

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

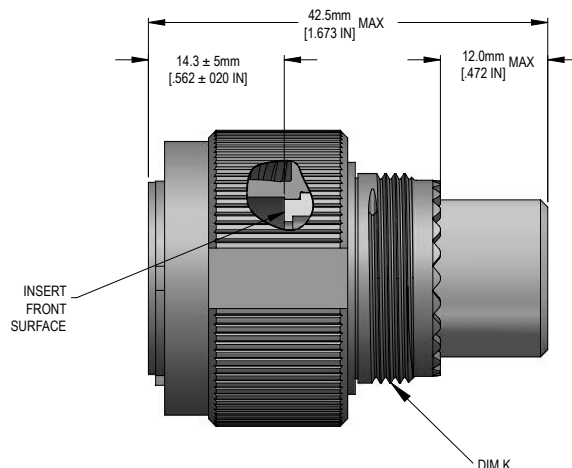
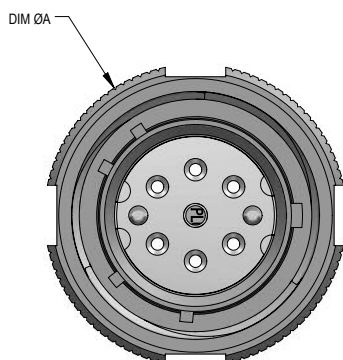
- Qualified to the ARINC 801 Specification
- Precision alignment and components provide excellent optical performance
- Supports APC termini for RF-over-Fiber and other applications requiring low backreflection
- Supports standard suite of 38999 backshells and accessories
- Removable ASR facilitates 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



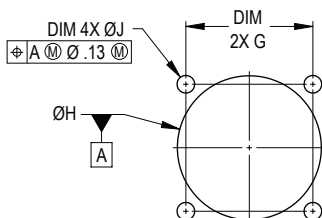
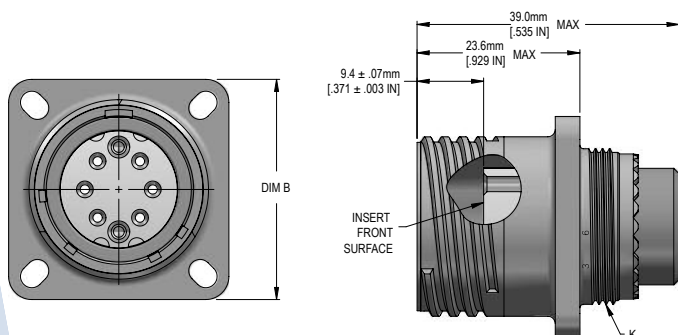
Plug Assembly



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")	3.91mm	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")	3.81mm	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	M37 X 1-6g

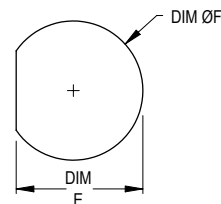
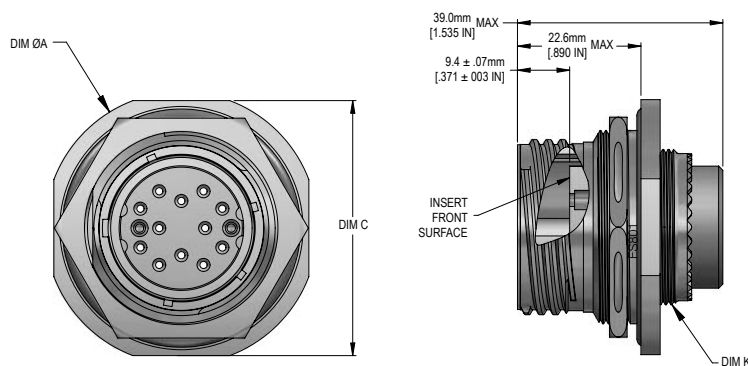
SHELL SIZE	KEYING POSITION DESIGNATOR	A°	B°	C°	D°
11, 13 & 15	N	95°	141°	208°	236°
	A	113°	156°	182°	292°
	B	90°	145°	195°	252°
	C	53°	156°	220°	255°
	D	119°	146°	176°	298°
17 & 19	E	51°	141°	184°	242°
	N	80°	142°	196°	293°
	A	135°	170°	200°	310°
	B	49°	169°	200°	244°
	C	66°	140°	200°	257°
21, 23 & 25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

