

# MIL-DTL-38999, Series I LJT, II JT, III TV, HD

## Insert Arrangements

Front face of pin inserts illustrated

38999

- III
- II
- I
- SJT
- Access
- Aquacon

Shell Size & Insert Arrg. for:



**Series II JT**

**Series I LJT**

**Series III TV**

Service Rating

Number of Contacts

Contact Size

	8-2	8-3		8-6	8-7		9-22	9-35	9-44		9-97	9-98	
		9-3		9-6	9-7							9-98	11-2
	7-D2		9-5			9-9 HD		9-35		9-94		9-98	11-2
Service Rating	M	M	M	Grounded	M	M	N	I	M	M	M	I	I
Number of Contacts	2	2	3	1	6	7	9	2	6	4	2	2	3
Contact Size	22D	20	20	8 Twinax	22M	22M	23	20	22D	22	20	22M 20	16

Shell Size & Insert Arrg. for:



**Series II JT**

**Series I LJT**

**Series III TV**

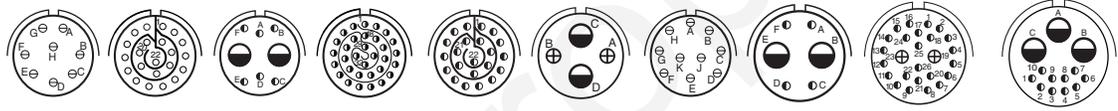
Service Rating

Number of Contacts

Contact Size

	10-4	10-5		10-13		10-35		10-98	10-99	12-3	12-4
	11-4	11-5	11-6	11-13		11-35		11-98	11-99	13-3	13-4
	11-4	11-5			11-19 HD	11-35	11-54	11-98	11-99		13-4
Service Rating	I	I	I	M	N	M	II	I	I	II	I
Number of Contacts	4	5	6	13	19	13	4	6	7	3	4
Contact Size	20	20	20	22M	23	22D	22D	20	20	16	16

Shell Size & Insert Arrg. for:



**Series II JT**

**Series I LJT**

**Series III TV**

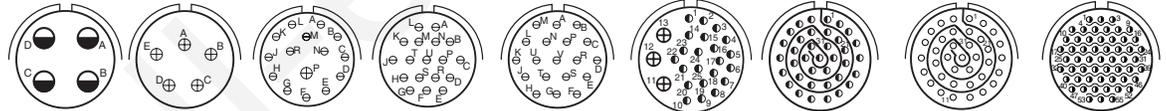
Service Rating

Number of Contacts

Contact Size

	12-8	12-22			12-35		12-98								
	13-8	13-22			13-35		13-98								
	13-8		13-26	13-32 HD	13-35	13-63	13-98	13-CB	15-AC	15-AT					
Service Rating	I	M	M	N	M	I	I	M	M	I					
Number of Contacts	8	22	6	2	32	2	2	10	4	2	24	2	10	3	
Contact Size	20	22M	22D	12	23	22D	16	12	20	22D	12	22D	16	22D	12

Shell Size & Insert Arrg. for:



**Series II JT**

**Series I LJT**

**Series III TV**

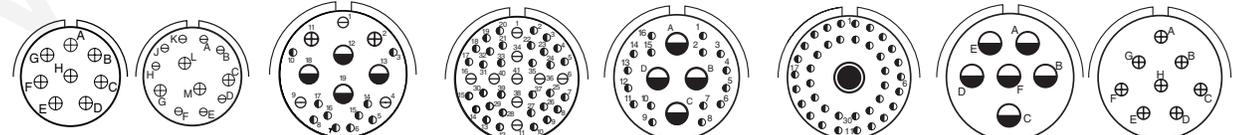
Service Rating

Number of Contacts

Contact Size

	14-4	14-5	14-15	14-18	14-19		14-35	14-37			
	15-4	15-5	15-15	15-18	15-19		15-35	15-37			
	15-4	15-5	15-15	15-18	15-19	15-25	15-35			15-55 HD	
Service Rating	I	II	I	I	I	M	M	M	M	N	
Number of Contacts	4	5	14	1	18	19	22	3	37	37	55
Contact Size	12	16	20	16	20	20	22D	16	22D	22M	23

Shell Size & Insert Arrg. for:



