

PL-900SM-N Series

Plastic Shell Auto-Coupling Connectors

14 Pole capacity miniature power connector



Features

The Pulse-Lok® 900SM-N is available in several power circuit configurations for industrial and medical electronic applications. This connector series is ideal for applications where safety, ease of use, and exposure to hostile environments are prevalent.

Overview (intuitive, compact, configurable)

- Pulse-Lok® auto-latch / quick-release
- Concealed contacts meet IEC and UL safety specifications
- Up to 14 contact positions
- 6 various color options
- Multiple standard and proprietary keying options

Order as a full cable assembly (Consult Factory)

- Single or double-ended
- Customize your cable bundle
- Overmolded strain relief
- Add components to fulfill design requirements

Specifications (for reference only)

Material

- Connector Housing: Polyamide 12
- Molded Core Insulator: Polyamide 12
- Contacts: Brass / Phosphor Bronze
 - 30µ" Gold over 50µ" Nickel
- Flammability Rating
 - Housing & Coupler: UL94 HB
 - Molded Contact Insulator (core): UL94 HB

Mechanical

- Mating Cycles: 5,000
- Mating Force:
 - Mate: 13.5 lbs. Max
 - Un-mate: 3.0 lbs. Max
- Unintended Extraction: 70 lbs. Min.
- Backshell Withdrawal: 9.5 lbs. Min.***

Environmental

- Operating Temperature: -20°C to +105°C
 - Moisture Resistance: to IP-67 (IEC)
 - Sterilizable: EtO, Autoclave, STERRAD® - Consult factory
 - Chemical Resistance: Common operating room cleaning solvents
- ***Backshell sold separately

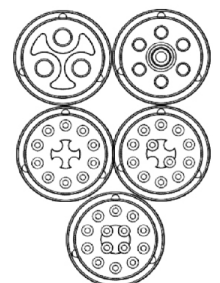
Table A: Standard Contact Configurations & Specifications

Number of Poles	Contact Size (Pin Diameter - mm)	Max Wire Gauge	Operating Voltage Max (V RMS)	Operating Current Max (A)*	Mated Contact Resistance (mΩ)
14	0.7	22	600V AC/DC	3.0	<50
12	0.7	22	600V AC/DC	3.0	<50
10	0.7	22	600V AC/DC	3.0	<50
7	1.5	16	600V AC/DC	8.0	<50
3	2.4	12	600V AC/DC	16.0	<50

*30C Heat Rise Limit

Custom contact inserts are available. Consult factory.

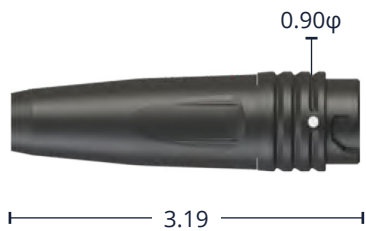
Up to 14 Contact Positions



For additional information about this, or any other Amphenol Alden product, please contact an Amphenol Alden specialist today.

Standard Housing Options - dimensions in inches

Disposable Receptacle Assembly



Shown with optional backshell
(See Table C)

Disposable Receptacle



Select this component from Table B

Rear Panel-Mount Receptacle



Mounts from back of panel to
achieve an IP-67 Seal

Select this component from Table B

Cable Mount Plug Assembly



Shown with optional backshell
(See Table C)

Cable Mount Plug Kit



Table B: Standard Part Numbers

Number of Poles	Front Panel-Mount Receptacle		Rear Panel-Mount Receptacle		Cable Mount Plug
	Solder Cup	PCB	Solder Cup	PCB	Solder Cup
14	340196	340518	340525	340112	380000
12	340182	340490	340497	340084	380056
10	340168	340462	340469	340056	380112
7	340154	340448	-	340028	380168
3	340140	340434	-	340000	380224

Note: Part numbers cover black housings in Key 1 configuration. For other color and housing options utilize the Amphenol Alden connector configurator located at www.amphenolalden.com/configurator

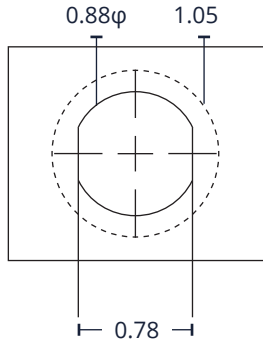
Options Include:

- Housing Color Options: Black (std.), Gray, White, Blue, Red, Green, Yellow
- Mating Key Options: 2 Standard Keys, Proprietary Keys Available
- Panel-Mount Thickness Options: .187 (std.), .063, .187, .250
- Contact Termination: Standard contact is equipped with a MIL crimp barrel suitable for soldering

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Contact Termination Options

Rear Panel-Mount Receptacle, Cut-Out Template



1.05φ Mounting Flange Footprint

Press & Seal™ Features & Benefits

- Contacts provide IP-67 water tight seal when inserted into insulator
- Easy crimp & poke installation
- Excellent contact retention
- Contacts may be crimped or soldered

Press & Seal™ Contact System



- Available on 3 to 14-Pole Configurations
- Accepts multiple wire gauges 12, 16, 22 AWG

PCB (Panel-Mount Receptacles only)



Request Sales Drawing for PCB mounting template

Accessories - dimensions in inches

Receptacle Dust Cover

Rear Panel-Mount Receptacle Dust Cover

(Nylon Tether locks into panelwasher)



P/N110401-01

Cable Mount Receptacle Dust Cover

(Wire Tether with cableloop)



P/N111026-01

Receptacle Dust Cover:

The PL-900 Series receptacle dust cover protects the receptacles contact system from dust, moisture, and mechanical stress when the connector pair is disengaged. When secured the dust cover will provide an IP-67 environmental seal. The cover is equipped with a tether for security.

Inline Receptacle Backshell

Plug Backshell



T
A
↓ (Wire exit i.d.)



Table C

Dimension A	Part Number
0.354	109353-01
0.420	109353

Plug Soaking Cap



P/N108717-08
(Available without tether)

Plug Soaking Cap:

The PL-900 Series Plug Soaking Cap is designed to protect the plug's contact system when a cable assembly is being cleaned or not in use. The soaking cap locks onto the plug providing an IP-67 seal that is ideal for soaking in liquid disinfectants. The soaking cap can be permanently attached to a cable assembly by means of a lightweight tether.

Assembly Instructions

Cable Mount Receptacle Instructions:

AI-PL900SMN-ILR01 (3Pole, 12AWG)
AI-PL900SMN-ILR02 (7Pole, 16AWG)
AI-PL900SMN-ILR03 (10-14Pole, 22AWG)

Panel-Mount Receptacle Instructions:

AI-PL900SMN-RPM01 (3Pole, 12AWG)

AI-PL900SMN-RPM02 (7Pole, 16AWG)
AI-PL900SMN-RPM03 (10-14Pole, 22AWG)

Cable Mount Plug Instructions:

AI-PL900SMN-P01 (3Pole, 12AWG)
AI-PL900SMN-P02 (7Pole, 16AWG)
AI-PL900SMN-P03 (10-14Pole, 22AWG)

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