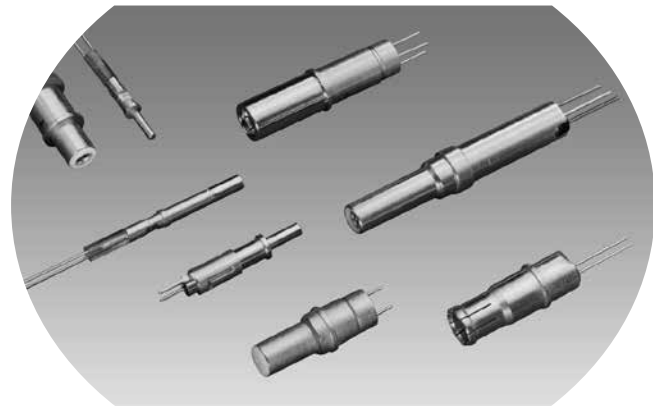


Amphenol® Printed Circuit Tail Contacts

are currently supplied as follows:

- 8, 12 and 16 Coax
- 8, 10 and 12 Twinax
- 8 Triax (socket only)

PC Tail shielded contacts provide a cost effective packaging solution for limited space applications where connectors are attached to printed circuit boards. High reliability is assured with factory pre-assembled contacts and standardization termination to the board. PC Tail contacts are available for MIL-DTL-38999 Series I and III circular connectors and also for ARINC 404, ARINC 600 and R27 rectangular connectors. The following pages show the available PC Tail contact part numbers for 38999 Circular connectors. See page 265 & 266 for information on twinax contacts for ARINC Rectangular connectors along with compatible cable terminations. Consult Amphenol Aerospace for further information on the applicable tooling for these contacts.



PC Tail Coax and Twinax Contacts for Attachment to Printed Circuit Boards

TYPICAL ELECTRICAL PERFORMANCE

Size 8, 12 & 16 PC Tail Coax Contacts

Contact Resistance:

Center @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Outer @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Operating Frequency: 0–500 MHz

Dielectric Withstanding Voltage:

Center to Outer 500 VAC Rms @ Sea Level

Insulation Resistance

1,000 megohms minimum @ 25°C

TYPICAL ELECTRICAL PERFORMANCE

Size 8, 10 & 12 PC Tail Twinax Contacts

Contact Resistance:

Center @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Intermediate @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Outer @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Operating Frequency: 0–20 MHz

Dielectric Withstanding Voltage:

Center to Intermediate 500 VAC Rms @ Sea Level

Intermediate to Outer 500 VAC Rms @ Sea Level

Insulation Resistance

1,000 megohms minimum @ 25°C

TYPICAL ELECTRICAL PERFORMANCE

Size 8 PC Tail Triax Contacts

Contact Resistance:

Center @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Intermediate @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Outer @ 1 Amp, 55 millivolts max. voltage drop @ 25°C

Operating Frequency: 0–500 MHz

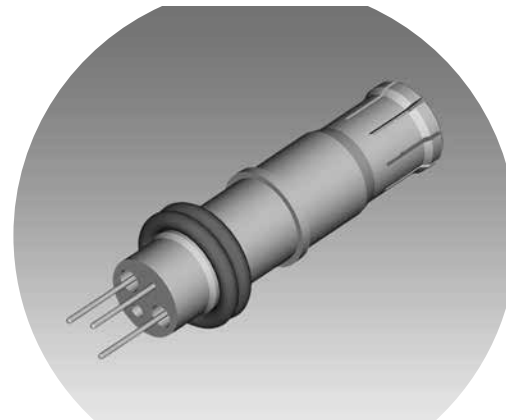
Dielectric Withstanding Voltage:

Center to Intermediate 500 VAC Rms @ Sea Level

Intermediate to Outer 500 VAC Rms @ Sea Level

Insulation Resistance

1,000 megohms minimum @ 25°C



Size 8, PC Tail Twinax Socket Contact for use in D38999 Connectors



D38999 Connector with PC Tail Coax Contacts, Sealing Plugs in unused contact cavities and PC Tail Alignment Disc

