

### About the ARINC 801

AFSI produces the ARINC 801 cylindrical fiber optic connector suite for aerospace and military applications. 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. It is available in standard D38999 plug and wall mount shells. Inserts are available to support 2 to 32 channels and can support both PC and APC.

AFSI 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 or 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). In addition to the standard PC end-face option, AFSI's ARINC 801 termini are offered with an APC end-face for applications requiring reduced back-reflection.



### Features and Benefits

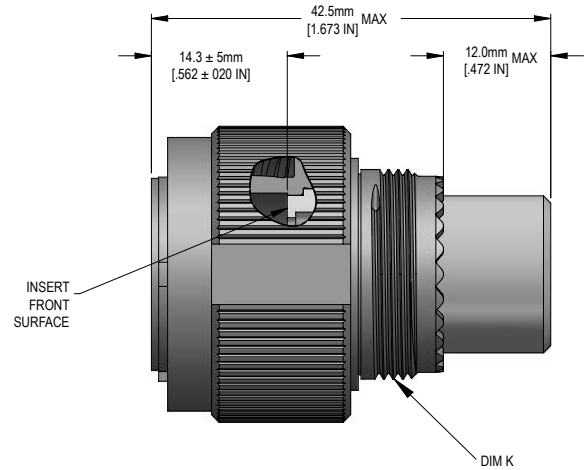
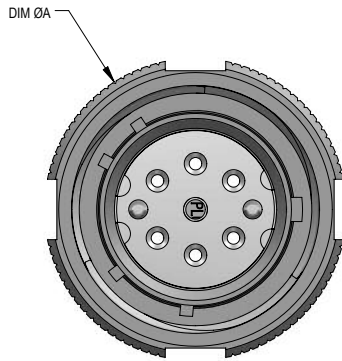
- Qualified to the ARINC 801 Specification
- Precision alignment and components provide excellent optical performance
- Supports APC termini for RF-over-Fiber and other applications requiring low backreflection
- Supports standard suite of 38999 backshells and accessories
- Removable ASR facilitates termini cleaning
- Scoop-proof design prevents termini end-face from being touched by the front of the mating connector
- High density arrangements up to 32-channels

### Applications

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



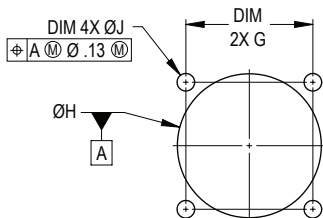
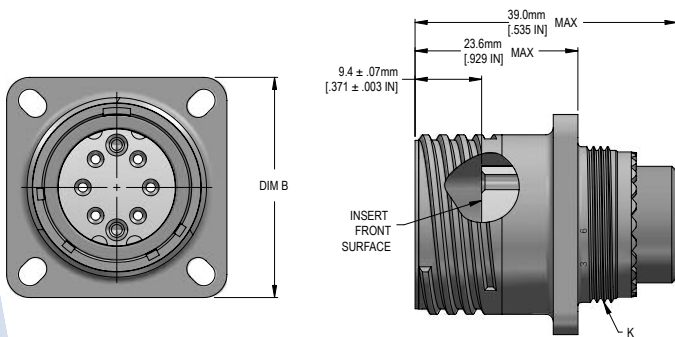
### Plug Assembly



SHELL SIZE	DIM ØA MAX	DIM B SQ ±0.3	DIM C SQ ±0.4	DIM ØD MAX	DIM E +.25/-00	DIM ØF +.00/-25	DIM G MIN	DIM ØH MIN	DIM J ±.13	DIM K 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 (0.969")	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 (2.200")	40.26mm (1.585")	41.53mm (1.635")	34.93mm (1.375")	39.29mm (1.547")		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")		M37 X 1-6g

