

PL-500FI SERIES

Plastic Shell Auto-Coupling Connectors
14 pole capacity miniature circular connector
Field Installable

PL-500FI FEATURES

Ideal for front-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
- Assemble without special tools
- 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 overmolded endure elevated strain and flex conditions



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,
Plating: Gold over Nickel

Mechanical

Mating Cycles: 20K cycles max
Retention Force:
• Mated Connectors: 25 lbs. min.
• Cable to Connector: to 30 lbs. typical
• Backshell to Connector: 50 lbs. min.
• Cable Diameter Range = .115 to .250

Environmental

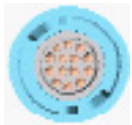
- Operating Temp: -40C to +105C
 - Moisture Resistance: to IP-67 (encapsulated)
 - Sterilizable: gamma, EtO & Autoclave
 - Chem. Resistance: common operating room cleaning solvents
- * post conditioning

SPECIFICATIONS

TABLE A: STANDARD CONTACT CONFIGURATIONS & SPECIFICATIONS

Number of Poles	Contact Size Pin ϕ (mm)	Max Wire Gauge	Operating Voltage max	Operating Current Max	Contact Resistance
14	0.5	28	300 V RMS	.9 A	< 14m ohms
10	0.5	28	300 V RMS	1.2 A	< 14m ohms
8	0.7	22	300 V RMS	1.8 A	< 6m ohms
7	0.7	22	300 V RMS	2.1 A	< 6m ohms
6	0.7	22	300 V RMS	2.1 A	< 6m ohms
5	0.7	22	300 V RMS	2.4 A	< 6m ohms
4	0.7	22	300 V RMS	2.4 A	< 6m ohms
3	0.7	22	300 V RMS	3.0 A	< 6m ohms
2	0.7	22	300 V RMS	3.0 A	< 6m ohms
1	0.7	22	300 V RMS	3.0 A	< 6m ohms
1	1.5	16	300 V RMS	7.0 A	< 2m ohms

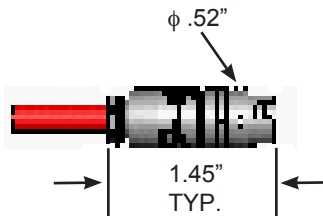
**Up to 14
contact positions**



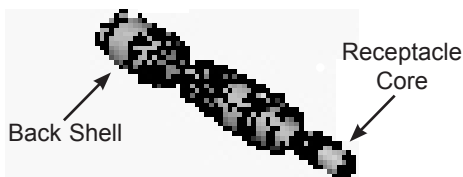
Custom contact inserts are available. Consult factory.

STANDARD HOUSING OPTIONS

In-Line Receptacle Assembly

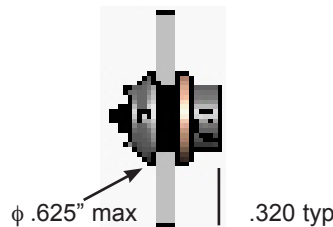


In-Line Receptacle Kit



Select this component from Table B

Panel-Mount Receptacle Assembly

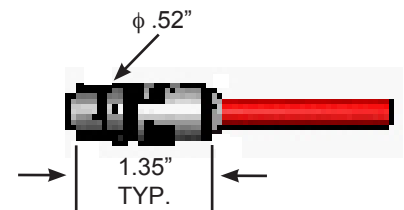


Panel-Mount Receptacle Kit

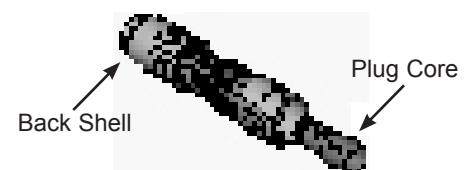


Select this component from Table B

In-Line Plug Assembly



In-Line Plug Kit



Select this component from Table B

Connector housings are illustrated in blue with gray couplers and backshells. Standard color is black on black. See our online configurator for color options at: www.amphenolalden.com/connectors-cable-assemblies/configure-connector

