FS12A Hermaphroditic Fiber Optic Connectors

FS12A Plug

FS12A Receptacle

About FS12A

Amphenol Fiber Systems International's (AFSI) FS12A fiber optic connector is for harsh environment broadcast applications. This connector is available in either single mode or multimode and uses field-proven M29A1000 type termini.

The 12-channel FS12A connector design provides flexibility for current and future communication requirements for high fiber-count tactical broadcast networks.

Removable termini enables quick connector reconfiguration and field maintainability.

Features and Benefits

- **Hermaphroditic Design:** Enables plug-to-plug or plug-to-receptacle connectivity.
- **Rugged Design:** FS12A connector handles the rigors of rapid deployment and harsh environment conditions for both industrial and military applications.
- **Environmentally Sealed Connector:** Ensures environmental integrity.
- **Field Proven Termini:** Takes advantage of tightly toleranced commercial ceramic ferrules and alignment sleeves allowing either single mode or multimode use.
- **Removable Insert Cap:** Enables ease of socket termini cleaning.
- **Captive Insert Cap Screw:** Prevents loss of screw during cleaning or repair.
- **Sealed Termini:** Keeps the optical path clear under extreme environmental conditions.
- **Field Repairable Using Existing Parts:** Additional connector components (other than termini) are not required to perform field repair.

Applications

- Broadcast
- Industrial
- Oil, gas and geoscience industries

How to Order

For more information on how to order or to obtain a price quote on any of our FS12A products, please call us at 800.472.4225. For international calls please dial 214.547.2400 or email us at info@fibersystems.com

FS12A Plugs on Hannay Reel

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FS12A Hermaphroditic Fiber Optic Connectors

FS12A Connector Specifications

Specification	Measurement/Detail
Fiber type	62.5/125 multimode or 9/125 single mode
Insertion loss	62.5/125 multimode fiber –0.3dB typical, 9/125 single mode fiber -0.4dB typical
Operating temperature	-46 °C to +71 °C
Shock	EIA/TIA-455-14, Condition A
Vibration	MIL-STD-1344, Method 2005.1
Cable retention	400 pounds minimum per EIA/TIA-455-6 (applies to plug and strain relief receptacles only)
Twist	1000 cycles per EIA/TIA-455-36
Cable seal flexing	100 cycles per MIL-STD-1344, Method 2017, Procedure I
Mating durability	2000 cycles per EIA/TIA-455-21
Impact	EIA/TIA-455-2
Crush resistance	450 pounds minimum per EIA/TIA-455-26
Flammability	MIL-STD-1344, Method 1012
EMI shielding effectiveness (receptacles only)	Greater than 60 dB average

FS12A Connector Part Numbers

Product Name
FS12A Plug

Product Number
FS12A__1000__ __-1__

FINISH	
A	HARD ANODIZE, BLACK

BOOT/CABLE SIZE	
F	CABLE DIA .240-.279 (6.1-7.0 mm)
A	CABLE DIA .280-.315 (7.1-8.0 mm)
B	CABLE DIA .316-.346 (8.0-8.8 mm)
G	CABLE DIA .347-.379 (8.8-9.6 mm)
C	CABLE DIA .380-.423 (9.7-10.7 mm)
D	CABLE DIA .424-.465 (10.8-11.8 mm)
E	CABLE DIA .466-.515 (11.8-13.0 mm)
H	CABLE DIA .635-.665 (16.1-16.9 mm)
J	CABLE DIA .750-.780 (19.0-19.8 mm)

INSERT FINISH	
1	GRAY ANODIZE
2	ELECTROLESS Ni

ELASTOMERS	
N	NITRILE
E	EPDM
F	FLUOROSILICONE
B	BUTYL

Example Part Number - FS12AA1000F1-1N
FS12A Plug; Hard Anodize, Black Finish; Cable Dia .240-.279; Gray Anodize; Nitrile Elastomers

FS12A Hermaphroditic Flanged Receptacle	FS12A-6000-1
FS12A Hermaphroditic Jam Nut Receptacle Rear	FS12A-8000-1
FS12A Hermaphroditic Jam Nut Receptacle Front	FS12A-8080-1

