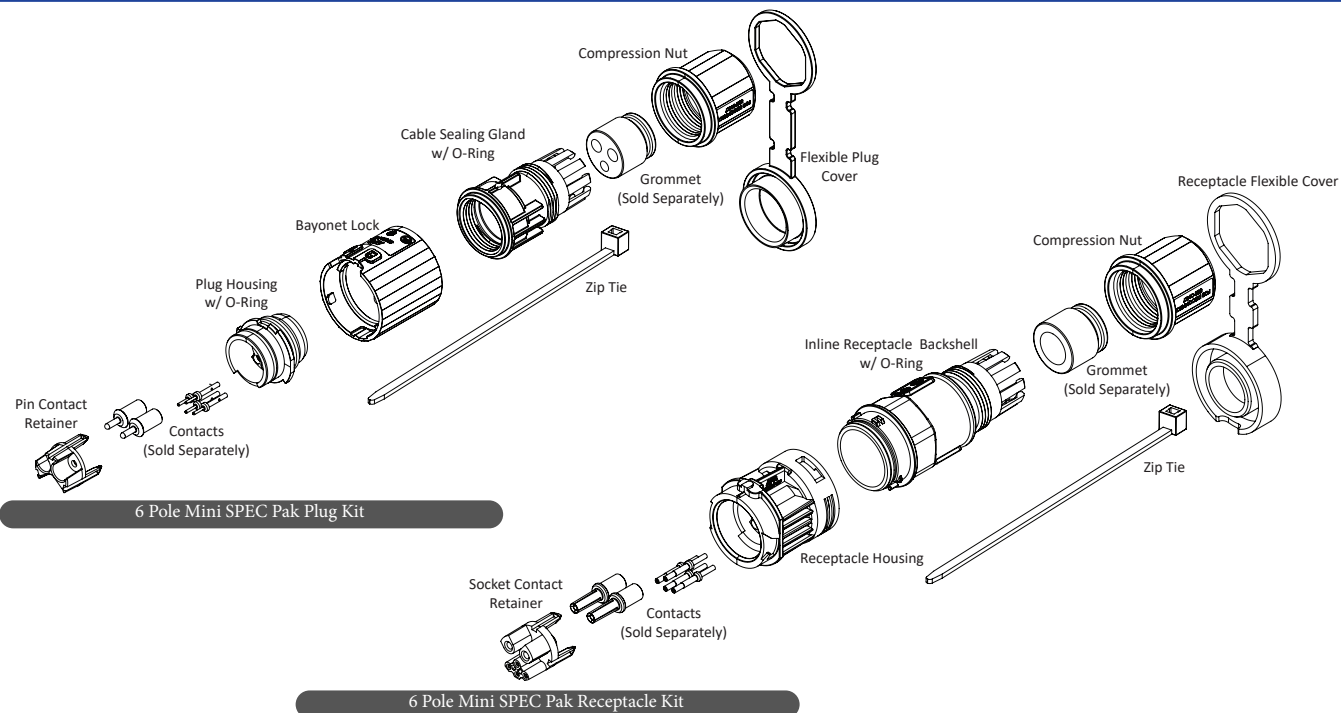
TEMPERATURE CHARTS



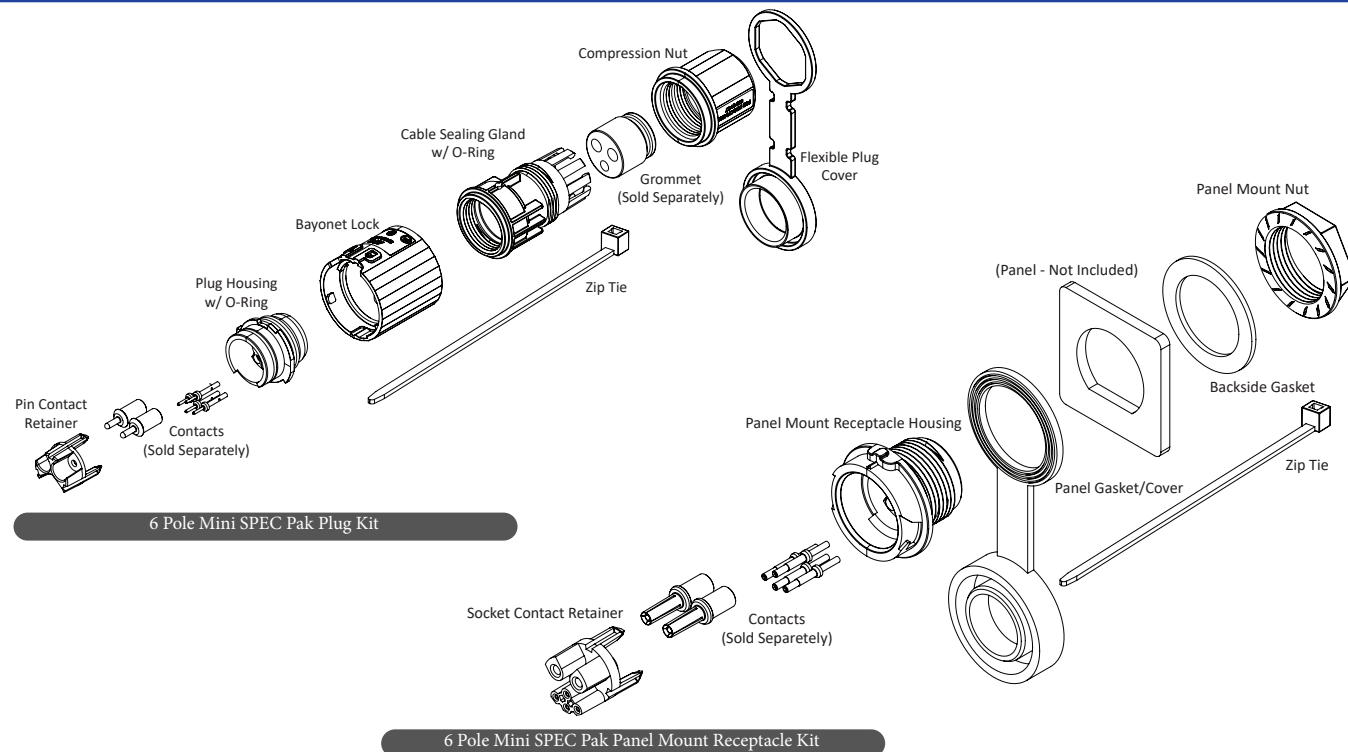
6 Pole Mini SPEC Pak®

COMPONENTS

Wire-to-Wire



Wire-to-Panel Mount



ORDERING INFORMATION

Step 1: Select the Housing Kit - Packaged as Individual Kits.
Contacts and Sealing Grommets sold separately (see Step 2 & 3)

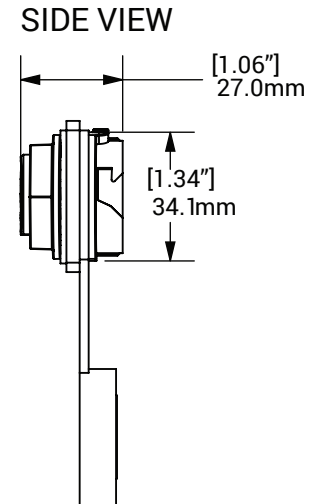
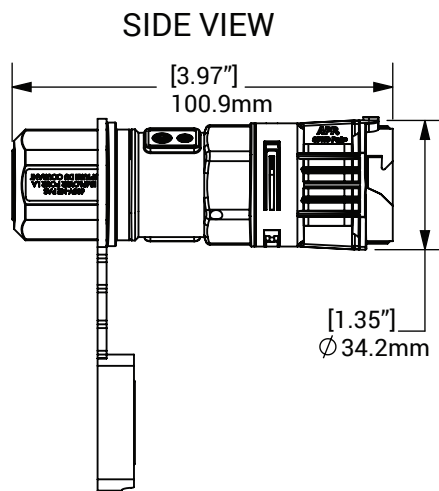
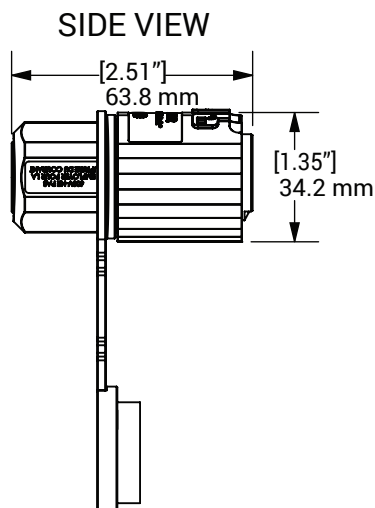
Image	Part Number	Description	Kit Includes Below Parts
Minimum Quantity			100
	SK1-034M06	6P Mini SPEC Pak Male Plug Kit	Pin Contact Retainer, Plug Housing w/ O-Ring, Bayonet Lock, Cable Sealing Gland w/ O-Ring, Compression Nut, Flexible Plug Cover, Zip Tie
	SK6-034M06	6P Mini SPEC Pak Inline Female Receptacle Kit	Socket Contact Retainer, Receptacle Housing, Inline Receptacle Backshell w/ O-Ring, Compression Nut, Receptacle Flexible Cover, Zip Tie
	SK7-034M06	6P Mini SPEC Pak Panel Mount Female Receptacle Kit	Socket Contact Retainer, Panel Mount Receptacle Housing, Panel Gasket/Cover, Backside Gasket, Panel Mount Nut, Zip Tie