* All dimensions shown in inches except where indicated

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

Phone: 508-427-7000
Fax: 508-583-0164
www.amphenolalden.com

PL-500FI SERIES

Plastic Shell Auto-Coupling Connectors

14 Pole Capacity Miniature Circular Field Installable Connectors

TABLE B:

STANDARD PART NUMBERS

Number of Poles	In-Line Receptacle	Panel-Mount Receptacle		In-Line Plug
	Solder Cup	Solder Cup	PCB	Solder Cup
14	327104	327212	327204	327004
10	327100	327208	327200	327000
8	327140	327284	327280	327040
7	327136	327276	327272	327036
6	327132	327268	327264	327032
5	327110	327220	327218	327010
4	327112	327228	327224	327012
3	327116	327236	327232	327016
2	327120	327244	327240	327020
1 (.7mm Pin)	327124	327252	327248	327024
1 (1.5mm Pin)	327128	327260	327256	327028

Note: Part numbers cover black housings in Key 1 configuration. For other color and housing options utilize the Alden connector configurator located @ www.aldenproducts.com/configurator

Options Include:

Housing Color Options: Black, Gray

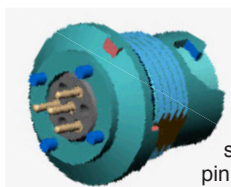
Mating Key Options: 2 Standard Keys, Proprietary Keys Available

Panel-Mount Thickness Options: Up to .125 Standard

CONTACT TERMINATION OPTIONS

Termination Options Receptacles & In-Line Plug

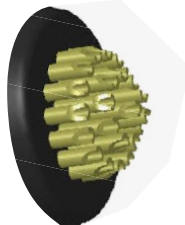
PCB (Panel-Mount Receptacle only)



stand off height .050"
pin length .125"

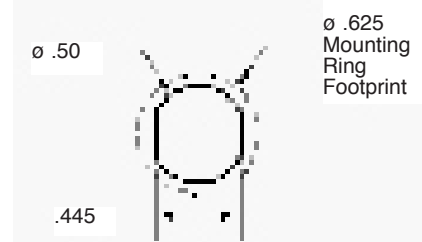
Request sales drawing SD-106999 for PCB mounting templates

Solder Cup (available on all)



Tiered & Canted for ease of assembly

Panel-Mount, Cut-Out Template



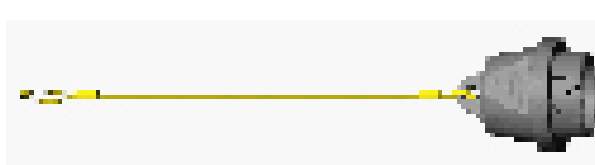
ACCESSORIES

SALES DRAWINGS

Drawing # Connector Type

- 3272XXA Panel-Mount Receptacle, 10 Pole, PCB
- 3272XXB Panel-Mount Receptacle, 14 Pole, PCB
- 3272XXC Panel-Mount Receptacle, 10 Pole, Solder Cup
- 3272XXD Panel-Mount Receptacle, 14 Pole, Solder Cup
- 3271XXA Inline Receptacle, 10 Pole, Solder Cup
- 3271XXB Inline Receptacle, 14 Pole, Solder Cup
- 3270XXA Inline Plug, 10 Pole, Solder Cup
- 3270XXB Inline Plug, 14 Pole, Solder Cup

PLUG SOAKING CAP #112058-02



CONNECTOR ASSEMBLY INSTRUCTIONS

- AI-PL500FI-01 Panel-Mount Receptacle
- AI-PL500FI-02 Inline Receptacle
- AI-PL500FI-03 Inline Plug

Available at:

www.amphenolalden.com/connectors-cable-assemblies/configure-connector

RECEPTACLE DUST COVER #107976



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