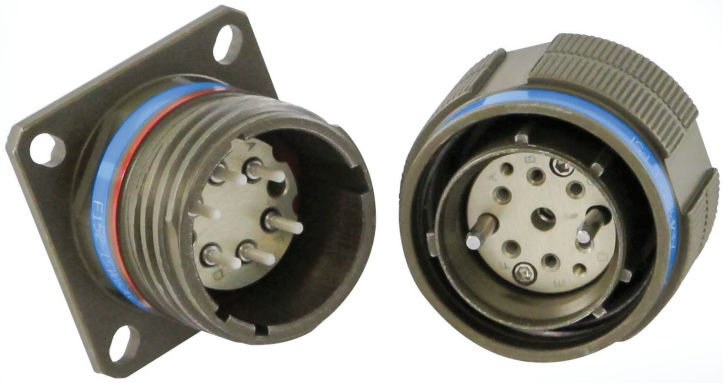
Amphenol FSI

ARINC 801 Fiber Optic Series



Based on the commercial ARINC 801 specification, this series features a removable alignment sleeve retainer (ASR) for ease of termini end-face cleaning, guide pins for precision alignment, and a scoop proof shell design.

Amphenol Fiber Systems International (AFSI) produces the ARINC 801 cylindrical fiber optic connector suite for aerospace and military applications. It is available in standard D38999 plug and receptacle shells. Inserts are available to support 2 to 32 channels and can support both PC and APC.

Amphenol FSI also offers the companion ARINC 801 terminus, which uses a standard 1.25mm ferrule and sleeve that can be terminated with standard LC termination procedures. The terminus can be inserted and removed from the connector with a standard size 16 contact removal tool. The terminus is available in both multimode and single mode versions. The fiber optic contact provides low insertion loss (0.3dB max, multimode) and back reflection (-55dB, APC). All versions of the termini are available in non-pull proof (for tight structure FO cables) and pull-proof (loose structure FO cable construction) variations.

Amphenol also manufactures a full range of other ARINC 801 related connectors such as ARINC 600, 404, EN 4165 and EN 3545, SJS Luminus series, as well as PROMI for easy splicing applications.

Features & Benefits:

- Qualified to the ARINC 801 Specification
- Precision alignment and components provide excellent optical performances
- Supports APC termini for RF-over-fiber and other applications requiring low back reflection
- Supports standard suite of 38999 backshells and accessories
- Removable ASR facilitates termini cleaning and maintenance
- High-density arrangements up to 32 channels

Amphenol Fiber Systems International, Inc.
859 State Highway 121, Suite #2000 Allen, TX 75013 | (214) 547-2400 | sales@fibersystems.com | www.fibersystems.com

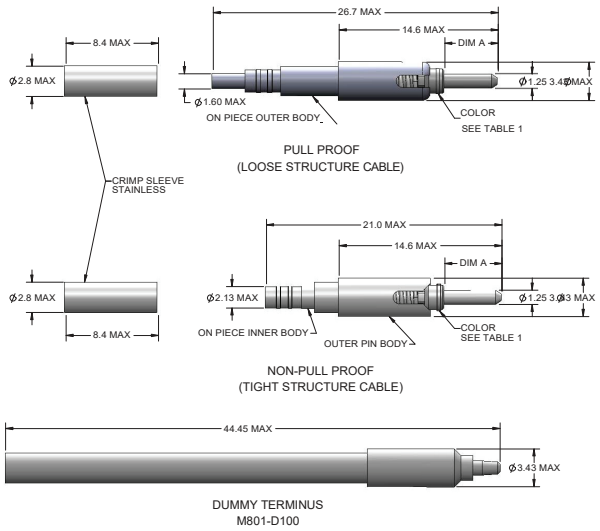
Performance Specifications :

- MM: IL 0.12dB @ 850nm & 1300nm
- SM APC: IL 0.12dB & RL >65dB @ 1310 & 1550nm
- Temp range -55C to +125C
- Temp life 1000hrs @ 100C
- Vibration levels up to 300 Grms
- Durability 500 mating cycles
- Humidity: 100hrs exposure

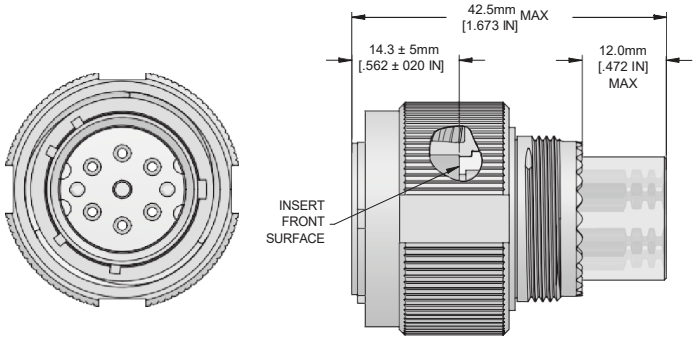
Applications :