**Series II JT**

**Series I LJT**

**Series III TV**

Service Rating

Number of Contacts

Contact Size

	14-68	14-97							16-6	16-8					
	15-68	15-97							17-2   17-3^	17-6	17-8				
	15-68	15-97	17-EA		17-EC	17-EG		17-2   17-3^	17-6	17-8					
Service Rating	I	I	M		M	M		M	I	II					
Number of Contacts	8	8	4	10	3	2	4	32	9	16	4	38	1	6	8
Contact Size	16	20	16	22D	20	16	12	22D	20	22D	12	22D	8 Twinax	12	16

HD: High Density HD38999 (use size 23 contacts only)

^ Supplied with D38999/62-A for Twinax, D38999/62-B for Coax



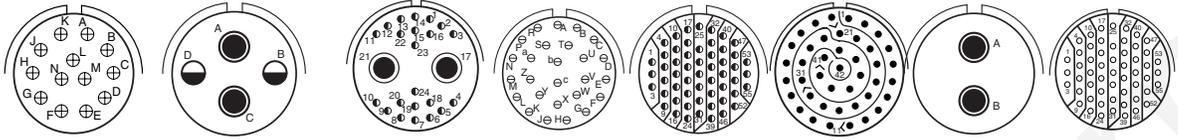
CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23

# MIL-DTL-38999, Series I LJT, II JT, III TV, HD

## Insert Arrangements

Front face of pin inserts illustrated

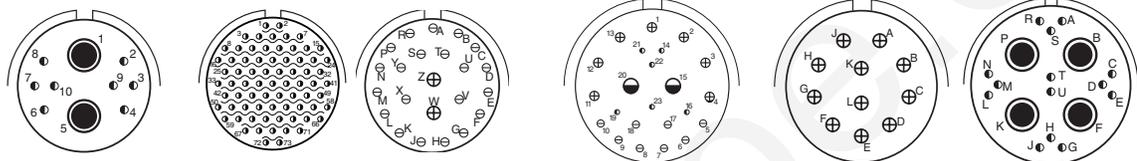
38999



Shell Size & Insert Arr. for:

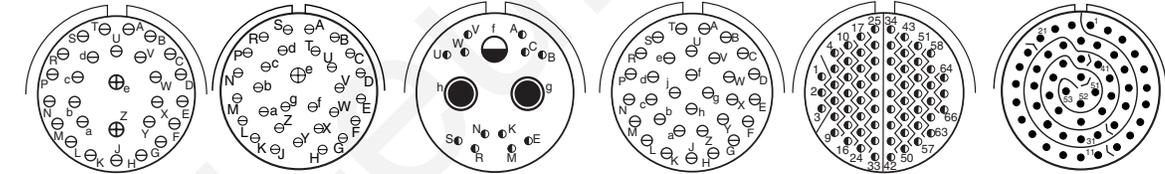
<b>Series II JT</b>	16-13			16-26	16-35	16-42			16-55
<b>Series I LJT</b>	17-13	17-22	17-25	17-26	17-35	17-42			17-55
<b>Series III TV</b>	17-13	17-22	17-25	17-26	17-35	17-52			
Service Rating	I	Coax		I	M	M	M	M	M
Number of Contacts	13	2	2	26	55	42	2	55	
Contact Size	16	12 Coax	8 Coax	20	22D	22	8 Twinax	22M	

III
II
I
SJT
Access
Aquacon



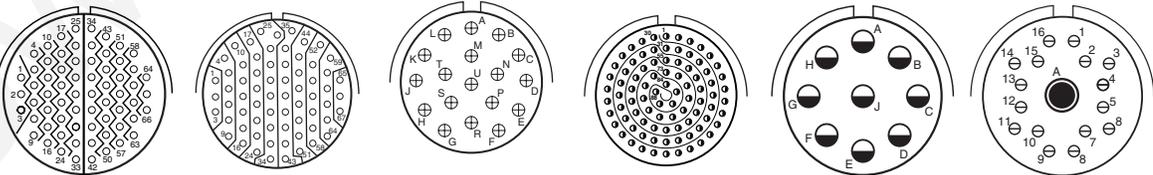
Shell Size & Insert Arr. for:

<b>Series II JT</b>			16-99			18-11		
<b>Series I LJT</b>			17-99			19-11	19-18   19-19^	
<b>Series III TV</b>	17-60	17-73 HD	17-99	19-FA		19-11	19-18   19-19^	
Service Rating	I/Coax	N	I	M		II	M	
Number of Contacts	8	2	21	2	6	8	7	2
Contact Size	22D	8 Coax	20	16	22D	20	16	12



