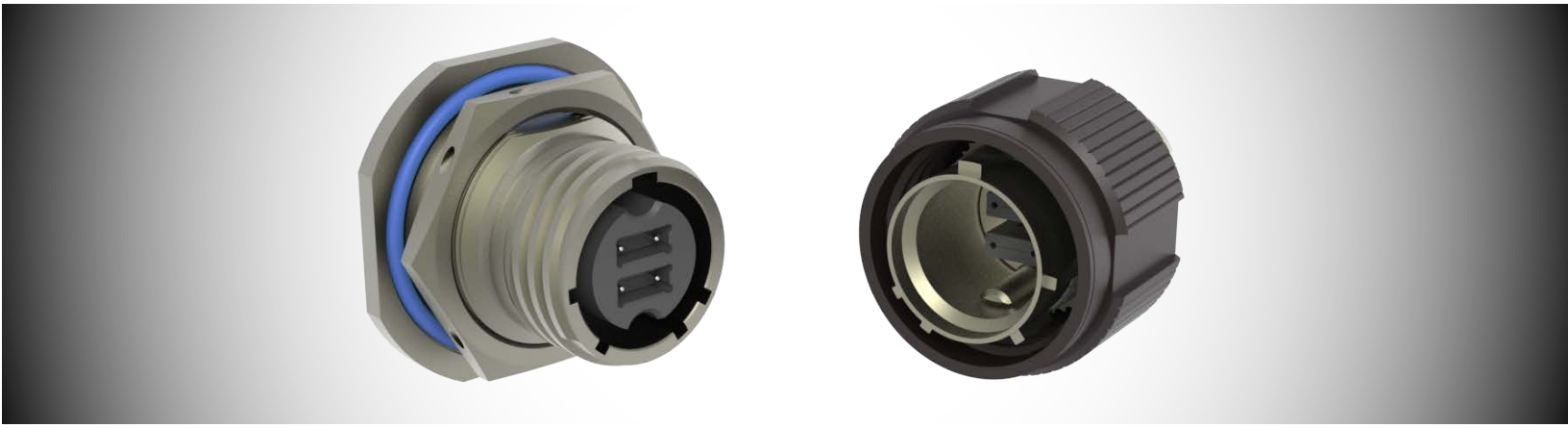
A-V87 High Density Circular MT Connectors



The A-V87 meets the VITA 87 and the SOSA Technical Standards, to help ensure A&D (Aerospace and Defence) customers supply demands can be achieved and they can design their systems confidently.

The A-V87 high density circular MT Connector product line offers a much higher density Mil Circular fiber optics option that is more aligned with industry architecture needs. The A-V87 High Density fiber optic connector product line features 12-24 Fiber options, Housing up to 192 fibers within a compact size 15 shell with 4 MTs and can support both PC and APC. These new connectors, available in both physical contact and lensed versions, cater to a distinct array of high-density applications.

These products are also part of global VITA and SOSA standards, ensuring supply and enabling customers to confidently design this product into their next generation systems. VITA 87 fills this need and is a significant improvement over previous offerings.

Features & Benefits:

- High-Reliability, High-Density, Ruggedized, Harsh-Environment MT Connectors in MIL-DTL-38999 Connector Packaging
- 3 levels of alignment provide for precision fiber-to-fiber interface:
  - Shell-to-shell with keying to allow for alternate positions
  - Insert plug to insert receptacle
  - MT contact guide pins
- Ferrules are available in either 12-fiber or 24-fiber versions, in multi-mode PC, single mode PC, and single mode APC configurations
- Low Insertion loss
- Individual rear insertable and removable optical contact.
- Housing up to 192 fibers within a compact size 21 shell with 8 MTs

Applications:

- Commercial Airframe
- Avionics
- Military Radar
- SATCOM Systems

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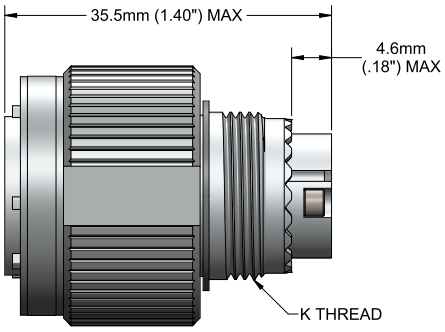
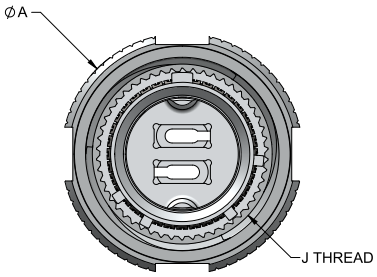
Amphenol FSI

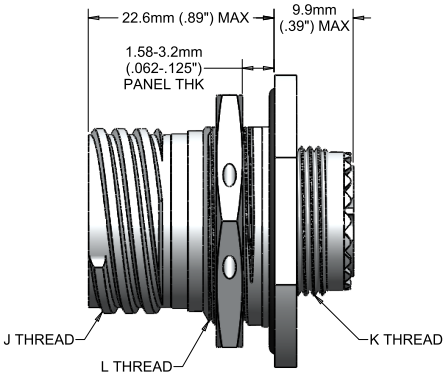
A-V87 Product Drawings

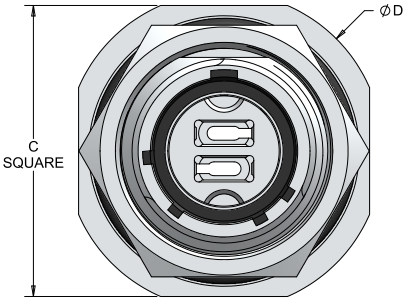
A-V87 Plug:





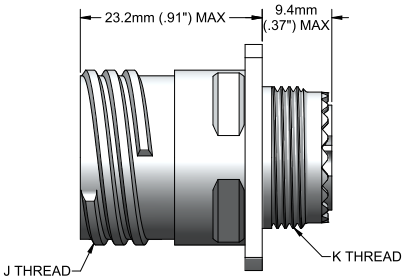
Jam Nut Receptacle:

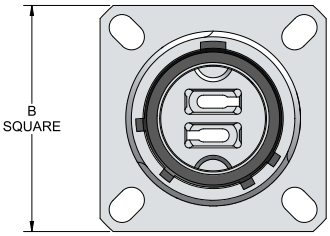




V87-JNR

Wall Mount Receptacle:





V87-WMR

Performance:

Parameter	Typical
Optical Insertion Loss	
Optical Return Loss	
Vibration - Random (LMT)	
Vibration - Random (PCMT)	
Mechanical Shock (LMT & PCMT)	
Mechanical Shock	
Mating Durability	
Humidity Exposure	
Thermal Cycle	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	
Optical Insertion Loss	

TABLE I

SHELL SIZE	DIM A MAX	DIM B MAX	DIM C MAX	DIM D MAX	DIM E MIN	DIM F MIN	DIM G +0.25/-0	DIM H +0/-0.25	J THREAD	K THREAD	L THREAD
11	25.0mm (.984")	26.47mm (1.042")	32.03mm (1.261")	35.23mm (1.387")	20.22mm (.796")	20.62mm (.812")	20.96mm (.825")	19.59mm (.771")	.750-.1P-.3L-TS	M15 X 1-6g 0.100R	M20 X 1-6g
13	29.4mm (1.157")	28.86mm (1.136")	35.21mm (1.386")	38.41mm (1.512")	23.42mm (.922")	23.01mm (.906")	25.65mm (1.010")	24.26mm (.955")	.875-.1P-.3L-TS	M18 X 1-6g 0.100R	M25 X 1-6g
15	32.5mm (1.280")	28.86mm (1.230")	38.38mm (1.511")	41.58mm (1.637")	26.59mm (1.047")	24.61mm (.969")	28.83mm (1.135")	27.56mm (1.085")	1.000-.1P-.3L-TS	M22 X 1-6g 0.100R	M28 X 1-6g