Wall Mount Assembly



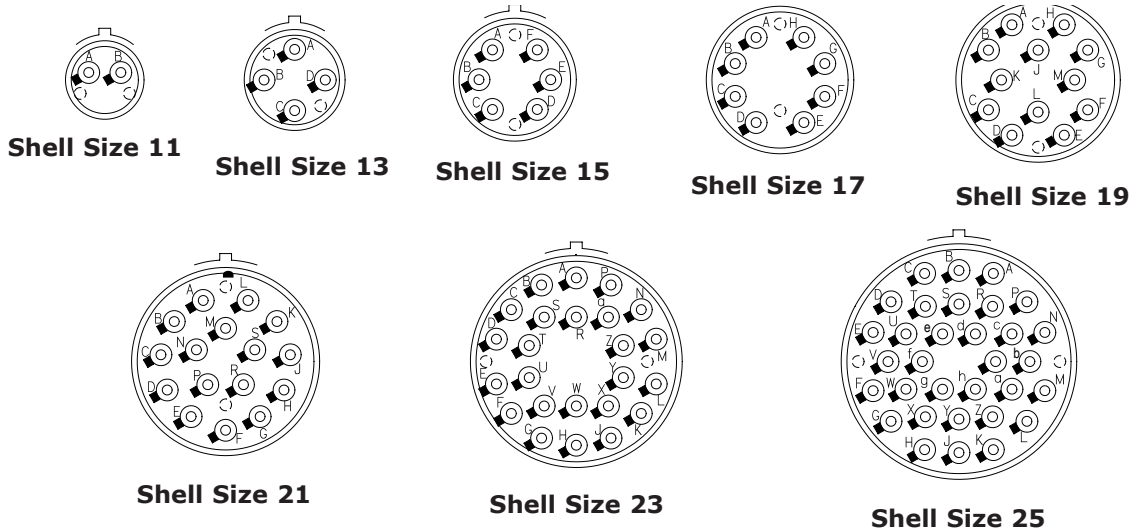
WALL MOUNT CONNECTOR CUTOUT

Jam Nut Receptacle Assembly

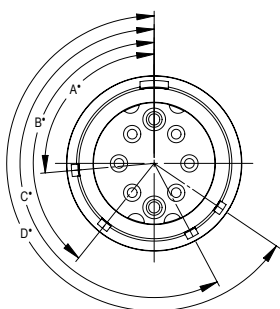
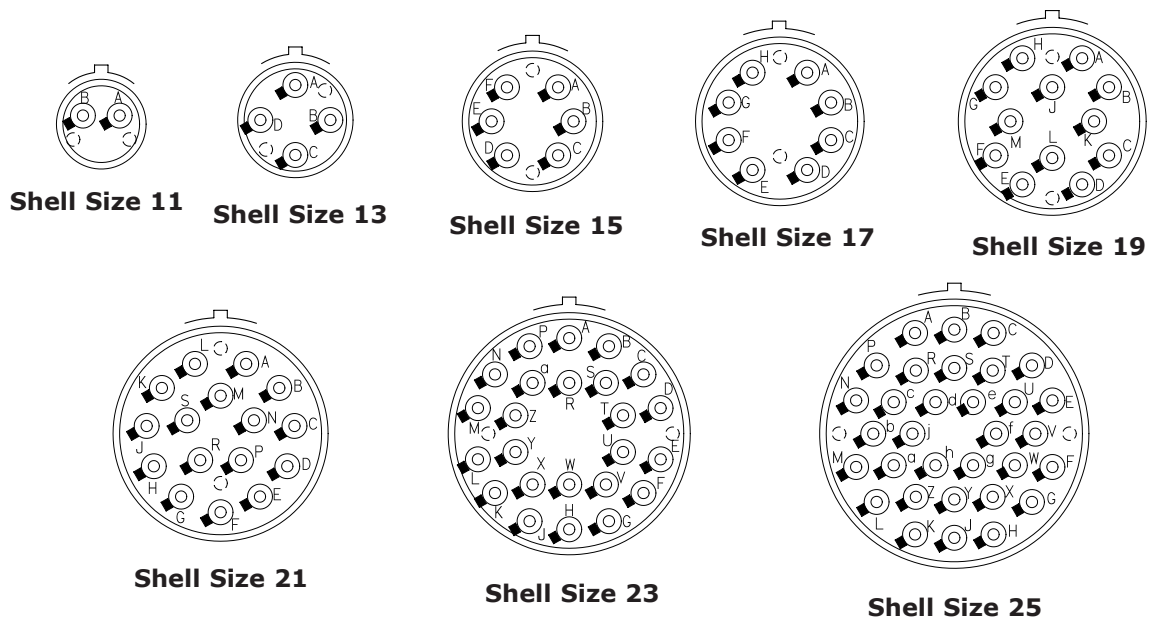


