# **Amphenol**

Alden

## PL-1200RG-N SERIES Plastic Shell Auto-Coupling Connectors 78 pole capacity interconnect system

## **PL-1200RG-N FEATURES**



Specifically designed for electro-surgical catheter applications, the compact and cost effective PL-1200 Series offers more features, contacts and termination options than the competition

## Packaging (intuitive, compact, configurable)

- Pulse-Lok® auto-latch / quick release 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

## Electrical (see below)

Mating Life: 5,000 cycles min. Contact Resistance: < 10 milliohms\*

#### Material

Nickel strike

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"

#### 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

## **SPECIFICATIONS**

Contact

- Operating Temp: -20C to +105C\*\*
- Moisture Resistance: to IP-67 (encapsulated)
- Sterilizable: gamma, EtO & Autoclave
- Chem. Resistance: common OR cleaning solvents

Environmental

## TABLE A:

## STANDARD CONTACT CONFIGURATIONS & SPECFICATIONS

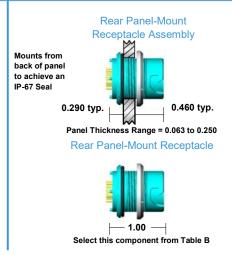
## **Up to 78 Contact Positions**



Number of Poles	Contact Size Pin φ (mm)	Max Wire Gauge	Operating Voltage Max	Operating Current Max (A)	Resistance (ohms)
78	0.5	26	300 V RMS	1.5	<10m
59	0.5	26	300 V RMS	1.5	<10m
52	0.5	26	300 V RMS	1.5	<10m
45	0.5	26	300 V RMS	1.5	<10m
26	0.5	26	300 V RMS	1.5	<10m
19	0.5	26	300 V RMS	1.5	<10m

**Custom contact inserts are available. Consult factory.** 

## Disposable Receptacle Assembly 3.00 Shown with optional backshell (See Table C) Disposable Receptacle **– 1.00** – Select this component from Table B





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

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

<sup>\*</sup> post conditioning
\*\*Dependent on overmold material

## **PL-1200RG-N SERIES**

Plastic Shell Auto-Coupling Connectors 78 pole capacity interconnect system

## TABLE B:

## STANDARD PART NUMBERS

Number of Poles	Disposable Receptacle	Rear Panel-Mount Receptacle		In-Line Plug
	Solder Cup	Solder Cup	PCB	Solder Cup
78	380588	380700	380707	380000
59	380532	380728	380735	380056
52	380504	380756	380763	380112
45	380476	380784	380791	380168
26	380448	380812	380819	380224
19	380420	380840	380847	380280

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

## CONTACT TERMINATION OPTIONS

## Panel 1

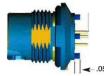
## **Termination Styles**

## 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

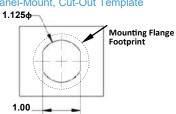
- Available in most pole counts from 9 to 52 Poles
- · PCB stand-offs ensure proper positioning
- Convenient packaging high temperature contect cures may be soldered to PCB and snapped into panel-mounted receptacle housing later



## 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

## TABLE C:

## **ACCESSORIES**

## **Backshell**



**Dimension A** 0.260 0.260

(Wire exit i.d.)

**Part Number** 107802-01 107802-02

Standard color is black. Gray is optional.

## **Panel-Mount Receptacle Dust Cover**



P/N 109767-01 Black (std.) Gray (opt.)

## **Panel-Mount Receptacle Dust Cover:**

The PL1200 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.



P/N 108552-01 Standard material is black PVC

**Plug Soaking Cap** 



P/N 109766-01 Black (std.) Gray Optional

## 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

## **Plug Soaking Cap:**

The PL1200 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.

ASSEMBLY INSTRUCTIONS

**Receptacles:** AI-PL1200RGN-ILR01 AI-PL1200RGN-RPM01 Plugs: AI-PL1200RGN-P01