38999

III
HD
Dualok
II
I
SJT
Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter
Transient

26482
Matrix 2

83723 III
Matrix | Pyle

26500
Pyle

5015
Crmp Rear Release Matrix

22992
Class 1

Back-Shell

Options
Others

38999

III
HD
Dualok
II
I
SJT
Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class 1

Back-Shells

Options Others

PC TAIL COAX, TWINAX, AND TRIAX CONTACTS FOR USE IN D38999 SERIES I & III CONNECTORS						
Size	PC Tail Coax Contact Part Number	PC Tail Twinax Contact Part Number	PC Tail Triax Contact Part Number	Tails*	Comments	
8 Pin	21-033733-007			PCB 2 tails		
8 Pin	21-033733-002			PCB 2 tails	For epoxy filled connector	
8 Pin	21-033733-004			PCB 2 tails	For epoxy filled connector	
8 Pin	21-033733-005			PCB 4 outer tails, 1 inner		
8 Pin	21-033733-009			PCB 2 tails		
8 Pin	21-033733-008			PCB 2 tails		
8 Socket	21-033426-001			PCB 2 tails		
8 Pin		21-033967-115		PCB 3 tails	M39029/90/91 Interface	
8 Pin		21-033967-125		PCB 3 tails		
8 Pin		21-033967-015		PCB 3 tails		
8 Pin		21-033967-045		PCB 3 tails		
8 Pin		21-033967-055		PCB 3 tails		
8 Pin		21-033967-065		PCB 3 tails		
8 Pin		21-033967-085		PCB 3 tails		
8 Pin		21-033967-095		PCB 3 tails		
8 Pin		P-209550†		PCB 3 tails		
8 Pin		P-209532-1		PCB 9 tails		
8 Pin		P-209532-2		PCB 9 tails		
8 Socket		21-033921-015		PCB 3 tails		
8 Socket		21-033921-045		PCB 3 tails		
8 Socket		21-033921-035		PCB 3 tails		
8 Socket		21-033921-065		PCB 3 tails		
8 Socket		21-033921-075		PCB 3 tails		
8 Socket		21-033921-115†		PCB 3 tails		
8 Socket		21-033479-001		PCB 3 tails		AS39029/114 Type (with hood)
8 Socket		21-033479-021		PCB 3 tails		AS39029/114 Type (with hood)
8 Socket		21-033921-105†		PCB 3 tails		M39029/90/91 Interface .040 dia. tails
8 Socket		DB-109002		PCB 2 tails	M39029/91 Interface Outer body grounded to shell	
8 Socket		21-033919-015		PCB 2 tails		
8 Socket		21-033919-025		PCB 2 tails		
8 Pin			21-033828-001	PCB 3 tails		
8 Pin			21-033828-021	PCB 3 tails		
8 Pin			21-033828-041	PCB 3 tails		
8 Socket			21-033840-001	PCB 3 tails		
8 Socket			21-033840-021	PCB 2 tails	Outer body grounded to shell	
8 Socket			21-033841-001	PCB 2 tails	Outer body grounded to shell	
10 Pin		21-033844-002†		PCB 2 tails	Outer body grounded to shell	
12 Socket						

* Consult Amphenol Aerospace for tail configurations and tail diameters.
† Consult Amphenol Aerospace for current release of this contact.

Coax, Twinax & Triax PC Tail Contacts

Application Data, cont.

