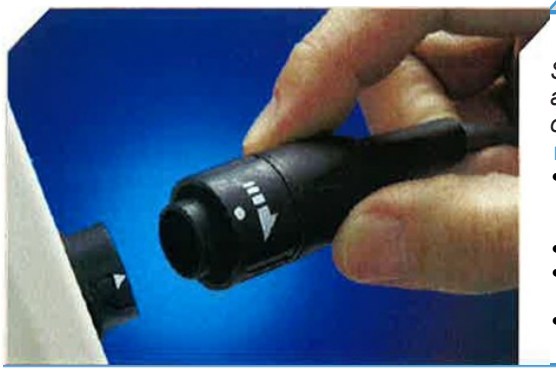
Amphenol Alden

PL-900RG-N SERIES

Plastic Shell Auto-Coupling Connectors

52 pole capacity disposable receptacle and support interconnects



PL-900RG-N FEATURES

Specifically designed for electro-surgical catheter applications, the compact and cost effective PL-900 Series offers more features, contacts, and termination options than the competition.

Packaging (intuitive, compact, configurable)

- ***Pulse-Lok®*** auto-latch / mating confirmation mechanism confirms continuity in critical surgical applications
- 14 standard color combinations
- Proprietary keying protects your single-use from being copied, or mated with the wrong connector
- Custom configurations including passive and active devices for coding or limiting catheter usage

Performance (for harsh environments)

- Water proof (IP-67 rated)
- Sterilizable
- Chemical resistant housing
- Up to 5,000 mating cycles (with std.Contacts)
- Factory terminated, overmolded cable assemblies for enhanced flex and stain relief

SPECIFICATIONS

Electrical (see below)
Mating Life: 5,000 cycles min.
Contact Resistance: < 10 milliohms*

Material
Connector Housing: Thermoplastic
Flex Reliefs: Thermoplastic Rubber
Contacts/Sockets: Brass / BeCu,
Gold Plate per MIL-G-45204
Reusable Socket = 30-45µ" Gold over 50-200µ" Nickel strike
Disposable Pin = 10-30µ" Gold over 50-200µ" Nickel strike

Mechanical
Mating Cycles: 5K cycles max
Retention Force:

- Mated Connectors: 50 lbs. Minimum
- Cable to Connector: 50 lbs. Typical
- Backshell to Connector: 50 lbs. Minimum

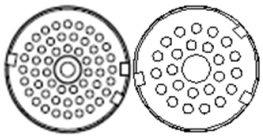
Environmental

- Operating Temp: -20C to +85C**
- Moisture Resistance: to IP-67 (encapsulated)
- Sterilizable: gamma, EtO & Autoclave
- Chem. Resistance: common OR cleaning solvents
- Shelf Life: 3 years (min) Disposable Connectors

** post conditioning*
**Dependent on overmold material

TABLE A: STANDARD CONTACT CONFIGURATIONS & SPECFICATIONS

Up to 52 Contact Positions

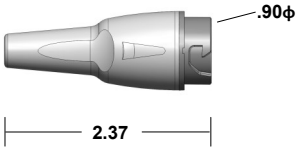


Number of Poles	Contact Size Pin ϕ (mm)	Max Wire Gauge	Operating Voltage Max	Operating Current Max (A)	Contact Resistance (ohms)
52	0.5	26	300 V RMS	2.0	<10m
41	0.5	22	300 V RMS	2.0	<10m
35	0.5	26	300 V RMS	2.0	<10m
28	0.5	26	300 V RMS	2.0	<10m
24	0.5	26	300 V RMS	2.0	<10m
24	0.7	22	300 V RMS	5.0	<10m
17	0.5	26	300 V RMS	2.0	<10m
15	0.7	22	300 V RMS	5.0	<10m
11	0.5	26	300 V RMS	2.0	<10m
9	0.7	22	300 V RMS	5.0	<10m

Custom contact inserts are available. Consult factory.

STANDARD HOUSING OPTIONS

Disposable Receptacle Assembly

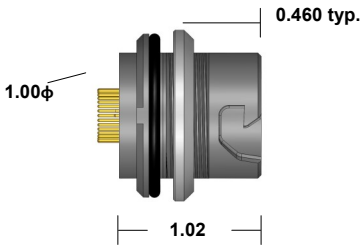


Shown with optional backshell (See Table C)

Disposable Receptacle

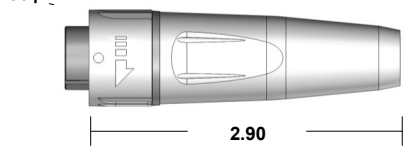
Select this component from Table B

Rear Panel-Mount Receptacle Assembly



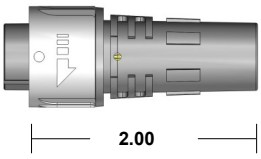
Panel Thickness Range = 0.063 to 0.250
Select this component from Table B

