

## 109 Series Connectors®



**Amphenol Fiber Systems International (AFSI) manufactures a complete line of next generation fiber optic connectors designed to meet the needs of harsh environment applications.**

Amphenol Fiber Systems International (AFSI) offers hermaphroditic fiber optic connectors for deployable fiber optic communication requirements. These rugged connectors are designed to be the industry's most economical connector providing easy maintenance and superior optical performance.

AFSI's line of 109 Series hermaphroditic connectors offers the ultimate in flexibility. 109 Series plugs can function as either a plug or a receptacle to fit any system design. With these connectors, cable assemblies can be daisy-chained to provide the required distance for any deployment condition.

The 109 Series connector line meets or exceeds the pertinent requirements of Society of Motion Picture and Television Engineers (SMPTE) standard 358M on harsh environment multi channel fiber optic connectors suitable for deployment in demanding outdoor broadcast applications, including high definition television (HDTV) signal transmission.

### Features & Benefits :

- 2- and 4-channel configurations
- Single mode and multi-mode compatible
- M29504/14 +/-15 Termini
- Ultra PC polish option
- Assemblies available on reels
- Hermaphroditic design for plug-to-plug connections
- 109 plugs can function as either a plug or a receptacle to fit any system design
- Industry tested M29504/14 +/-15 Termini
- Single mode supports broadband requirements

### Applications:

- Deployable broadcast networks, including HDTV
- Outdoor fiber optic interconnect
- Emergency restoration systems
- Ship-to-shore communications
- Military tactical deployable systems

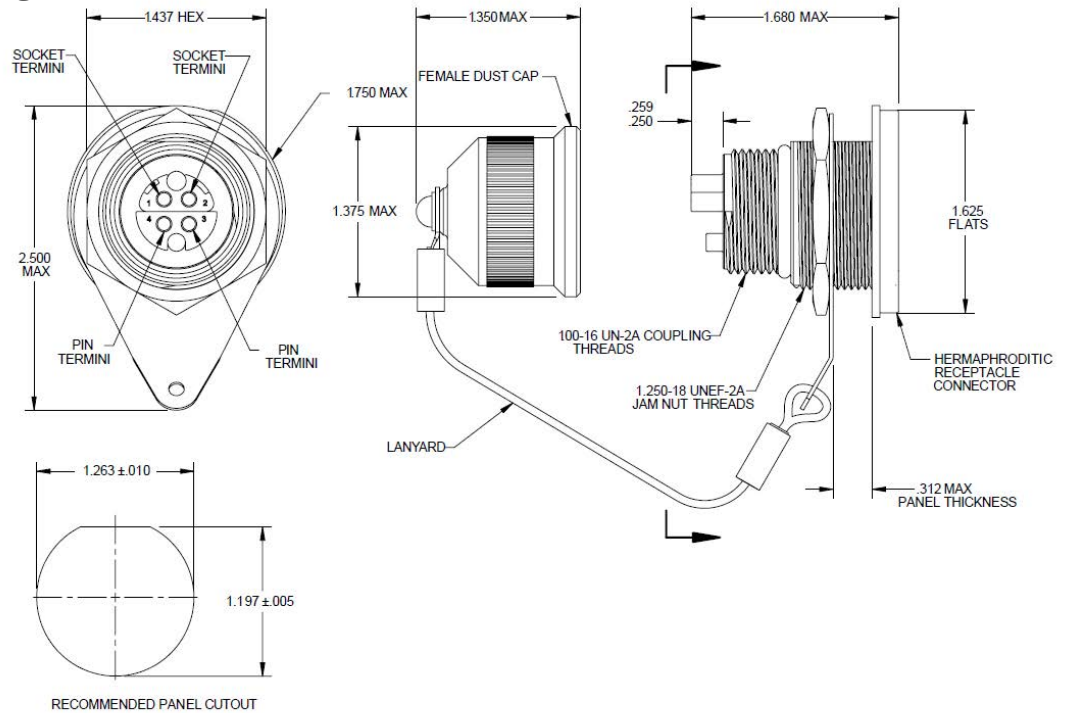
**Amphenol Fiber Systems International, Inc. | 1300 Central Expressway N, Suite 100 Allen, TX 75013**

Phone: (214) 547-2400 | Email: [sales@fibersystems.com](mailto:sales@fibersystems.com) | Website: [amphenol-fsi.com](http://amphenol-fsi.com)