DIMENSIONAL VIEWS

SK1-034M06
6P Mini SPEC Pak
Male Plug Kit

SK6-034M06
6P Mini SPEC Pak Female
Inline Receptacle Kit

SK7-034M06
6P Mini SPEC Pak
Female Panel Mount Receptacle Kit

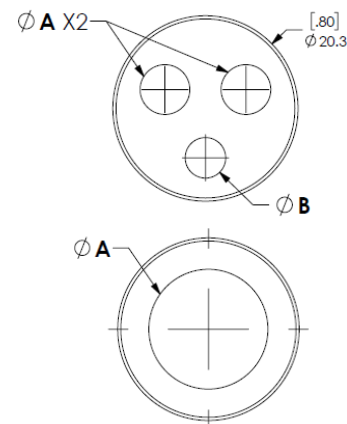


E-Mobility Applications

Step 2: Select Sealing Grommet

To select proper grommet size, you will need to know the outer diameter of discrete power jacket diameters as well as the outer diameter of the jacketed signal cables. Find your overall power size, then determine appropriate outer dimension for Signal cables.

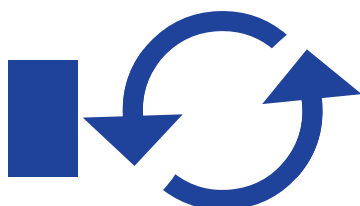
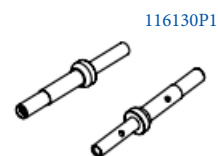
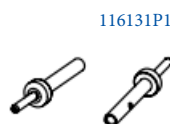
Part Number	Identifier Mark	Number of Holes	Discrete Power Jacket (Diameter Range)		Jacketed Signal (Diameter Range)	
			ØA		ØB	
			INCH	MM	INCH	MM
D-220-180-SP	D-A	3	.220 to .240	5.59 to 6.10	.180 to .200	4.57 to 5.08
D-220-220-SP	D-B				.220 to .240	5.59 to 6.10
D-240-180-SP	D-C		.240 to .260	6.10 to 6.60	.180 to .200	4.57 to 5.08
D-240-220-SP	D-C				.220 to .240	5.59 to 6.10
J-530-SP	J-A	1	.530 to .550	13.46 to 14	N/A	N/A



Step 3: Select Contacts for Power and Auxiliaries

6 Pole Mini SPEC Pak housings use two silver plated power contacts and up to 4 signal contacts per housing for the best electrical performance and durability up to 10,000 mating cycles.

Power Contacts			
Part Numbers	Description	AWG	mm ²
116132P1	Flanged Pin Contact, Plated	8	10
116133P1	Flanged Socket Contact	8	10
Auxiliary Contacts			
Part Numbers	Description	AWG	mm ²
116131P1	Flanged Pin Contact	20 to 24	.50 to .25
116130P1	Flanged Socket Contact	20 to 24	.50 to .25



10,000 Mating Cycles - Tested

TOOLING INFORMATION

Tools

1309G13



1309G12



1387G1 with Die & Locator



TP0001

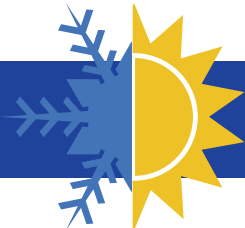


TM0001



Wire Size		Power Contacts								
AWG	mm ²	Power Contact Part Number	Pneumatic Bench Tool	+	Die	+	Locator	Number of Crimps	OR	Hand Tool
8	10	116132P1	1387G1		1388G6		1389G22	Single		1309G13
		116133P1								

Wire Size		Auxiliary Contacts								
AWG	mm ²	Auxiliary Contact Part Number	MIL Std Hand Tool	OR	Pneumatic Tool	Number of Crimps	+	Locator for TM0001 & TP0001	OR	Hand Tool
20 to 24	.50 to .25	116130P1	TM0001		TP0001	Single		TP1920		1309G12
		116131P1						TP1921		



Operating Temperature
-20°C to 105°C / -4 °F to 221°F

BUILD YOUR PART NUMBER

Step 1

Housings Kit

Step 2

Grommets

Step 3

Power / Auxiliary Contacts

Tooling



Lawn & Garden / ConAg Applications

All Data Subject to Change Without Notice 2024-0101 DS-6PMINISP REV 1 Your Best Connection™

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