# **Amphenol** Alden

PL-700RG-N SERIES Plastic Shell Auto-Coupling Connectors 27 pole capacity disposable receptacle and support interconnects

# PL-700RG-N 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 Single or double ended
- 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)

- · Customize your cable bundle
- Overmolded strain relief
- · Add components to fulfill requirements

### Material

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

- 30µ" Gold over 50µ" Nickel Flammability Rating
- Housing/Coupler Assembly: 94HB
- 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.\*\*\*

# **SPECIFICATIONS**

### **Environmental**

- Operating Temp: -20C to +85C\*\*
- Moisture Resistance: to IP-67 (mated)
- Sterilizable: gamma & EtO\*\*
- Chem. Resistance: common OR cleaning solvents
- \*\*Dependent on overmold material \*\*\*Backshell sold separately

### TABLE A:

# STANDARD CONTACT CONFIGURATIONS & SPECIFICATIONS

# **Up to 27 Contact Positions**



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

\*30C Heat Rise Limit

Custom contact inserts are available. Consult factory.

# Disposable Receptacle



Select this component from Table B

# Front Panel-Mount Receptacle Assembly



Panel Thickness Range = 0.063 to 0.250

Note: The disposable 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.

# STANDARD HOUSING OPTIONS

Cable Mount Plug Assembly



Shown with optional backshell (See Table C)

# Cable Mount Plug Kit



Select this component from Table B

<sup>\*</sup>All dimensions shown in inches except where indicated Standard color is black on black. See our online configurator for color options at: www.amphenolalden.com/configurator

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### TABLE B:

# STANDARD PART NUMBERS

Number of Poles	Disposable Red	ceptacle	Front Panel-Mount Receptacle		Cable Mount Plug
	Solder Cup	PCB	Solder Cup	PCB	Solder Cup
27	107264-01	107376-01	Contact Factory		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 www.amphenolalden.com/configurator

### Options Include:

**Housing Color Options** Mating Key Options
Panel-Mount Thickness Options Black (std.), Gray, White, Blue, Red, Green, Yellow 2 Standard Keys, Proprietary Keys Available Up to 0.187(std.)

# **CONTACT TERMINATION OPTIONS**

### PCB (Disposable Receptacle)



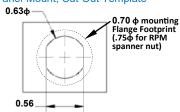
Request Sales Drawing for PCB mounting template

### Solder Cup (Available for All)



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

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



P/N 300390

# Plug Soaking Cap



P/N 300391

### Backshell



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: **ACCESSORIES**

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	

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

# **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)

**ASSEMBLY INSTRUCTIONS**