Amphenol Alden

PL-900SM-N SERIES Plastic Shell Auto-Coupling Connectors **14 Pole** capacity miniature power connector





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

Material

Connector Housing: Polyamide 12 Molded Core Insulator: Polyamide 12 Contacts: Brass / Phosphor Bronze

- •30µ" Gold over 50µ" Nickel Flammability Rating
- Housing & Coupler: 94HB • Molded Contact Insulator (core): 94HB

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: 9.5lbs. Min.***

SPECIFICATIONS

• Operating Temp: -20C to +105C**

Environmental

- Moisture Resistance: to IP-67 (IEC)
- Sterilizable: EtO, Autoclave, STERRAD®**
- Chem. Resistance: common OR cleaning solvents
- **Dependent on overmold material. Consult factory
- ***Backshell sold separately

Up to 14 Contact Positions



TA	В	LE	A	:

STANDARD CONTACT CONFIGURATIONS & SPECFICATIONS

Number of Poles	Contact Size Pin φ (mm)	Max Wire Gauge	Operating Voltage Max	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.

Cable Mount Receptacle Assembly -0.90ф 3.19 Shown with optional backshell (See Table C) Cable Mount Receptacle Kit 2.31 Select this component from Table B

Rear Panel-Mount Receptacle Assembly 1.00ф



Panel Thickness Range = 0.063 to 0.250 Select this component from Table B

STANDARD HOUSING OPTIONS Cable Mount Plug Assembly 0.90ф 2.90 Shown with optional backshell Cable Mount Plug Kit 2.00 Select this component from Table B

Connector housings are illustrated in gray with black couplers and backshells. www.amphenolalden.com/configurato

Standard color is black on black. See our online configurator for color options at : *All dimensions shown in inches except where indicated

PL-900SM-N SERIES OF THE PL-900SM-N SERIES

Plastic Shell Auto-Coupling Connectors 14 pole capacity for High Power Applications

TABLE B:

STANDARD PART NUMBERS

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

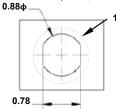
Note: Part numbers cover black housings in Kev 1 configuration, For other color and housing options utilize the Amphenol Alden connector configurator located at www.amphenolalden.com/configurator

Options Include: Mating Key Options Panel-Mount Thickness Options Contact Termination

Black (std.), Gray, White, Blue, Red, Green, Yellow 2 Standard Keys, Proprietary Keys Available .187 (std.), .063, .187,.250

Standard contact is equipped with a MIL crimp barrel suitable for soldering

Rear Panel-Mount Receptacle, Cut-Out Template



1.05 φ mounting Flange Footprint

Press & Seal[™] Contact System

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



- 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

Panel-Mount Receptacle Dust Cover (Nylon Tether locks into panel washer)



Cable Mount Receptacle Dust Cover (Wire Tether with cable loop)



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.

Backshell (Wire exit i.d.) 2.25

Dimension A 0.354 0.420

Part Number 109353-01 109353

Plug Soaking Cap (Wire Tether with cable loop)



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 lin liquid disinfectants. The soaking cap can be permanently attached to a a cable assembly by means of a light weight tether.

Note: Black (std.) Gray (optional) & accessories sold separately

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)

Note: recommended tooling included in assembly instructions