

# PL-700RG-N Series

**Plastic Shell** Auto-Coupling Connectors

**27 pole** capacity disposable receptacle and support interconnects



## Features

Specifically designed for electro-surgical catheter applications, the Pulse-Lok® 700RG-N Series 0.700" inch footprint and reverse gender configuration offers a cost effective solution.

### Overview (intuitive, compact, configurable)

- Pulse-Lok® auto-latch / mating confirmation mechanism
- Up to 27 contact positions
- Multiple standard and proprietary keying options
- 6 color options in a variety of combinations

### Order as a full cable assembly (Consult Factory)

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

## Specifications (for reference only)

### Material

- Connector Housing: Polyamide
- Molded Core Insulator: LCP
- Contacts: Brass/Phosphor Bronze
  - 30µ" Gold over 50µ" Nickel
- Flammability Rating
  - Housing/Coupler Assembly: UL94 HB
  - Molded Contact Insulator (core): UL94 V-0

### Mechanical

- Mating Cycles: 5,000
- Mating Force:
  - Mate: 13.5 lbs. Max
  - Un-mate: 3.0 lbs. Max
- Unintended extraction: 30 lbs. Min.
- Backshell Withdrawal: 5.0lbs. Min. \*\*\*

### Environmental

- Operating Temp: -20C to +85C
  - Moisture Resistance: to IP-67 (mated)
  - Sterilizable: gamma & EtO  
Consult factory
  - Chem. Resistance: common operating room cleaning solvents
- \*\*\*Backshell sold separately

## Table A: Standard Contact Configurations & Specifications

Custom contact inserts are available.  
Consult factory.

Number of Poles	Contact Size (Pin Diameter - mm)	Max Wire Gauge	Operating Voltage Max (V RMS)	Operating Current Max (A)*	Mated Contact Resistance (mΩ)
27	0.5	26	300	2.0	<50
24	0.5	26	300	2.0	<50
14	0.7	22	300	3.0	<50

**Up to 27 Contact Positions**

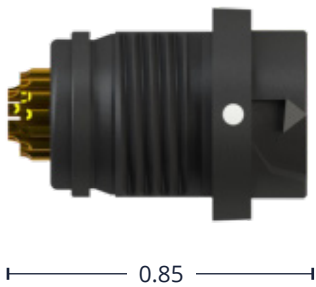


\*30C Heat Rise Limit

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



0.85

Select this component from Table B

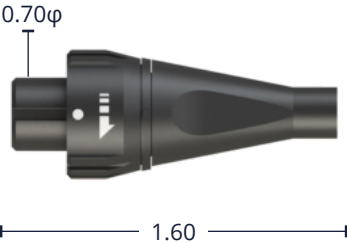
### Front Panel-Mount Receptacle Assembly



Panel Thickness Range =  
0.063 to 0.250

**Note:** The cable mount receptacle housing is threaded and may be panel-mounted on a disposable hand piece or electronic accessory. A panel-mount receptacle from Amphenol Alden's PL-700SM-N Series may be preferable for reusable applications.

### Cable Mount Plug Assembly




0.70φ

1.60

Shown with optional backshell (See Table C)

### Cable Mount Plug Kit



0.90

Select this component from Table B

## Table B: Standard Part Numbers

Plastic Shell Auto-Coupling Connectors **27 pole** capacity disposable receptacle and support interconnects

Number of Poles	Front Panel-Mount Receptacle		Rear Panel-Mount Receptacle		Cable Mount Plug
	Solder Cup	PCB	Solder Cup	PCB	Solder Cup
27	107264-01	107376-01	<b>Contact Factory</b>		315252
24	316454	316452			315224
14	107265-01	107377-01			315140

**Note:**

Part numbers cover black housings in Key 1 configuration. For other color and housing options utilize the Amphenol Alden connector configurator located at [amphenolalden.com/configurator](http://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 Up to 0.187"(std.)

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## Contact Termination Options

### PCB (Disposable Receptacle)



Request Sales Drawing for PCB mounting template

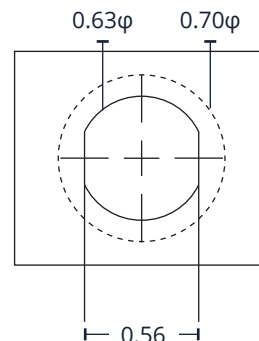
### Solder Cup (Available for All)



#### Features & Benefits

Tiered solder cups provide easy access to center positions. Canted cups facilitate quick and easy wire positioning. Standard on 14-27 pole configurations

### Panel-Mount, Cut-Out Template



Applies to Disposable Receptacle

## Accessories - dimensions in inches

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

### Front Panel-Mount Receptacle Dust Cover



P/N 300390

### Backshell



### Plug Soaking Cap



P/N 300391

The **PL-700 plug housing** is designed to accept Amphenol Alden's one piece, Press & Seal PVC Backshell. This unique backshell simply snaps into place providing an IP-67 rated seal to the plug housing and cable exit without hardware resulting in a clean overmolded look. For optimum sealing we suggest selecting a wire exit i.d. that is at least .005" smaller than your nominal cable diameter.

Table C

Dimension A	Part #	
Inches	Black	Gray
0.053	300350	300351
0.064	300352	300353
0.075	300354	300355
0.086	300356	300357
0.096	300358	300359
0.104	300360	300361
0.120	300362	300363
0.129	300364	300365
0.142	300366	300367
0.153	300368	300369
0.162	300370	300371
0.170	300372	300373
0.186	300374	300375
0.204	300376	300377
0.215	300378	300379
0.225	300380	300381
0.235	300382	300383
0.249	300384	300385
0.264	300386	300387
0.300	300388	300389

## Assembly Instructions

### Receptacle Instructions:

AI-PL700RGN-R01 (14Pole, 22AWG)

AI-PL700RGN-R02 (24-27Pole, 26AWG)

### Cable Mount Plug Instructions

AI-PL700RGN-P01 (14Pole, 22AWG)

AI-PL700RGN-P02 (24-27Pole, 26AWG)

**Note:** Recommended tooling included in assembly instructions. Accessories sold separately

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