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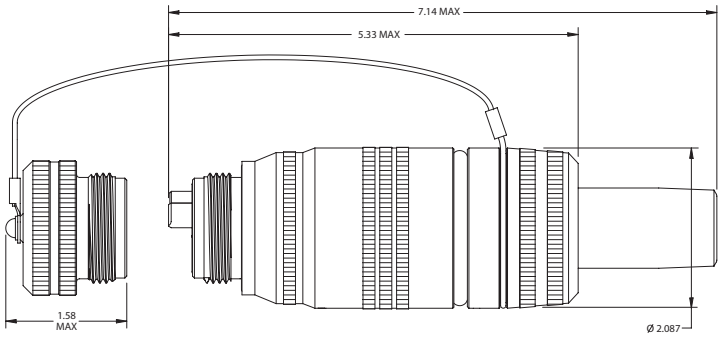
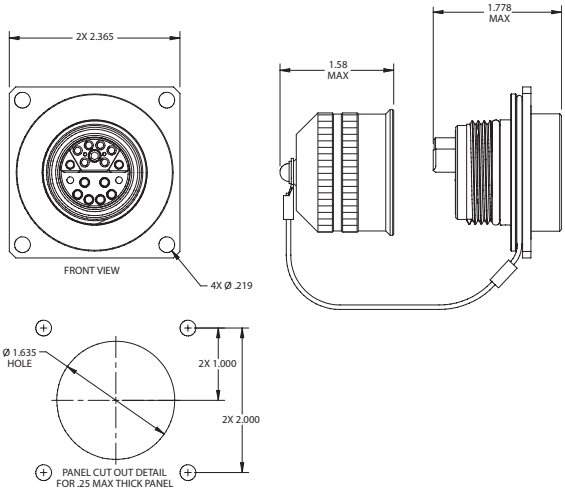
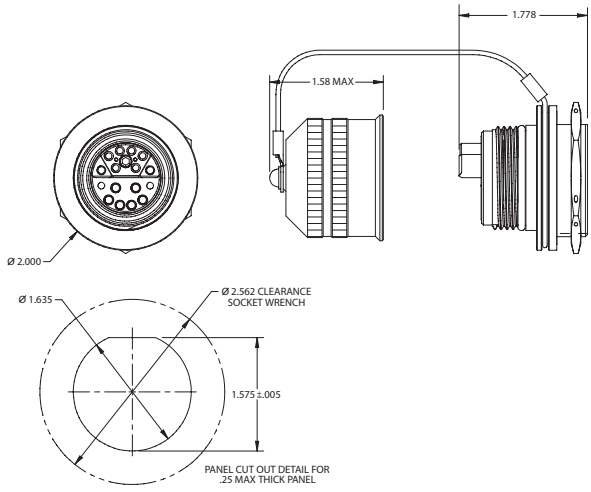
FS12A Hermaphroditic Fiber Optic Connectors



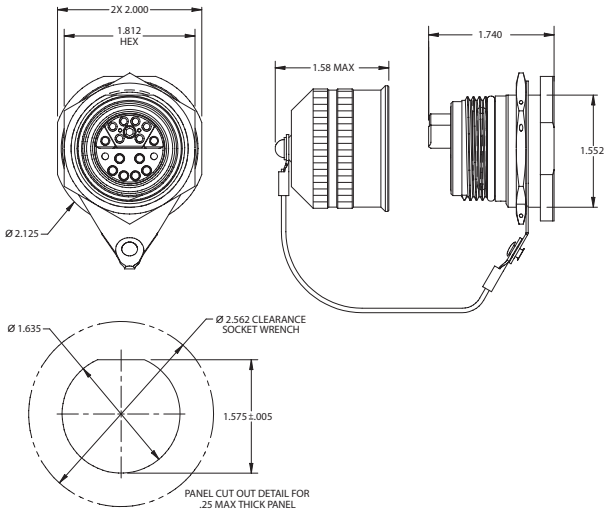
FS12A-1000 Hermaphroditic Plug



FS12A-6000 Hermaphroditic Flanged Receptacle with Panel Cut Out



FS12A-8000 Hermaphroditic Rear Jam Nut Receptacle with Panel Cut Out



FS12A-8080 Hermaphroditic Front Jam Nut Receptacle with Panel Cut Out

Drawings are not to scale.
Measurements are in inches.

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FS12A Hermaphroditic Fiber Optic Connectors

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 a decade 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. Altogether, AFSI has delivered millions of fiber optic connectors in more than 22 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.

For more information about AFSI, please visit our web site at www.fibersystems.com

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