Shell Size & Insert Arr. for:

<b>Series II JT</b>	18-28	18-30			18-32	18-35	18-53	
<b>Series I LJT</b>	19-28	19-30			19-32	19-35	19-53	
<b>Series III TV</b>	19-28	19-31		19-32	19-35			
Service Rating	M	I	M		1	M	M	
Number of Contacts	26	2	29	1	2	1	12	32
Contact Size	20	16	20	16	8 Coax	12	22D	20



Shell Size & Insert Arr. for:

<b>Series II JT</b>	18-66			18-68			18-96		
<b>Series I LJT</b>	19-66	19-67	19-68						
<b>Series III TV</b>			19-68		19-88 HD		19-AD		
Service Rating	M	M	I		N	I	Inst.		
Number of Contacts	66	67	18		88	9	16	1	
Contact Size	22M	22M	16		23	12	20	8 Twinax	



HD: High Density HD38999 (use size 23 contacts only)

^ Supplied with D38999/62-A for Twinax, D38999/62-B for Coax

CONTACT LEGEND

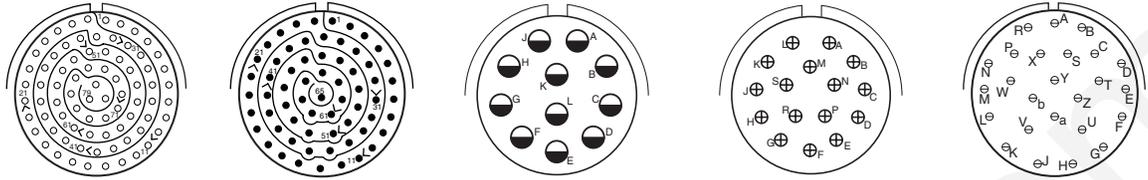
# MIL-DTL-38999, Series I LJT, II JT, III TV, HD

## Insert Arrangements

Front face of pin inserts illustrated

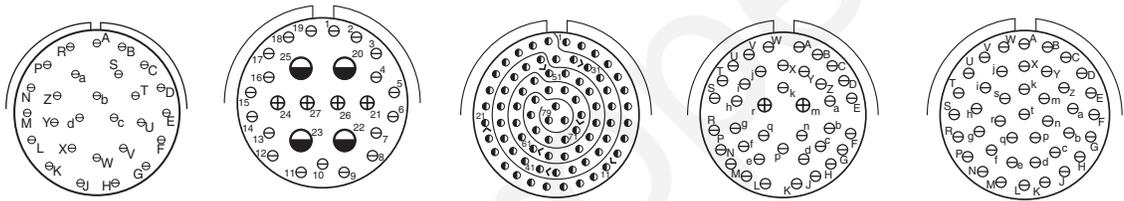
38999

III  
II  
I  
SJT  
Access  
Aquacon



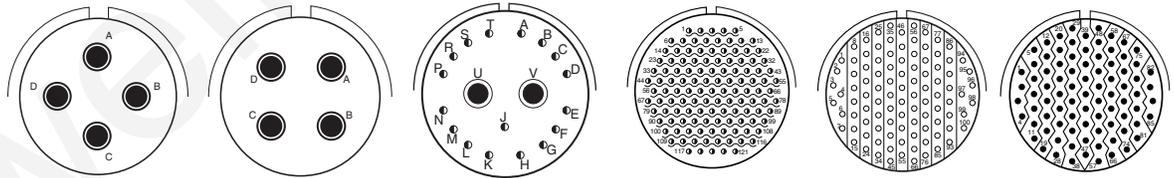
Shell Size & Insert Arrg. for:

Series II JT	20-1	20-2	20-11	20-16	
Series I LJT	21-1	21-2	21-11	21-16	21-25
Series III TV			21-11	21-16	
Service Rating	M	II	I	II	I
Number of Contacts	79	65	11	16	25
Contact Size	22M	22	12	16	20



Shell Size & Insert Arrg. for:

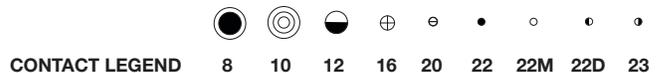
Series II JT			20-35	20-39	20-41
Series I LJT	21-27		21-35	21-39	21-41
Series III TV		21-29	21-35	21-39	21-41
Service Rating	I	I	M	1	I
Number of Contacts	27	19 4 4	79	37 2	41
Contact Size	20	20 16 12	22D	20 16	20



