

### PL500FI FEATURES

Ideal for rear-panel instrumentation and hand-held equipment, the compact and cost effective PL-500FI Series is designed to meet the efficient packaging demands of portable electronic devices

#### Packaging (intuitive, compact, configurable)

- Pulse-Lok® auto-latch / mating confirmation
- Miniature .520" diameter circular shell
- Up to 14 contact positions
- 14 standard color combinations
- Multiple and proprietary keying options
- Available as an overmolded cable assembly
- Custom configurations available

#### Performance (for harsh environments)

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

### SPECIFICATIONS

#### Electrical (see below)

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

#### Material

Connector Housing: Nylon 12  
Flex Reliefs: Thermoplastic Rubber  
Contacts: Brass / BeCu,  
Gold Plate per MIL-G-45204

#### Mechanical

Mating Cycles: 5K cycles  
Retention Force:  
• Mated Connectors: 15 lbs. Minimum  
• Cable to Connector: 25 lbs. Typical  
• Backshell to Connector: 35 lbs. Minimum  
Cable Diameter range = .115 to .250

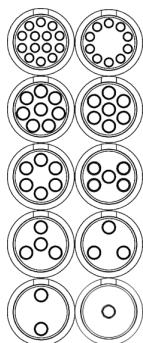
#### Environmental

- Operating Temp: -40C to +105C\*\*
  - Moisture Resistance: to IP-67 (encapsulated)
  - Sterilizable: gamma, EtO & Autoclave
  - Chem. Resistance: common OR cleaning solvents
- \* post conditioning  
\*\*Dependent on overmold material

TABLE A:

STANDARD CONTACT CONFIGURATIONS & SPECIFICATIONS

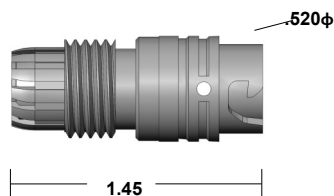
#### Up to 14 Contact Positions



Number of Poles	Contact Size Pin $\phi$ (mm)	Max Wire Gauge	Operating Voltage Max	Operating Current Max (A)	Contact Resistance (ohms)
14	0.5	26	300 V RMS	0.9	<14m
10	0.5	26	300 V RMS	1.2	<14m
8	0.7	22	300 V RMS	1.8	<6m
7	0.7	22	300 V RMS	2.1	<6m
6	0.7	22	300 V RMS	2.1	<6m
5	0.7	22	300 V RMS	2.4	<6m
4	0.7	22	300 V RMS	2.4	<6m
3	0.7	22	300 V RMS	3.0	<6m
2	0.7	22	300 V RMS	3.0	<6m
1	0.7	22	300 V RMS	3.0	<6m
1	1.5	16	300 V RMS	7.0	<2m

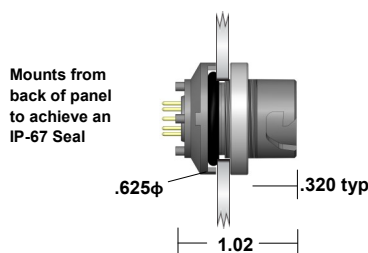
Custom contact inserts are available. Consult factory.

#### In-Line Receptacle Assembly



Select this component from Table B

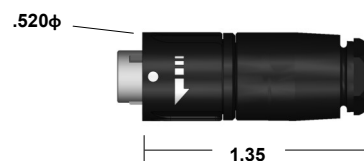
#### Rear Panel-Mount Receptacle Assembly



Panel thickness range = .063 to .125  
Select this component from Table B

#### STANDARD HOUSING OPTIONS

##### In-Line Plug Assembly



##### In-Line Plug Kit



Select this component from Table B

# PL-500FI SERIES

Plastic 14 pole capacity miniature circular field installable connector

TABLE B:

STANDARD PART NUMBERS

Number of Poles	In-Line Receptacle	Rear Panel-Mount Receptacle		In-Line Plug
	Solder Cup	Solder Cup	PCB	Solder Cup
14	327104	327212	327204	327004
10	324100	327208	327200	327000
8	324140	327276	327280	327040
7	327136	327268	327272	327036
6	327132	327220	327264	327032
5	327110	327228	327218	327010
4	327112	327236	327224	327012
3	327116	327236	327232	327016
2	327120	327244	327240	327020
1 (22 AWG)	327124	327252	327248	327024
1 (16 AWG)	327128	327260	327256	327028

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](http://www.amphenolalden.com/configurator)

**Options Include:**

Housing Color Options

Mating Key Options

Panel-Mount Thickness Options

Black (std.) Gray

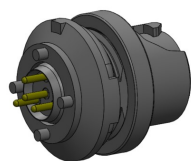
2 Standard Keys, Proprietary Keys Available

Up to .125 Standard

## Receptacles & In-Line Plug

## CONTACT TERMINATION OPTIONS

### PCB (Panel-Mount Receptacles only)



Stand off height 0.050"

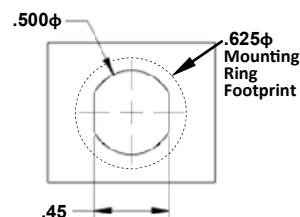
Request sales drawing for PCB Mounting Templates

### Solder Cup (Available for All)



Tiered solder cups provide easy access to center positions.  
Canted cups facilitate quick and easy wire positioning.  
Standard on 2-14 pole configurations

### Panel-Mount, Cut-Out Template



## ACCESSORIES

### Receptacle Dust Cover



P/N 107976

### Plug Soaking Cap



P/N 112058-02

Note: accessories sold separately

## ASSEMBLY INSTRUCTIONS

### Receptacles:

AI-PL500FI-IR01 (1Pole, 16AWG)

AI-PL500FI-IR02 (1Pole, 22AWG)

AI-PL500FI-IR03 (2-8/10-14 Pole, 22/26AWG)

AI-PL500FI-PMR01 (1Pole, 16AWG)

AI-PL500FI-PMR02 (1Pole, 22AWG)

AI-PL500FI-PMR03 (2-8/10-14 Pole, 22/26AWG)

### Plugs:

AI-PL500FI-P01 (1Pole, 16AWG)

AI-PL500FI-P02 (1Pole, 22AWG)

AI-PL500FI-P03 (2-8/10-14 Pole, 22/26AWG)