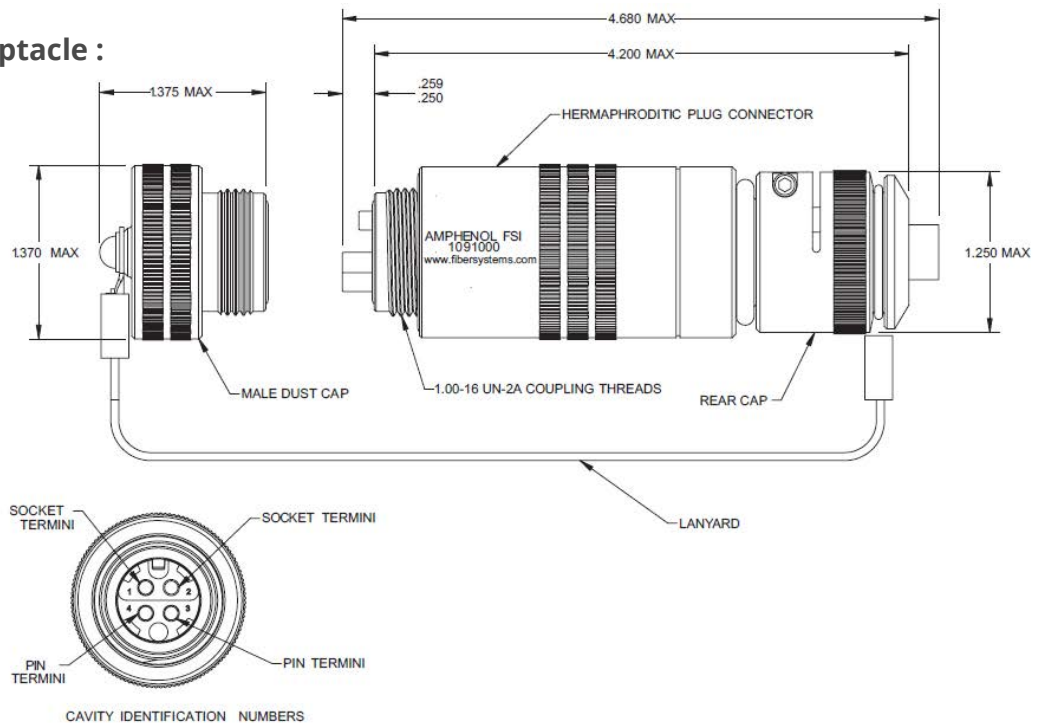
Amphenol Fiber Systems International (AFSI), a division of Amphenol Military & Aerospace Operations (AMAO), is the largest manufacturer of harsh environment fiber optic cable assemblies & connectors in the world. Visit AMAO at [amphenolmao.com](http://amphenolmao.com).

## 109 Series Connectors®

### 109 Series 4-Ch. Hermaphroditic Plug :



### 109 Series 4-Ch. Hermaphroditic Receptacle :



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## 109 Series Connectors® Specifications:

Specification	Measurement/Detail
<b>Fiber Type</b>	62.5/125 or 50/125 multimode, 9/125 single mode
<b>Insertion Loss</b>	62.5/125 or 50/125 multimode fiber: -0.3dB typical 9/125 single mode: -0.4dB typical
<b>Operating Temperature</b>	-46 to + 71o C
<b>Cable Seal Flexing</b>	200 cycles at 180o flex per EIA/TIA-455-1
<b>Mating Durability</b>	500 cycles per EIA/TIA-455-21
<b>Impact</b>	EIA/TIA-455-2
<b>Crush Resistance</b>	450 lb minimum per EIA/TIA-455-26

## How to Order :

For more information on how to order or to obtain a price quote on any of our TFOCA-II® EX products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail us at [info@fibersystems.com](mailto:info@fibersystems.com).



## Build a 109 Series Connector®:

1.	2.	3.	4.	5.
Base Part Number	Material & Finish	Insert Material & Finish	Fiber Type/ Mode	Dust Cap
1091000				

1. Base Part Number	2. Material & Finish
<b>1091000</b>	<b>A</b> Aluminum - Black Anodize

3. Insert Material & Finish	4. Fiber Type/Mode
<b>1</b> Plastic - Black	<b>S</b> Single Mode (Yellow)
<b>2</b> Aluminum - Black Anodize	<b>M</b> Multimode (Blue)

5. Dust Cap
<b>1</b> Male
<b>2</b> Female

## About Amphenol Fiber Systems International :

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than two decades in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented.

AFSI has delivered millions of fiber optic connectors in more than 34 countries. Whenever there is a need for superior, cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

Visit [www.amphenol-fsi.com](http://www.amphenol-fsi.com) for more information.

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