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

HIGH SPEED

Fiber Optics

Contacts
Connectors
Cables

EMI Filter
Transient

26482
Matrix 2

83723 III
Matrix | Pyle

26500
Pyle

5015
Crimp Rear Release
Matrix

22992
Class 1

Back-Shell
Shells

Options
Others

PC TAIL COAX, TWINAX, AND TRIAX CONTACTS FOR USE IN D38999 SERIES I & III CONNECTORS					
Size	PC Tail Coax Contact Part Number	PC Tail Twinax Contact Part Number	PC Tail Triax Contact Part Number	Tails*	Comments
12 Pin	21-033686-008			PCB 2 tails	
12 Pin	21-033686-009			PCB 2 tails	Outer tail clip type
12 Pin	21-033686-005			PCB 2 tails	
12 Pin	21-033686-010			PCB 2 tails	
12 Pin	21-033686-013			PCB 2 tails	Outer tail clip type
12 Pin	21-033687-006			PCB 2 tails	For epoxy filled connector
12 Pin	21-033687-007			PCB 2 tails	
12 Pin	21-033686-016†			PCB 2 tails	
12 Socket	21-033614-001			PCB 2 tails	
12 Socket	21-033614-021			PCB 2 tails	
12 Socket	21-033614-041			PCB 2 tails	
12 Socket	21-033611-003			PCB 2 tails	Outer tail clip type
12 Socket	21-033440-001			PCB 3 tails	
12 Socket	21-033430-001			PCB 2 tails	Outer tail clip type, M38999 Series II
12 Socket	21-033430-021			PCB 2 tails	M38999 Series II
12 Socket	21-033430-041				M38999 Series II
12 Pin		21-033633-001†**		PCB 4 tails	JN1104 Interface
12 Pin		21-033633-002**		PCB 4 tails	
12 Pin		21-033633-006**		PCB 4 tails	
12 Pin		21-033633-007**		PCB 4 tails	
12 Socket		21-033393-006**		PCB 4 tails	
12 Socket		21-033393-005**		PCB 4 tails	
12 Socket		21-033433-001**		PCB 4 tails	M38999 Series II, JN1104 Interface
16 Pin	21-033856-015			PCB 2 tails	
16 Pin	21-033856-025			PCB 90 degree, 2 tails	
16 Pin	21-033856-065			PCB 2 tails	
16 Pin	21-033634-015			PCB 1 tail	Outer body grounded to shell
16 Pin	21-033634-035			PCB 1 tail	Outer body grounded to shell
16 Pin	21-033634-045			PCB 1 tail	
16 Pin	21-033386-001			PCB 2 tails	
16 Socket	21-033857-001			PCB 2 tails	
16 Socket	21-033857-008			PCB 2 tails	
16 Socket	21-033857-007			PCB 2 tails	
16 Socket	21-033610-001			PCB 2 tails	
16 Socket	21-033610-002			PCB 2 tails	
16 Socket	21-033441-001			PCB 2 tails	
16 Socket	21-033606-001			PCB 2 tails	
16 Socket	21-033606-021†			PCB 2 tails	M38999 Series II
16 Socket	21-033606-031†			PCB 2 tails	
16 Socket	21-033610-003			PCB 2 tails	
16 Socket	21-033857-003			PCB 2 tails	

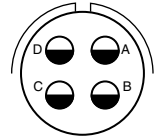
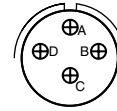
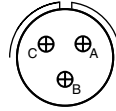
* Consult Amphenol Aerospace for tail configurations and tail diameters.

** Size 12 twinax and triax contacts are intermatable.

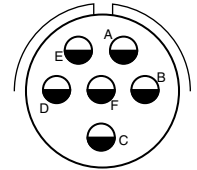
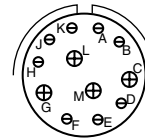
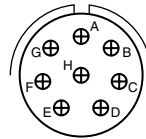
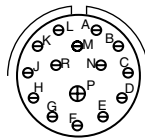
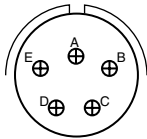
† Consult Amphenol Aerospace for current release of this contact.