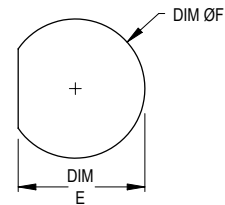
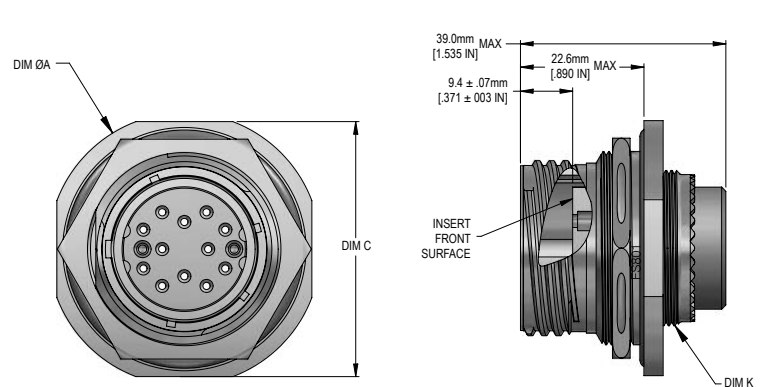
SHELL SIZE	KEYING POSITION DESIGNATOR	A°	B°	C°	D°
11, 13 & 15	N	95°	141°	208°	236°
	A	113°	156°	182°	292°
	B	90°	145°	195°	252°
	C	53°	156°	220°	255°
	D	119°	146°	176°	298°
17 & 19	E	51°	141°	184°	242°
	N	80°	142°	196°	293°
	A	135°	170°	200°	310°
	B	49°	169°	200°	244°
	C	66°	140°	200°	257°
21, 23 & 25	D	62°	145°	180°	280°
	E	79°	153°	197°	272°
	N	80°	142°	196°	293°
	A	135°	170°	200°	310°
	B	49°	169°	200°	244°
	C	66°	140°	200°	257°
	D	62°	145°	180°	280°
	E	79°	153°	197°	272°

### Wall Mount Assembly



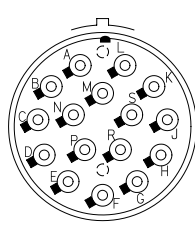
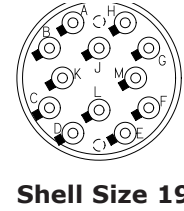
WALL MOUNT CONNECTOR CUTOUT

### Jam Nut Receptacle Assembly

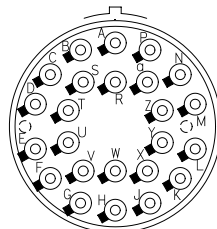


JAM NUT CONNECTOR CUTOUT

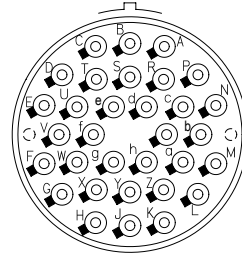
### Plug Grommet Face



Shell Size 21

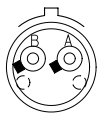


Shell Size 23

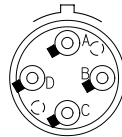


Shell Size 25

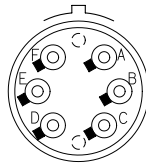
### Receptacle Grommet Face



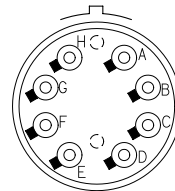
Shell Size 11



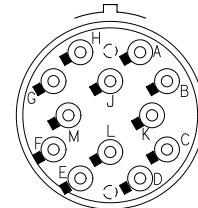
Shell Size 13



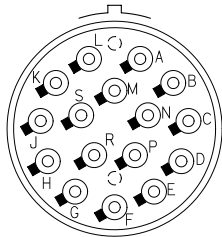
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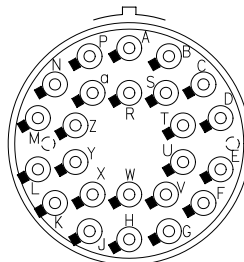
Shell Size 17



