

GROUND PLANE CONNECTORS

COAX/TRIAX/TWINAX



For high speed Data Bus, LAN and Coax, Triax and Twinax data transmission, MIL-DTL-38999 type connectors are available with metal inserts to maintain a common ground plane with the connector shell for all the shielded contacts contained in the connector.

These electrical connectors are available for all MIL-DTL-38999 insert patterns using size 16, 10, 12 or 8 contacts. This data sheet contains some of the popular insert patterns that are commonly used for ground plane connector applications. Options include crimp termination and printed circuit tail contacts in either solder or compliant pin configurations. Composite shells are also available.

APPLICATIONS:

Applications for ground plane connectors include MIL-STD 1553B data bus as well as video, signal and multiplex transmission.

MORE INFORMATION:

For more information on insert and shell style availability request the following catalogs:

- MIL-DTL-38999 Connectors Catalog
- High Speed Contacts Product Guide

INSERT PATTERNS - SUBMINIATURE CYLINDRICALS

INCORPORATING COAX, TWINAX AND TRIAX CONTACTS

The following pages show the most popular and most readily available insert arrangements for incorporation of shielded contacts within the Subminiature Cylindrical Connector Family. 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.



8
Coax/
Twinax/
Triax or
Power



10
Twinax/
Triax/
or Power



12
Coax/
Twinax/
Triax or
Power



16
Coax
or Power



20
Power



22D
Power

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

Insert Arrangement	14-4	15-5	14-15	15-5	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 Contacts	5	14	14	1	8	8	8	4	6	6
Contact Size	16	16	20	16	16	16	20	16	12	12

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

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

INSERT PATTERNS - SUBMINIATURE CYLINDRICALS

INCORPORATING COAX, TWINAX AND TRIAX CONTACTS



8
Coax/
Twinax/
Triax or
Power



10
Twinax/
Triax/
or Power



12
Coax/
Twinax/
Triax or
Power



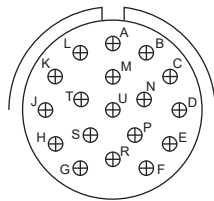
16
Coax
or Power



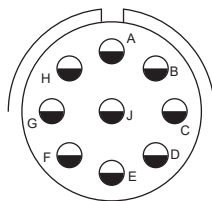
20
Power



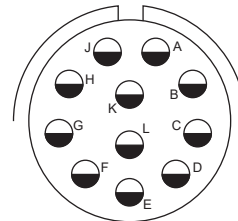
22D
Power



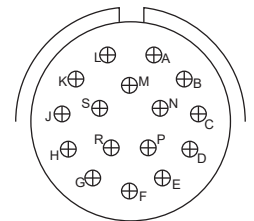
18-68	19-68
JT	LJT
I	
18	
16	



18-96
JT
I
9
12

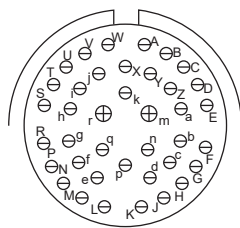


20-11	21-11
JT, SJT	LJT, TV
I	
11	
12	

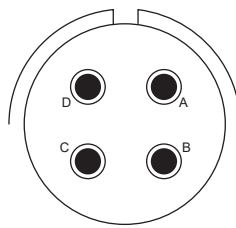


20-16	21-16
JT, SJT	LJT, TV
II	
16	
16	

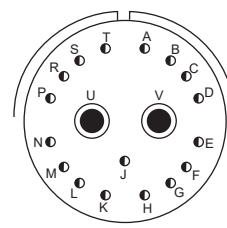
Insert Arrangement
Available in Connector Series
Service Rating
Number of Contacts
Contact Size



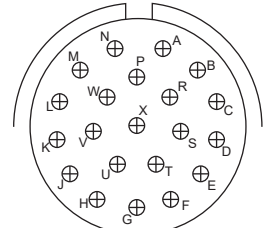
20-39	21-39
JT, SJT	LJT, TV
I	
37	2
20	16



20-75	21-75
SJT	LJT, TV
M	
4	
8	

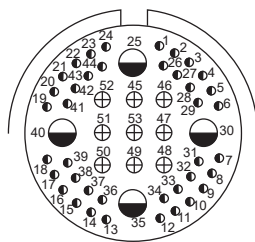


20-79	21-79
SJT	LJT
II	
17	
22D	

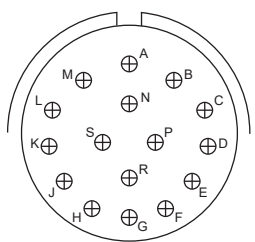


22-21	23-21
JT, SJT	LJT, TV
II	
21	
16	

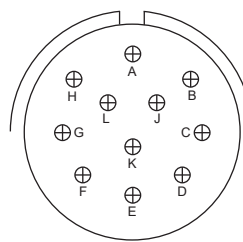
Insert Arrangement
Available in Connector Series
Service Rating
Number of Contacts
Contact Size