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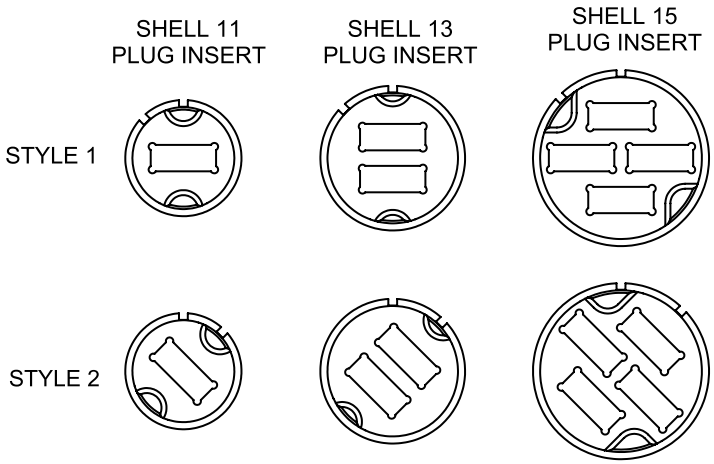
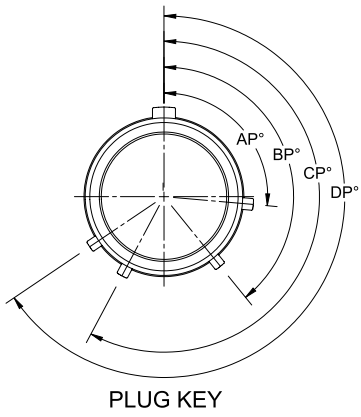
A-V87 Connector Layouts:

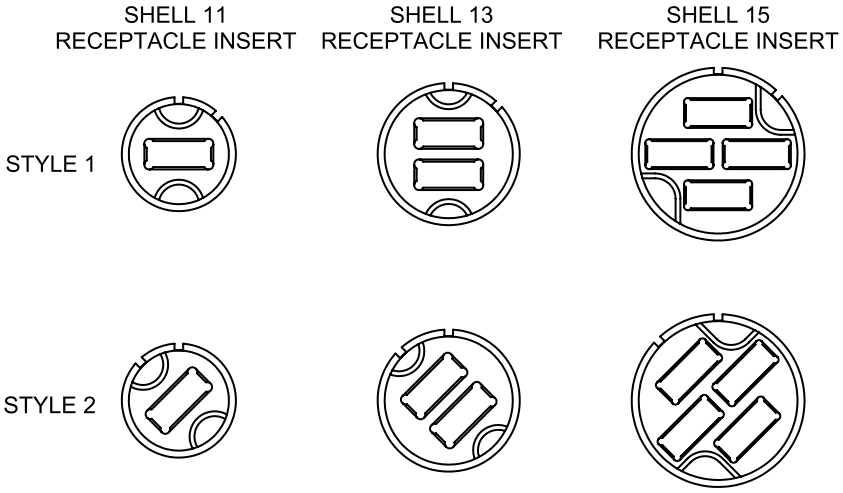
A-V87 Plug:



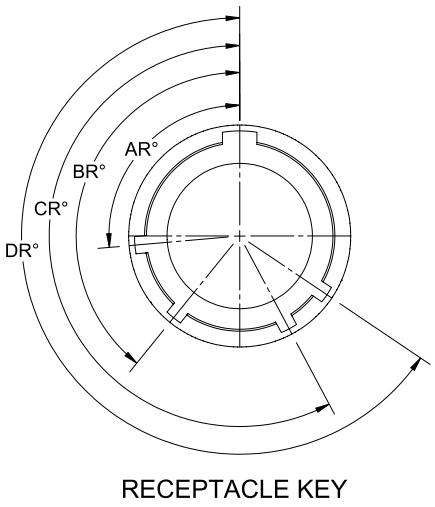
Plug Key Arrangements:



A-V87 Receptacle:



Receptacle Key Arrangements:



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A-V87 High Density Circular MT Connectors