- Commercial Airframe
- Avionics
- Military Radar
- SATCOM Systems
- RF over Fiber

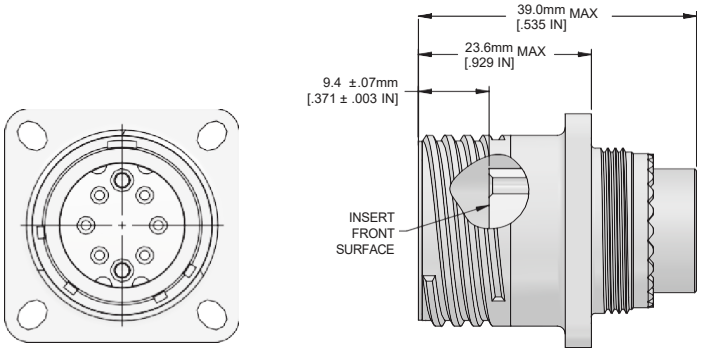
Arinc 801 Fiber Optic Termini :



ARINC 801 Dimensions:



Wall Mount Assembly :



Jam Nut Receptacle Assembly :

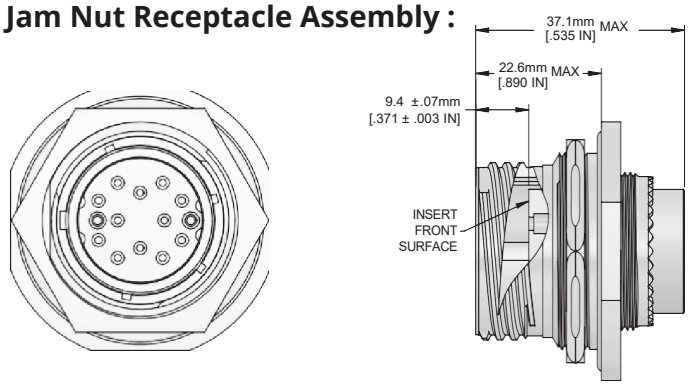


TABLE I

Shell Size	DIMØA MAX	DIM B SQ ± 0.3	DIM C SQ ± 0.4	DIMØD MAX	DIM E +.25/-.00	DIMØF +.00/-.25	DIMG MIN	DIMØH MIN	DIMJ +.13	DIMK THREAD
11	24.9mm (0.98″)	26.2mm (1.031″)	31.8mm (1.250″)	35.2mm (1.386″)	19.59mm (.771″)	20.96mm (0.825″)	20.62mm (0.812″)	20.22mm (0.796″)	3.25mm (.128″)	M15 X 1-6g
13	29.2mm (1.150″)	28.6mm (1.125″)	34.9mm (1.375″)	38.4mm (1.512″)	24.26mm (0.955″)	25.65mm (1.010″)	23.01mm (0.906″)	23.42mm (0.922″)		M18 X 1-6g
15	32.3mm (1.272″)	31.0mm (1.220″)	38.1mm (1.500″)	41.6mm (1.638″)	27.56mm (1.085″)	28.83mm (1.135″)	24.61mm (0.906″)	26.59mm (1.047″)		M22 X 1-6g
17	35.8mm (1.410″)	33.3mm (1.311″)	41.3mm (1.625″)	44.8mm (1.764″)	30.73mm (1.210″)	32.01mm (1.260″)	26.97mm (1.062″)	30.96mm (1.219″)		M25 X 1-6g
19	38.6mm (1.520″)	36.5mm (1.437″)	46.0mm (1.811″)	49.5mm (1.950″)	33.91mm (1.335″)	35.18mm (1.385″)	29.36mm (1.156″)	32.94mm (1.297″)		M28 X 1-6g
21	41.9mm (1.650″)	39.7mm (1.563″)	49.2mm (1.937″)	52.7mm (2.075″)	37.08mm (1.460″)	38.35mm (1.510″)	31.75mm (1.250″)	36.12mm (1.422″)		M31 X 1-6g
23	44.7mm (1.760″)	42.9mm (1.689″)	52.4mm (2.063″)	55.9mm (2.323″)	40.26mm (1.585″)	41.53mm (1.635″)	34.93mm (1.375″)	39.29mm (1.547″)	3.91mm (0.154″)	M34 X 1-6g
25	48.0mm (1.890″)	46.0mm (1.811″)	55.6mm (2.189″)	59.0mm (2.323″)	43.43mm (1.710″)	44.70mm (1.760″)	38.10mm (1.500″)	42.47mm (1.672″)	3.81mm (0.150″)	M37 X 1-6g

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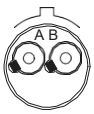
ARINC 801 Connector Layouts:

Plug Grommet Face



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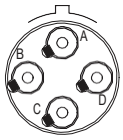
#11-02



