

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

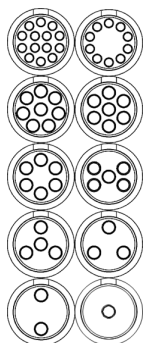
Environmental

- 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

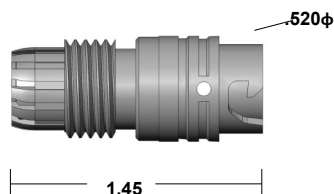
Up to 14 Contact Positions



Number of Poles	Contact Size Pin ϕ (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

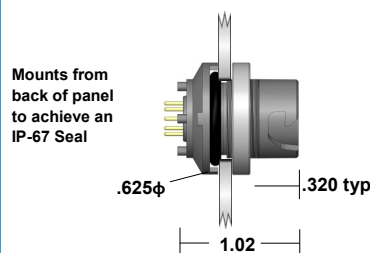
Custom contact inserts are available. Consult factory.

In-Line Receptacle Assembly



Select this component from Table B

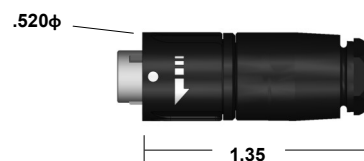
Rear Panel-Mount Receptacle Assembly



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

Options Include:

Housing Color Options

Mating Key Options

Panel-Mount Thickness Options

Black (std.) Gray

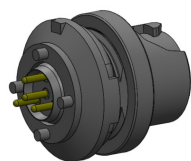
2 Standard Keys, Proprietary Keys Available

Up to .125 Standard

Receptacles & In-Line Plug

CONTACT TERMINATION OPTIONS

PCB (Panel-Mount Receptacles only)



Stand off height 0.050"

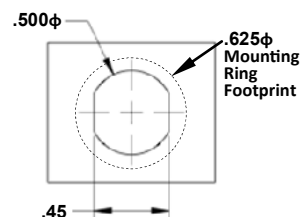
Request sales drawing for PCB Mounting Templates

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



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)