JAM NUT CONNECTOR CUTOUT

Plug Grommet Face



Receptacle Grommet Face

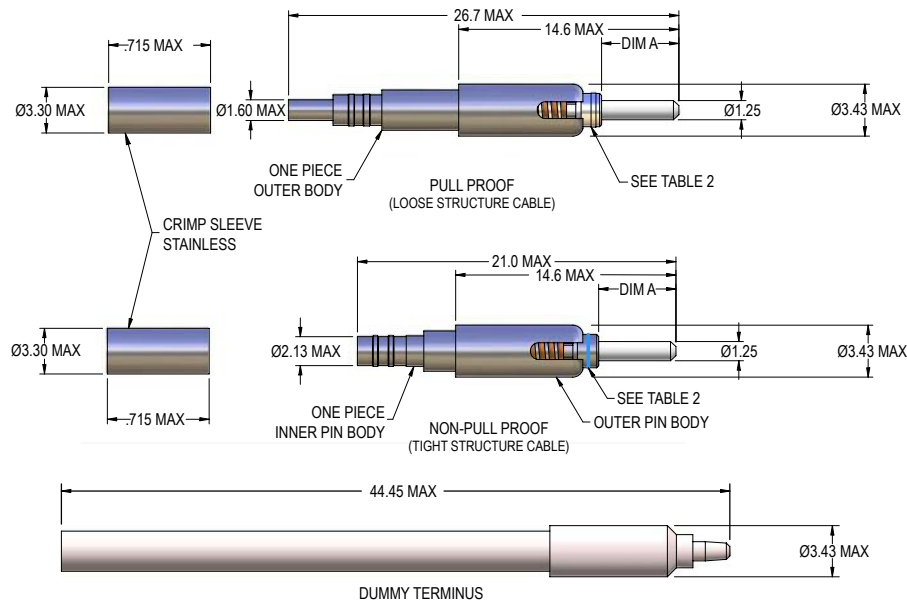


Keying Arrangements



ARINC 801 Fiber Optic Termini

Fiber optic Termini



Connector Ordering Information (see Table III)

FS801 - XX X XX X X X

SHELL SIZE DESIGNATION (COLUMN A) →
 SHELL TYPE DESIGNATION (COLUMN B) →
 HOLE LAYOUT (COLUMN C) →
 KEYING POSITION DESIGNATION (COLUMN F) →
 SHELL MATERIAL & FINISH (COLUMN E) →
 INSERT MATERIAL (COLUMN D) →

Terminus Ordering Information

M801 - X X X X

S = Single mode →
 M = Multimode →
 S = Super polish →
 U = Ultra polish →
 A = Angle polish →
 P = Pull proof →
 N = Non pull proof →
 1 = 127 +1/-0
 2 = 125.5 +0.5/-0
 3 = 140 +2/-0
 8 = 230 +2/-0

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			