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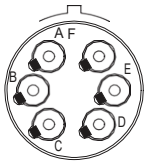

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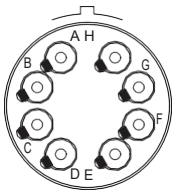

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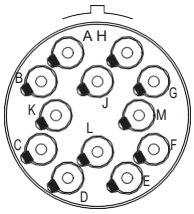

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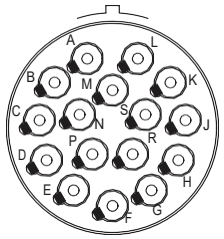

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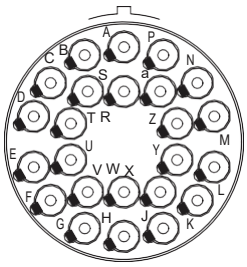

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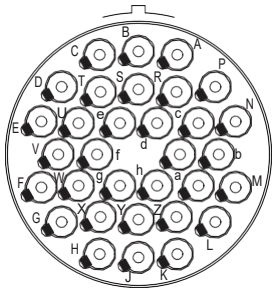
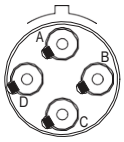


Shell Size 25
#25-32

Receptacle Grommet Face:

Receptacle Grommet Face

Shell Size 11



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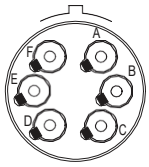

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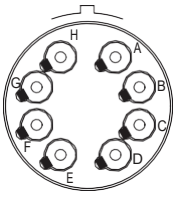

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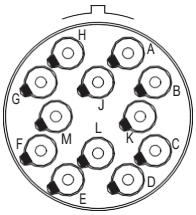

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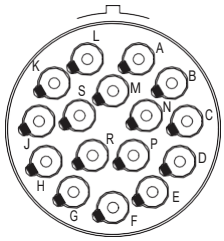

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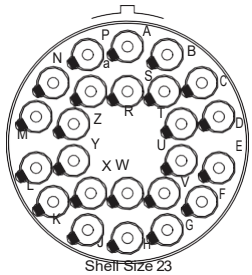

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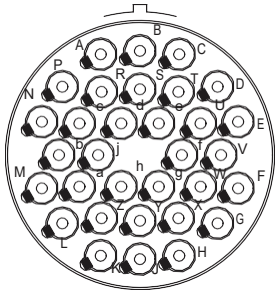
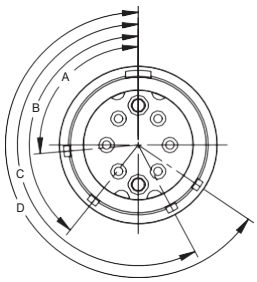


Shell Size 25

Key Arrangements:



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Amphenol Fiber Systems International (AFSI) :

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports the broadest portfolio of reliable and innovative fiber optic interconnect solutions to withstand the harsh environments of military, aerospace, heavy industrial, broadcast and medical applications. Since inception in 1993, AFSI continues to advance its position as a global leader in harsh environment fiber optic interconnect.

AFSI has delivered millions of fiber optic solutions in more than 30 countries. Whenever there is a need for superior, cost-effective fiber optic systems to withstand the harshest of operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

Visit **www.fibersystems.com** for more information.

How to Order:

For more information on how to order or to obtain a price quote on our Arinc 801 products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail info@fibersystems.com.

Build an ARINC 801 Connector:

1. Base Part Number	2. Shell Size	3. Shell Type	4. Hole Layout	5. Insert Material	6. Shell Material & Finish	7. Key
FS801						

1. Base Part Number	
FS801	

5. Insert Material	
A	Aluminum

2. Shell Size
11
13
15
17
19
21
23
25

4. Hole Layout
2
4
6
8
12
16
24
32

6. Shell Material & Finish	
B	Black Anodized Alum
C	CAD Olive Drab Alum
S	Passivated Stainless Steel
K	Nickel Plated Alum
Z	Black Zinc Nickel
M	Marine Bronze
P	Ni Plated Composite
J	CAD OD Composite

3. Shell Type	
P	Straight Plug
R	Wall Mount Receptacle
J	Jam Nut Receptacle

7. Key
N
A
B
C
D
E

M801 Terminus:

1. Base Part Number	2. Mode	3. Polish	4. Fiber Size	5. Cable Structure
M801				

1. Base Part Number
M801

2. Mode	
S	Single Mode
M	Multimode

3. Polish	
S	Super Polish
U	Ultra Polish
A	Angle Polish

4. Fiber Size	
1	MM (50/125 & 62.5/125)
2	SM (9/125)
3	MM (100/140)
4	MM (50/125)
8	MM (200/230)

5. Cable Structure	
P	Pull Proof (loose structure)
N	Non Pull Proof (tight structure)

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