38999

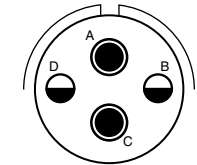
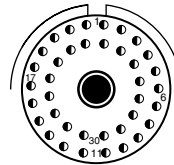
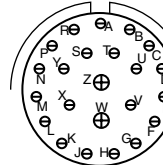
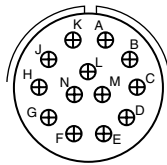
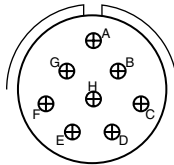
Front face of pin inserts illustrated



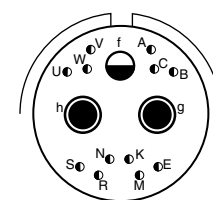
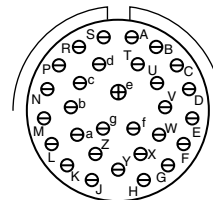
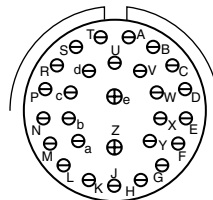
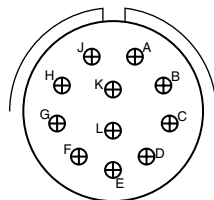
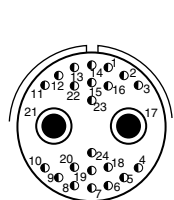
Insert Arrangement	9-5	10-2	11-2	12-3	13-3	12-4	13-4	14-4	15-4
Connector Series	TV	SJT	LJT,TV	JT	LJT	JT, SJT	LJT, TV	JT	LJT
Service Rating	Grounded	I		II		I		I	
Number of Contact	1	2		3		4		4	
Contact Size	8 Twinax	16		16		16		12	



Insert Arrangement	14-5	15-5	14-15	15-15	14-68	15-68	14-97	15-97	16-6	17-6
Available in Connector Series	JT, SJT	LJT,TV	JT, SJT	LJT,TV	JT	LJT	JT, SJT	LJT, TV	JT, SJT	LJT, TV
Service Rating	II		I		I		I		I	
Number of Contact	5		14	1	8		8	4	6	
Contact Size	16		20	16	16		20	16	12	



Insert Arrangement	16-8	17-8	16-13	17-13	16-99	17-99	17-2	17-22
Connector Series	JT, SJT	LJT, TV	JT, SJT	LJT	JT, SJT	LJT,TV	LJT	TV
Service Rating	II		I		I		M	Coax
Number of Contact	8		13		21	2	38	1
Contact Size	16		16		20	16	22D	8



Insert Arrangement	17-25	18-11	19-11	18-28	19-28	18-30	19-30	19-31
Connector Series	LJT	JT, SJT	LJT,TV	JT	LJT	JT	LJT	TV
Service Rating	M		II		I		I	M
Number of Contact	22	2	11	26	2	29	1	2
Contact Size	22D	8	16	20	16	20	16	8

The insert arrangements shown on this page and the next page represent the most readily available patterns within the 38999 Circular Series. If you require other arrangements than what are shown here, consult Amphenol for further availability. In most cases, unless otherwise stated, size 8 and size 12 cavities can be filled with either coax, twinax, triax or power contacts.

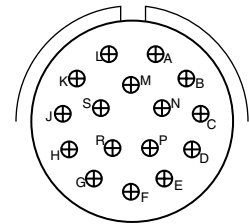
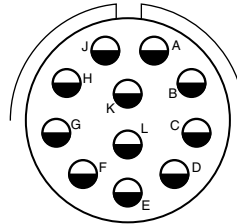
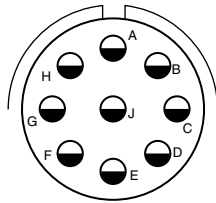
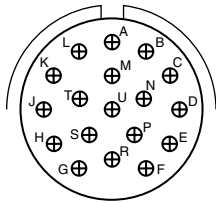
CONTACT LEGEND

