Amphenol Alden

PL-500FI SERIES
Plastic Shell Auto-Coupling Connectors
14 pole capacity miniature circular
field installable connector

PL-500FI FEATURES

Compact and low cost, the **Pulse-Lok®** 500FI Series connectors are Amphenol Alden's ideal solution for hand-held equipment and confined locations. The **Pulse-Lok®** 500FI low cost allows for a reliable and cost effective solution for your interconnect requirements.

Overview (intuitive, compact, configurable)
- **Pulse-Lok®** auto-latch / mating confirmation
- Miniature .520" diameter metal circular shell
- Up to 14 contact positions
- Multiple and proprietary keying options

Order as a full cable assembly (Consult Factory)
- Single or double ended
- Customize your cable bundle
- Overmolded strain relief
- Add components to fulfill design requirements

SPECIFICATIONS

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: 5 lbs. Max
- Un-mate: 1.5 lbs. Max
- Unintended Extraction: 35 lbs. Min.
- Backshell withdrawal: 5 lbs. Min.***

Environmental
- Operating Temp: -40C to +105C**
- 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 14 Contact Positions
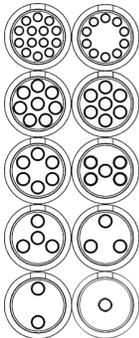
Number of Poles	Contact Size Pin φ (mm)	Max Wire Gauge	Operating Voltage Max	Operating Current Max (A)*	Mated Contact Resistance (mΩ)
14	0.5	26	300 V RMS	2.5	<50
10	0.5	26	300 V RMS	2.5	<50
8	0.7	22	300 V RMS	3.5	<50
7	0.7	22	300 V RMS	3.5	<50
6	0.7	22	300 V RMS	3.5	<50
5	0.7	22	300 V RMS	3.5	<50
4	0.7	22	300 V RMS	3.5	<50
3	0.7	22	300 V RMS	3.5	<50
2	0.7	22	300 V RMS	3.5	<50
1	0.7	22	300 V RMS	3.5	<50
1	1.5	16	300 V RMS	5.0	<50

*30C Heat Rise Limit
Custom contact inserts are available. Consult factory.

STANDARD HOUSING OPTIONS

Cable Mount Receptacle Kit

0.52φ

1.45

Select this component from Table B

Rear Panel-Mount Receptacle Assembly

Mounts from back of panel to achieve an IP-67 Seal

0.63φ

0.32 typ

0.68
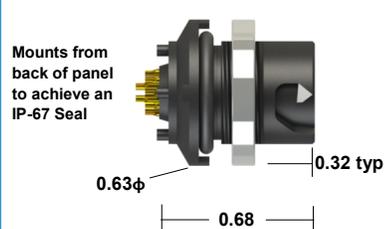
Panel thickness range = .063 to .125
Select this component from Table B

Cable Mount Plug Kit

0.52φ

1.35

Select this component from Table B

*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**

2.0

For additional information about this, or any other Amphenol Alden product, please contact an Amphenol Alden specialist today, www.AmphenolAlden.com.

Phone: 508-427-7000
E-mail: Info@AmphenolAlden.com
www.AmphenolAlden.com

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PL-500FI SERIES
Plastic 14 pole capacity miniature circular field installable connector

Number of Poles	Cable Mount Receptacle	Rear Panel-Mount Receptacle		Cable Mount 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**

Options Include:

Housing Color Options	Black (std.) Gray
Mating Key Options	2 Standard Keys, Proprietary Keys Available
Panel-Mount Thickness Options	Up to .125 Standard

CONTACT TERMINATION OPTIONS

Receptacles & Cable Mount Plug

PCB (Panel-Mount Receptacles only)

Stand off height 0.05"
Pin length 0.125"

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

0.50φ
0.63φ Mounting Ring Footprint
0.45
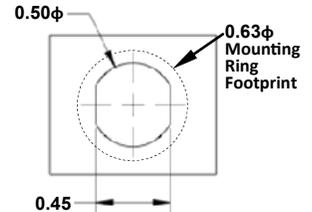
ACCESSORIES

Receptacle Dust Cover

P/N **107976**

Backshell

P/N **108194-02**
(For 0.20" Cable Diameter)

Plug Soaking Cap

P/N **112058-01**

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

ASSEMBLY INSTRUCTIONS

Receptacle Instructions:

AI-PL500FI-R01 (1Pole, 16AWG)

AI-PL500FI-R02 (1-14 Pole, 22/26AWG)

Cable Mount Plug Instructions:

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

AI-PL500FI-P02 (1-14 Pole, 22/26AWG)

Note: recommended tooling included in assembly instructions