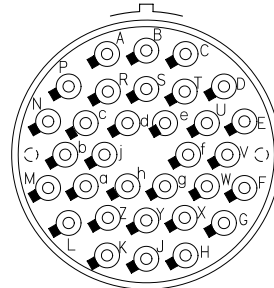
Shell Size 19



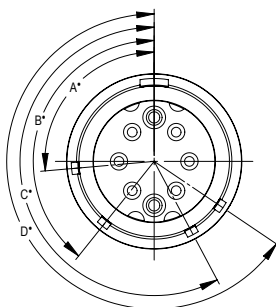
Shell Size 21



Shell Size 23



Shell Size 25

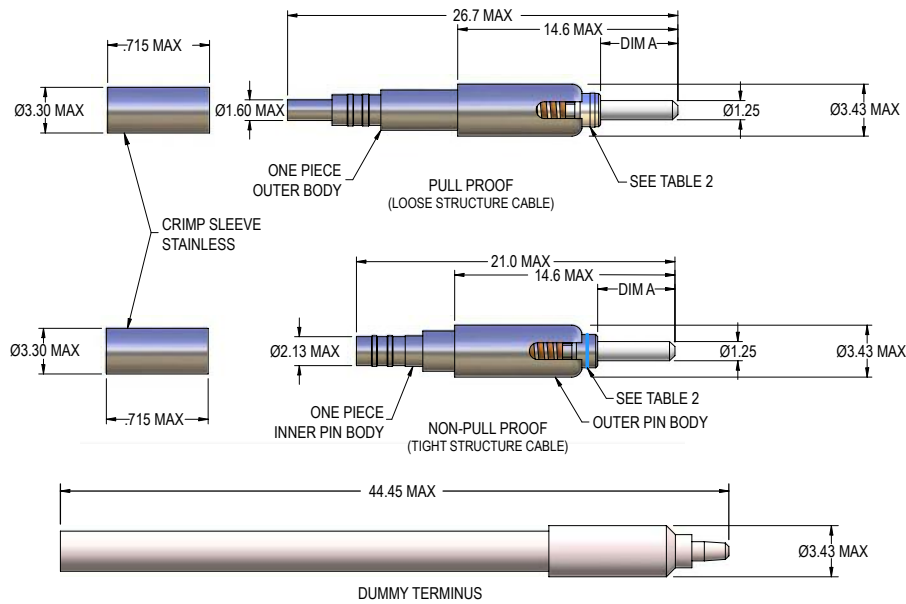


Keying Arrangements



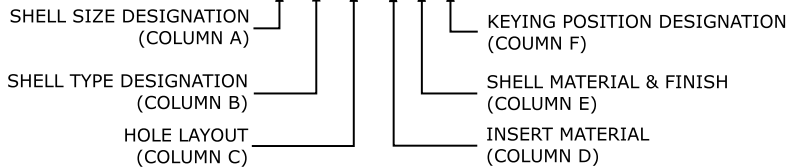
ARINC 801 Fiber Optic Termini

## Fiber optic Termini



### Connector Ordering Information (see Table III)

**FS801 - XX X XX X X X**



### Terminus Ordering Information

**M801 - X X X X**

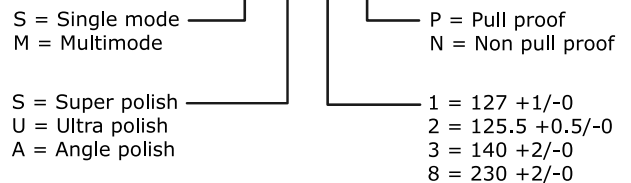


TABLE III ARINC CONNECTOR PRODUCT INFORMATION

PART NUMBER	A	B	C	D	E	F
	SHELL SIZE	SHELL TYPE	HOLE LAYOUT	INSERT MATERIAL	SHELL MATERIAL & FINISH	KEY
FS801-XX X XX X X X	11	P = STRAIGHT PLUG H = WALL MOUNT RECEPTACLE J = JAM NUT RECEPTACLE	02	A = ALUMINUM	B = BLACK ANODIZED ALUM C = CAD OLIVE DRAB ALUM D = PTFE NICKEL PLATED ALUM S = PASSIVATED STAINLESS STEEL	N, A B, C D & E  (see Keying Arrangements)
	13		04			
	15		06			
	17		08			
	19		12			
	21		16			
	23		24			
	25		32			