In-Line Plug Assembly



Showm with Overmolded Strain Relief

In-Line Plug Kit (For overmolding)



Select this component from Table B

Connector housings and backshells are illustrated in light gray with gray couplers. Standard color is black on black. *All dimensions shown in inches except where indicated

PL-900RG-N SERIES

Plastic Shell Auto-Coupling Connectors ***52 pole*** *capacity disposable receptacle and support interconnects*

TABLE B: STANDARD PART NUMBERS

Number of Poles	Disposable Receptacle		Rear Panel-Mount Receptacle		In-Line Plug
	Solder Cup	PCB	Solder Cup	PCB	Solder Cup
52	341406	342946	342512	342519	341252
41	341392	342932	342484	342491	341224
35	341378	342918	342456	342463	341196
28	341364	342904	342428	342435	341168
24 (26AWG)	341350	342890	342541	342407	341140
24 (22AWG)	341336	342876	342372	342379	341112
17	341322	342862	342344	342351	341084
15	341308	342848	342316	342323	341056
11	341294	342834	342288	342295	341028
9	341280	342820	342260	342267	341000

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:

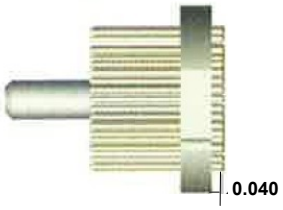
Indicator Color Options	Black (std.), Gray, White, Blue, Red, Green, Yellow
Mating Key Options	2 Standard Keys, Proprietary Keys Available
Panel-Mount Thickness Options	.125 (std.), .063, .187,.250

CONTACT TERMINATION OPTIONS

Termination Styles

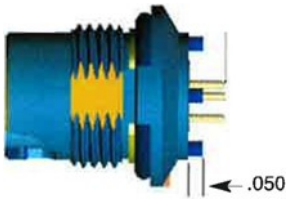
Panel 1

Pin Length & Application



Intended for termination to flex circuit

Pin Length & Applications



Intended for mounting on rigid PC Board

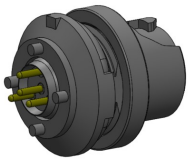
Flex Circuits Benefits

Facilitates the automated internal application of passive and active electronic components

Facilitates the introduction of automated mass termination techniques. These termination methods are extremely cost effective when terminating 52 pole connectors

Panel 2

PCB (Panel-Mount Receptacles only)



Request Sales Drawing for PCB mounting template

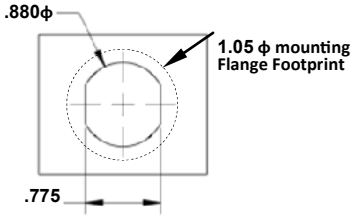
Features & Benefits

- Available in most pole counts from 9 to 52 Poles
- PCB stand-offs ensure proper positioning
- Convenient packaging high temperature contect cures may be soldered to PCB and snapped into panel-mounted receptacle housing later

Features & Benefits

Tiered solder cups provide easy access to center positions. Canted cups facilitate quick and easy wire positioning. Standard on 9-52 pole configurations

Panel-Mount, Cut-Out Template



Applies to Rear Panel-Mount Receptacles

ASSEMBLY INSTRUCTIONS

Receptacles:

AI-PL900RGN-ILR01 (3Pole, 12AWG)

AI-PL900RGN-ILR02 (7Pole, 16AWG)

AI-PL900RGN-ILR03 (10-14Pole, 22AWG)

AI-PL900RGN-RPM01 (3Pole, 12AWG)

AI-PL900RGN-RPM02 (7Pole, 16AWG)

AI-PL900RGN-RPM03 (10-14Pole, 22AWG)

Plugs:

AI-PL900RGN-P01 (3Pole, 12AWG)

AI-PL900RGN-P02 (7Pole, 16AWG)

AI-PL900RGN-P03 (10-14Pole, 22AWG)

TABLE C: *ACCESSORIES*

Backshell

Dimension A	Part Number
0.140	107307-01
0.166	107307-08
0.180	107307-15
0.210	107307-22
0.260	107307-29

Disposable Receptacle Backshell:
In applications where the disposable receptacle is attached directly to a cable or catheter this one piece backshell is available to protect light gauge wire terminations and provide an anchor point for the catheter jacket. These backshells snap into place and may be encapsulated

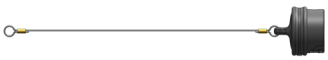
Standard color is black. Gray is optional.

Protective Connective Caps (IP-67 Seal Rating)

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

P/N **110401-01**

Plug Soaking Cap
(Wire Tether with cable loop)



P/N **111179-01**

In-Line Receptacle Dust Cover
(Wire Tether with cable loop)

P/N **111026-01**

Panel-Mount 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.

Receptacle Dust Cover
(Without Wire Tether)

P/N **107522-01**

Plug Soaking Cap
(Without Wire Tether)

P/N **107521-01**

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 (opt.)

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

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Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9