8	10	12	16	20	22D
Coax/Twinax/Triax or Power	Twinax/Triax/ or Power	Coax/Twinax/Triax or Power	Coax or Power	Power	Power

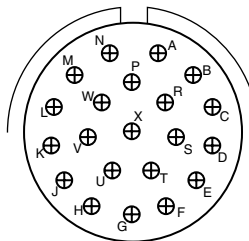
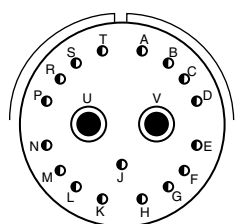
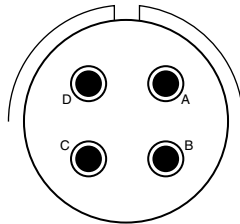
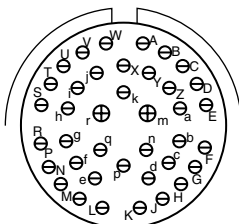
Insert Patterns - MIL-DTL-38999

Incorporating Coax, Twinax and Triax Contacts

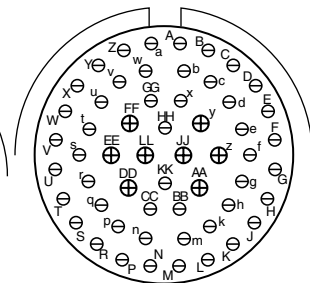
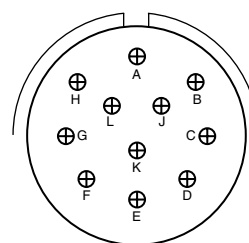
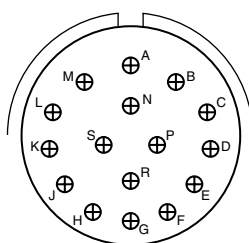
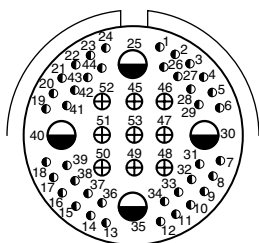
Front face of pin inserts illustrated



Insert Arrangement	18-68	19-68	18-96	20-11	21-11	20-16	21-16
Connector Series	JT	LJT	JT	JT, SJT	LJT, TV	JT, SJT	LJT, TV
Service Rating		I	I		I		II
Number of Contact	18	18	9	11	11	16	16
Contact Size		16	12	12	12	16	16



Insert Arrangement	20-39	21-39	20-75	21-75	20-79	21-79	22-21	23-21
Connector Series	JT, SJT	LJT, TV	SJT	LJT, TV	SJT	LJT	JT, SJT	LJT, TV
Service Rating		I		M		II		II
Number of Contact	37	2	4	4	17	17	21	21
Contact Size	20	16	8	8	22D	22D	16	16



Insert Arrangement	23-54	23-97	23-99	24-4	25-4
Connector Series	TV	LJT	LJT	JT, SJT	LJT, TV
Service Rating		II	II		I
Number of Contact	40	16	11	48	8
Contact Size	22D	16	16	20	16

CONTACT LEGEND

8	10	12	16	20	22D
Coax/Twinax/Triax or Power	Twinax/Triax or Power	Coax/Twinax/Triax or Power	Coax or Power	Power	Power

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED**
- Fiber Optics
- Contacts
- Connectors
- Cables

