Amphenol Alden

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

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,
Plating: Gold over Nickel

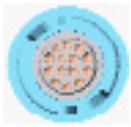
Mechanical
Mating Cycles: 20K cycles max
Retention Force:
- Mated Connectors: 25 lbs. min.
- Cable to Connector: to 30 lbs. typical
- Backshell to Connector: 50 lbs. min.
- Cable Diameter Range = .115 to .250

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*

TABLE A: STANDARD CONTACT CONFIGURATIONS & SPECIFICATIONS

Up to 14 contact positions

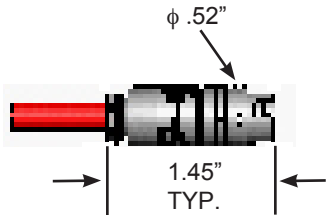


Number of Poles	Contact Size Pin ϕ (mm)	Max Wire Gauge	Operating Voltage max	Operating Current Max	Contact Resistance
14	0.5	28	300 V RMS	.9 A	< 14m ohms
10	0.5	28	300 V RMS	1.2 A	< 14m ohms
8	0.7	22	300 V RMS	1.8 A	< 6m ohms
7	0.7	22	300 V RMS	2.1 A	< 6m ohms
6	0.7	22	300 V RMS	2.1 A	< 6m ohms
5	0.7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

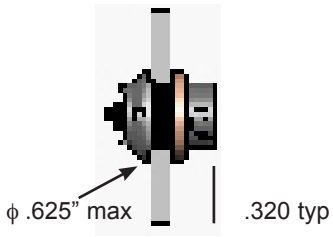
Custom contact inserts are available. Consult factory.

STANDARD HOUSING OPTIONS

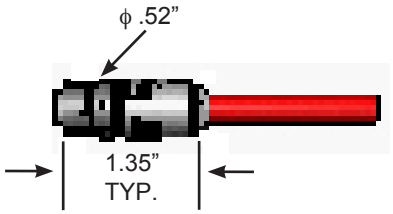
In-Line Receptacle Assembly



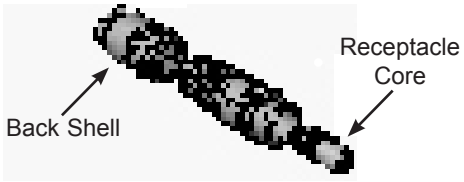
Panel-Mount Receptacle Assembly



In-Line Plug Assembly



In-Line Receptacle Kit

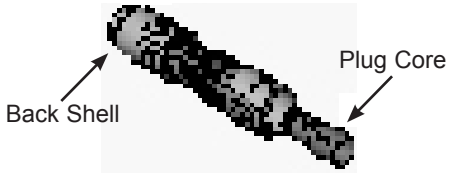


Select this component from Table B

Panel-Mount Receptacle Kit

Select this component from Table B

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

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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

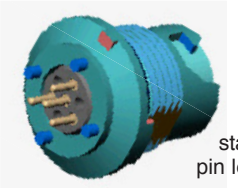
Note: Part numbers cover black housings in Key 1 configuration. For other color and housing options utilize the Alden connector configurator located @ www.aldenproducts.com/configurator

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

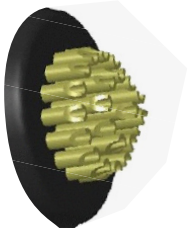
PCB (Panel-Mount Receptacle only)



stand off height.050"
pin length .125"

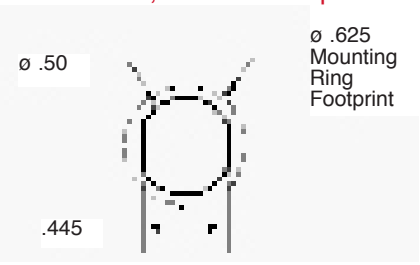
Request sales drawing SD-106999
for PCB mounting templates

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

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

PLUG SOAKING CAP #112058-02

RECEPTACLE DUST COVER #107976

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