

### MEDI|LIGHT FEATURES



Designed specifically for patient monitoring and endoscopy vision system applications, our medi|light series offers an ergonomic and cost effective package integrating electrical and optical interconnects into a single assembly

#### Overview (intuitive, compact, efficient)

- Pulse-Lok® auto-latching mechanism for assured connections
- Available with ceramic LC- or MT-termini for precise F/O alignment
- Ergonomic size fits comfortably in the hands of the user
- Multiple keying options available

#### Order as a full cable assembly (Consult Factory)

- Single or double ended
- Customize your cable bundle
- Overmolded strain relief
- Add components to fulfill requirements

### SPECIFICATIONS

#### Material

Connector Housing: Polyamide Molded  
Core Insulator: LCP  
Electrical Contacts: Brass/Phosphor Bronze

- Termination: Solder-cup
- Plating: 30µ" Gold over 50µ" Nickel
- Flammability Rating
- Housing/Coupler Assembly: 94HB
- Molded Contact Insulator (core): UL94 V-0

#### Mechanical

Mating Cycles: 500 min.\*  
Mating Force:

- Mate: 7.5lbs. Max
- Un-mate: 1.6 lbs. Max
- Unintended extraction: 30 lbs. Min.
- Backshell Withdrawal: 5.0lbs. Min.\*\*\*

#### Environmental

- Operating Temp: -20C to +85C\*\*
- Dust Resistance: to IP-50 (mated)
- Sterilizable: gamma & EtO\*\*
- Chem. Resistance: common OR cleaning solvents

\* ML900 only

\*\*Dependent on overmold material

\*\*\*Backshell sold separately

TABLE A: STANDARD CONTACT CONFIGURATIONS & SPECIFICATIONS

Series	Contact Type Pin φ	Wire	Operating	Loss performance
ML700	2x 1.25mm LC-termini 4x 0.5mm electrical	0.9mm buffer, nominal 26 AWG, max.	PC / UPC polish; 850 / 1300 / 1510 nm 300 V RMS @ 2A (max. <sup>1</sup> )	IL - 0.75 dB <50 mΩ resistance
ML900	1x E-beam MT 6x 0.7mm electrical	0.125mm cladding, nominal 22 AWG, max.	PC / APC / E-beam polish; 850 / 1300 / 1510 nm 300 V RMS @ 3A (max. <sup>1</sup> )	IL - 0.5 dB <sup>2</sup> <50 mΩ resistance

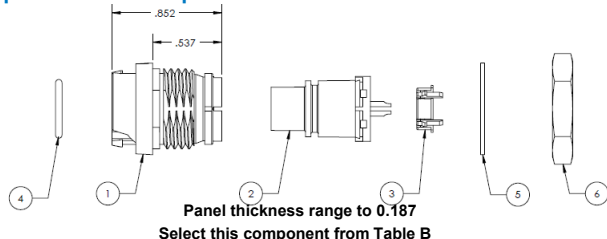
<sup>1</sup> 30C Heat Rise Limit <sup>2</sup> Post-cleaning

### ML700 CONNECTOR KITS

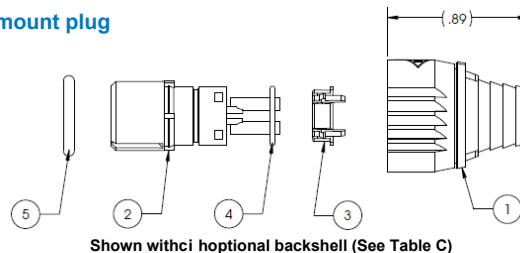
### STANDARD HOUSING OPTIONS

Note: This assembly may be panel-mounted or mounted within a hand piece or electronic accessory