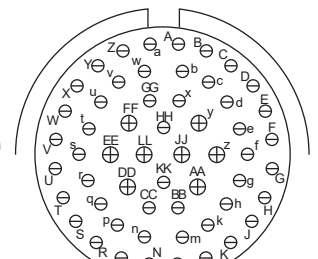
23-54
TV
M
40
22D



23-97
LJT
II
16
16



23-99
LJT
II
11
16

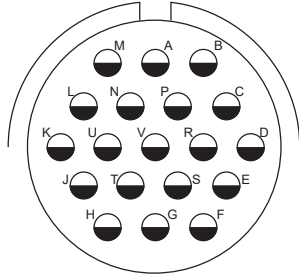


24-4	25-4
JT, SJT	LJT, TV
I	
48	8
20	16

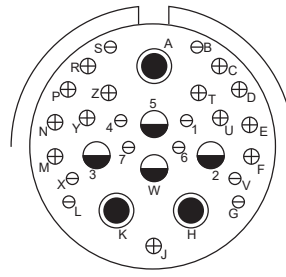
Insert Arrangement
Available in Connector Series
Service Rating
Number of Contacts
Contact Size

INSERT PATTERNS - SUBMINIATURE CYLINDRICALS

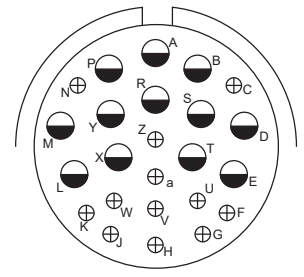
INCORPORATING COAX, TWINAX AND TRIAX CONTACTS



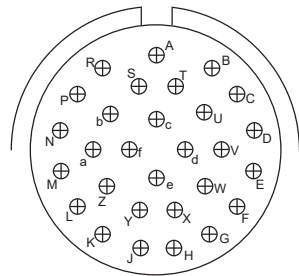
Insert Arrangement	24-19	25-19
Available in Connector Series	JT, SJT	LJT, TV
Service Rating	I	
Number of Contacts	19	
Contact Size	12	



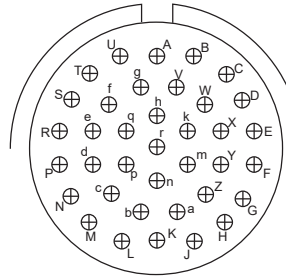
Insert Arrangement	24-20	25-20
Available in Connector Series	SJT	LJT, TV
Service Rating	N	
Number of Contacts	10	13
Contact Size	20	16



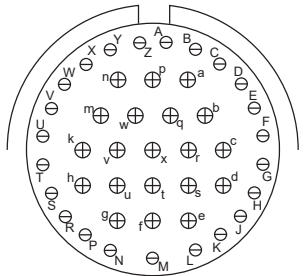
Insert Arrangement	24-24	25-24
Available in Connector Series	JT, SJT,	LJT,TV
Service Rating	I	
Number of Contacts	12	12
Contact Size	16	12



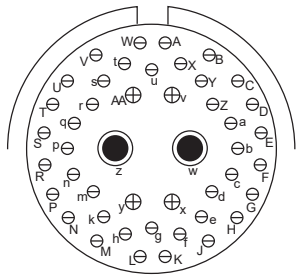
Insert Arrangement	24-29	25-29
Available in Connector Series	JT, SJT	LJT,TV
Service Rating	I	
Number of Contacts	29	
Contact Size	16	



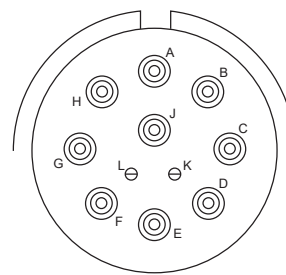
Insert Arrangement	24-37	25-37
Available in Connector Series	JT, SJT	LJT,TV
Service Rating	I	
Number of Contacts	37	
Contact Size	16	



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



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



Insert Arrangement	25-11*
Available in Connector Series	LJT, TV
Service Rating	N
Number of Contacts	2 9
Contact Size	20 10

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