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Part Numbering Schemes

AV87 - #######

PART NO.	DESCRIPTION				
AV87 - #######	**DASH NUMBER COLUMN 1 & 2 = SHELL SIZE**				
AV87 - 11 #####	**11** = SHELL SIZE 11				
AV87 - 13 #####	**13** = SHELL SIZE 13				
AV87 - 15 #####	**15** = SHELL SIZE 15				
AV87 - #######	**DASH NUMBER COLUMN 3 = CONNECTOR TYPE**				
AV87 - ## P ####	**P** = PLUG				
AV87 - ## J ####	**J** = JAM NUT RECEPTACLE				
AV87 - ## R ####	**R** = WALL MOUNT RECEPTACLE				
AV87 - #######	**DASH NUMBER COLUMN 4 = MT FERRULE COUNT**				
AV87 - ### 1 ###	**1** = 1 BLADE (SHELL 11)				
AV87 - ### 2 ###	**2** = 2 BLADE (SHELL 13)				
AV87 - ### 4 ###	**4** = 4 BLADE (SHELL 15)				
AV87 - #######	**DASH NUMBER COLUMN 5 = INSERT MATERIAL**				
AV87 - #### A ##	**A** = 6061-T6 ALUMINUM, GREY ANODIZED				
AV87 - #### C ##	**C** = COMPOSITE				
AV87 - #######	**DASH NUMBER COLUMN 6 = SHELL MATERIAL / FINISH**				
AV87 - ##### F #	**F** = 6061-T6 ALUMINUM, Ni				
AV87 - ##### T #	**T** = 6061-T6 ALUMINUM, Ni PTFE				
AV87 - ##### C #	**C** = 6061-T6 ALUMINUM, BLACK ANODIZED				
AV87 - ##### Z #	**Z** = 6061-T6 ALUMINUM, BLACK Zn Ni				
AV87 - ##### W #	**W** = 6061-T6 ALUMINUM, CAD OD				
AV87 - ##### V #	**V** = 6061-T6 ALUMINUM, Sn Zn				
AV87 - ##### K #	**K** = STAINLESS STEEL PASSIVATED				
AV87 - ##### B #	**B** = MARINE BRONZE				
AV87 - ##### M #	**M** = COMPOSITE, Ni				
AV87 - ##### J #	**J** = COMPOSITE, CAD OD				
AV87 - #######	**DASH NUMBER COLUMN 6 = INSERT STYLE & KEY OPTION**				
		AP° / AR°	**BP° / BR°**	**CP° / CR°**	**DP° / DR°**
AV87 - ###### N	**N** = KEY STYLE 1	95°	141°	208°	236°
AV87 - ###### A	**A** = KEY STYLE 1	113°	156°	182°	292°
AV87 - ###### B	**B** = KEY STYLE 1	90°	145°	195°	252°
AV87 - ###### C	**C** = KEY STYLE 1	53°	156°	220°	255°
AV87 - ###### D	**D** = KEY STYLE 1	119°	146°	176°	298°
AV87 - ###### E	**E** = KEY STYLE 1	51°	141°	184°	242°
AV87 - ###### U	**U** = INSERT 1 UNIVERSAL *UNIVERSAL KEYS ACCEPT ALL MATING CONNECTORS WITH MATCHING INSERT*				
AV87 - ###### F	**F** = KEY STYLE 2	95°	141°	208°	236°
AV87 - ###### G	**G** = KEY STYLE 2	113°	156°	182°	292°
AV87 - ###### H	**H** = KEY STYLE 2	90°	145°	195°	252°
AV87 - ###### J	**J** = KEY STYLE 2	53°	156°	220°	255°
AV87 - ###### K	**K** = KEY STYLE 2	119°	146°	176°	298°
AV87 - ###### L	**L** = KEY STYLE 2	51°	141°	184°	242°
AV87 - ###### W	**U** = INSERT 2 UNIVERSAL *UNIVERSAL KEYS ACCEPT ALL MATING CONNECTORS WITH MATCHING INSERT*				

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