#### Front panel-mount receptacle

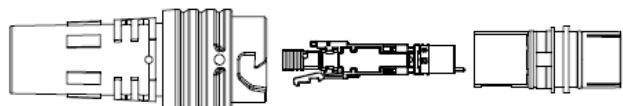


#### Cable-mount plug

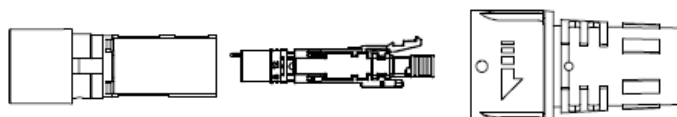


### ML900 CABLE ASSEMBLIES

#### Front panel-mount receptacle assembly



#### Plug cable assembly



\*All dimensions shown in inches (unless otherwise noted)

For additional information about this, or any other Amphenol Alden product, please contact an Amphenol Alden specialist today, [www.AmphenolAlden.com](http://www.AmphenolAlden.com)

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[www.AmphenolAlden.com](http://www.AmphenolAlden.com)

# MEDI|LIGHT SERIES

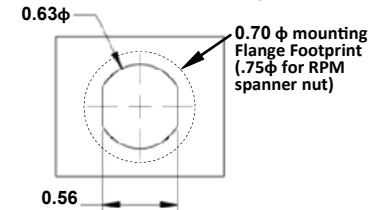
Hybrid fiber optic & electrical connectors and cable assemblies

TABLE B:

STANDARD PART NUMBERS

ML700SM-N	Plug Connector Kit Cable-mount		Receptacle Connector Kit Front Panel-Mount (FPM)	
Color	Black	Grey	Black	Grey
Key 1	305910	305911	305940	305941
Key 2	305912	305913	305942	305943

Panel-Mount, Cut-Out Template



Applies to Disposable Receptacle

ML900SM-N	Cable assembly, Plug	Cable assembly, In-line Receptacle	Cable assembly, Front Panel-Mount (FPM) Receptacle
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*Coming soon...consult factory*

**ML700 Options Include:**

Housing Color Options: Black (std.), Gray, White, Blue, Red, Green, Yellow  
 Mating Key Options: 2 Standard Keys, Proprietary Keys Available  
 Panel-Mount Thickness: Up to 0.187" (standard)

**ML900 Options Include:**

Housing Color Options: Black (std.), Gray, White, Blue, Red, Green, Yellow  
 Distal Termini Options: Simplex LC-termini (std.), COTS simplex, duplex, MT termini optional  
 Panel-Mount Thickness: Up to 0.187" (standard)

*Let us streamline your assembly process by providing fully assembled, and tested, Medi|Light cable assemblies*

TABLE C:

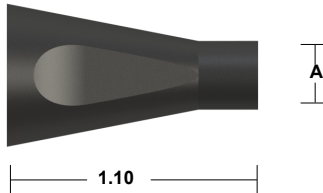
ACCESSORIES

ML700SM-N FPM Receptacle Dust Cover



P/N 300390

ML700SM-N Backshell



ML700SM-N Plug Soaking Cap



P/N 300391

The PL-700 plug housing is designed to accept Amphenol Alden's one piece, Press & Seal PVC Backshell. This unique backshell simply snaps into place providing an IP-67 rated seal to the plug housing and cable exit without hardware resulting in a clean overmolded look. For optimum sealing we suggest selecting a wire exit i.d. that is at least .005" smaller than your nominal cable diameter.

Dimension A	Part #	
(Inches)	(Black)	(Gray)
0.053	300350	300351
0.064	300352	300353
0.075	300354	300355
0.086	300356	300357
0.096	300358	300359
0.104	300360	300361
0.120	300362	300363
0.129	300364	300365
0.142	300366	300367
0.153	300368	300369
0.162	300370	300371
0.170	300372	300373
0.186	300374	300375
0.204	300376	300377
0.215	300378	300379
0.225	300380	300381
0.235	300382	300383
0.249	300384	300385
0.264	300386	300387
0.300	300388	300389

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

**Receptacle Instructions:**

AI-ML700SMN-PMR05

**Cable Mount Plug Instructions**

AI-ML700SMN-P05

**ASSEMBLY INSTRUCTIONS**

Note: accessories sold separately

Note: recommended tooling included in assembly instructions

For additional information about this, or any other Amphenol Alden product, please contact an Amphenol Alden specialist today, [www.AmphenolAlden.com](http://www.AmphenolAlden.com)

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