### **Amphenol FSI**

## **110 Series -** Hybrid Fiber Optic Connectors for HDTV Broadcast Cameras - SMPTE 304M Compliant



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) introduces a new line of 110 Series connectors conforming to the SMPTE 304M Standard. These hybrid connectors are designed for use with high definition broadcast television cameras used world-wide for the production and transmission of high definition TV programming.

The 110 Series Connectors feature two fiber optic termini and four electrical contacts. The fiber termini support either single mode and multimode fibers, while the two auxiliary electrical contacts permit supply of power remotely to the camera at long distances from the studio, control van or CCU. Two additional low voltage electrical contacts are provided for communication purposes. The connectors are designed to be used in conjunction with SMPTE 311M Standard cables.

The connectors are fabricated from stainless steel to withstand corrosive elements when exposed to the extreme harsh outdoor environments, and are sealed to an IP68 rating to block out ingress of damaging dirt, dust and moisture. The robust shells are designed with thick walls to prevent damage from rough handling during outdoor deployment at venues such as professional sports arenas. Dust caps are available to protect against contamination of the interfaces. The connectors are designed for easy termination in the field.

While intended primarily for use for HDTV broad-cast applications, these connectors are ideal for other applications that call for rugged hybrid fiber optic connections. Optional materials, finishes, inserts and keying configurations are available as custom configurations. The connectors are also offered with optional custom cable attachments allowing use with other cable structures.

#### Features & Benefits:

- SMPTE 304M Compliant
- Hybrid (2-ch SM fiber + 2HV + 2LV)
- Push Pull quick connect/disconnect mechanism for easy/quick mating
- Multiple key design for easy blind mating
- Low insertion loss
- High back reflection with super PC polish

- Plug and socket configuration for easy daisy-chaining
- Designed for excellent optical performance over the harshest environmental conditions
- 360 degree shielding for full EMI screening
- Plug shell has color-code band
- Designed for easy field termination

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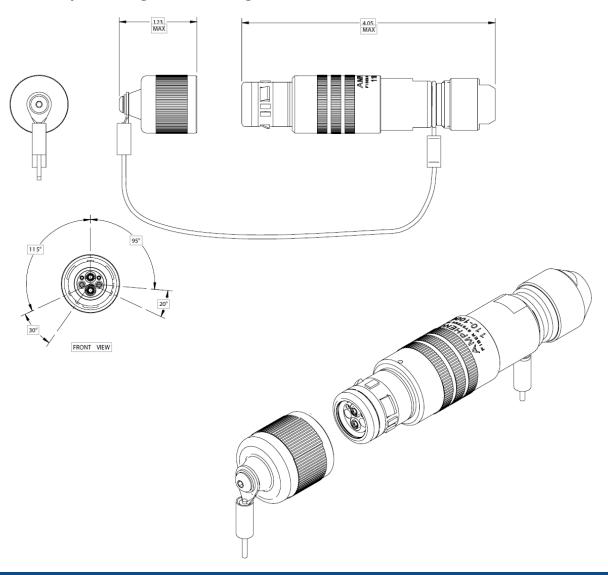
### **Applications:**

- HDTV broadcast cameras
- Studios
- Outside broadcast vehicles
- Sports arenas
- Auditoria

#### **SMPTE 304M Compliant Connectors Product Specs:**

| Specification     | Measurement/Detail          |
|-------------------|-----------------------------|
| Insertion Loss    | 0.5dB max                   |
| Return Loss       | -45dB min (Super PC Polish) |
| Temperature Range | -40° to +75°C               |
| Humidity          | 0% to 95% RH (at +40°C)     |

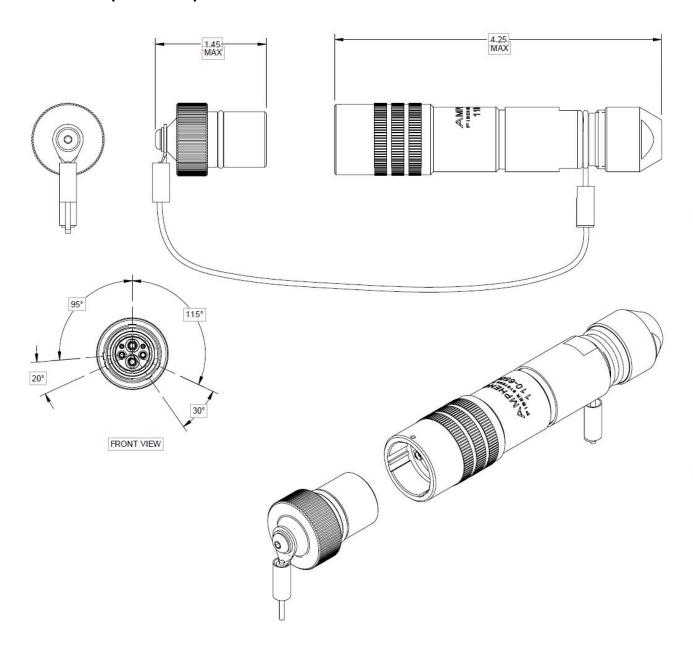
### **SMPTE 304M Compliant Plug Connector Figure 1:**





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#### **SMPTE 304M Compliant Receptacle Connector:**



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#### How to Order:

For more information on how to order or to obtain a price quote on any of our SMPTE 304M Standard 110 Series products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail us at info@fibersystems.com.



### **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** for more information.