EMI Filter
Transient

26482
Matrix 2

83723 III
Matrix | Pyle

26500
Pyle

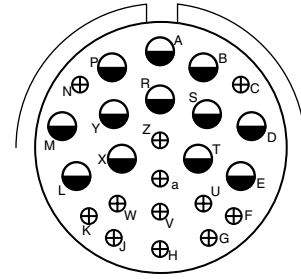
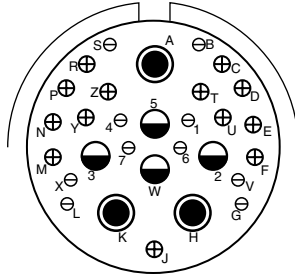
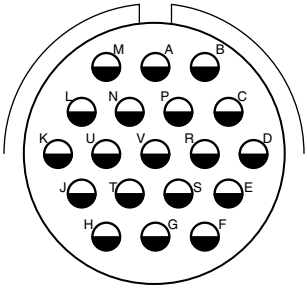
5015
Crimp Rear Release Matrix

22992
Class 1

Back-Shell's

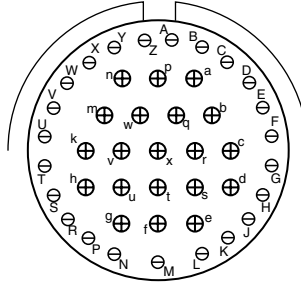
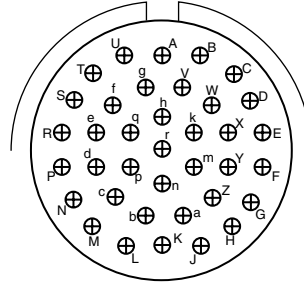
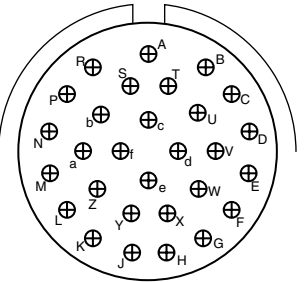
Options
Others

38999

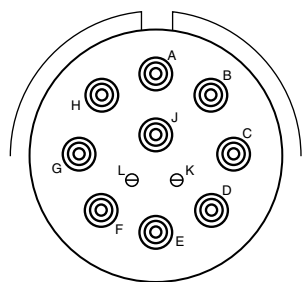
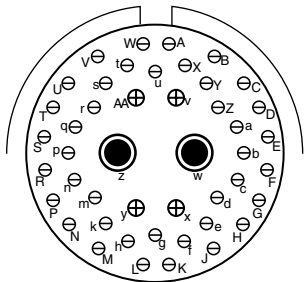


Insert Arrangement	24-19	25-19	24-20	25-20*	24-24	25-24
Connector Series	JT, SJT	LJT, TV	SJT	LJT, TV	JT, SJT	LJT, TV
Service Rating	I		N		I	
Number of Contact	19		10	13	3	4
Contact Size	12		20	16	8	12

(Locations U and Y - Dedicated to Fiber Optics)



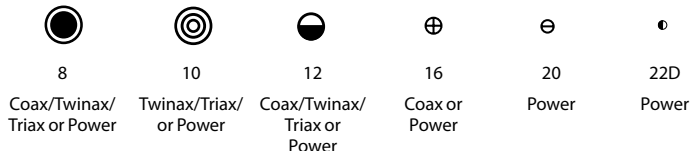
Insert Arrangement	24-29	25-29	24-37	25-37	24-43	25-43
Connector Series	JT, SJT	LJT, TV	JT, SJT	LJT, TV	JT, SJT	LJT, TV
Service Rating	I		I		I	
Number of Contact	29		37		23	20
Contact Size	16		16		20	16



Insert Arrangement	24-46	25-46	25-11*
Connector Series	SJT	LJT, TV	LJT, TV
Service Rating	I		N
Number of Contact	40	4	2
Contact Size	20	16	8

* For use in MIL-STD-1760 applications with MIL-DTL-38999 Series III.

CONTACT LEGEND



- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED**
- Fiber Optics
- Contacts
- Connectors
- Cables

- EMI Filter
- Transient

- 26482
- Matrix 2

- 83723 III
- Matrix | Pyle

- 26500
- Pyle

- 5015
- Crimp Rear Release
- Matrix

- 22992
- Class I

- Back-Shell

- Options
- Others