Shell Size & Insert Arrg. for:

Series II JT				22-1	22-2
Series I LJT		21-75   21-76^	21-79	23-1	23-2
Series III TV	21-48	21-75   21-76^	21-79	21-121 HD	
Service Rating	M	N	II	N	M
Number of Contacts	4	4	17 (See Note)	121	100
Contact Size	8 power	(See Note)	22D	23	22M

HD: High Density HD38999 (use size 23 contacts only)  
 Note: MS connector 21-75 is supplied with four size 8 twinax contacts.  
 Commercial connector 21-75 is supplied with four size 8 coax contacts.  
 MS connector 21-79 has provision for two size 8 coax contacts.  
 Coax contacts are not supplied unless specified by customers.  
 ^ Supplied with D38999/62-A for Twinax, D38999/62-B for Coax

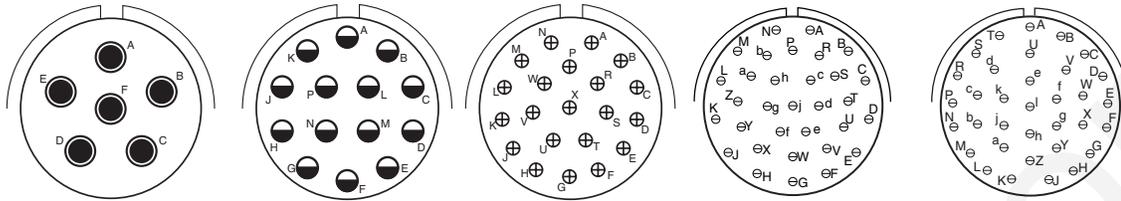


# MIL-DTL-38999, Series I LJT, II JT, III TV, HD

## Insert Arrangements

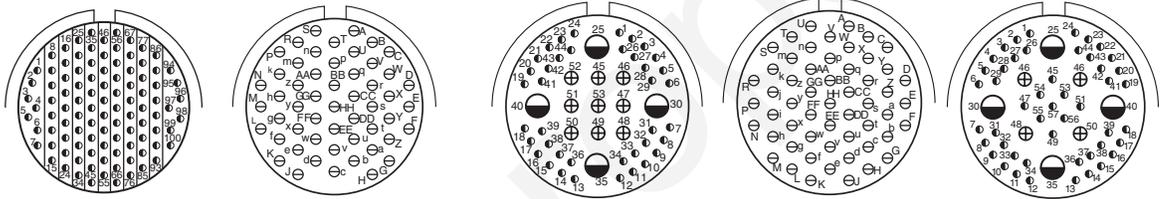
Front face of pin inserts illustrated

38999



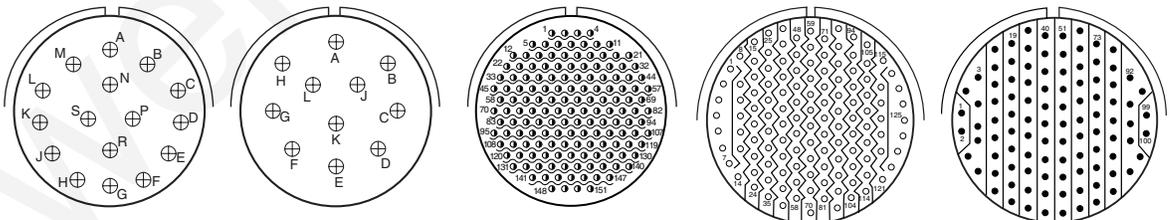
Shell Size &  
Insert Arrg. for:

<b>Series II JT</b>	22-14	22-21	22-32	
<b>Series I LJT</b>	23-14	23-21	23-32	23-34
<b>Series III TV</b>	23-14	23-21		
Service Rating	I	II	I	I
Number of Contacts	14	21	32	34
Contact Size	12	16	20	20



Shell Size &  
Insert Arrg. for:

<b>Series II JT</b>	22-53	22-55		
<b>Series I LJT</b>	23-53	23-55		
<b>Series III TV</b>	23-53	23-54	23-55	23-63
Service Rating	I	M	I	M
Number of Contacts	20	40 9 4	55	49 4 4
Contact Size		22D 16 12	20	22D 16 12 Coax Coax



Shell Size &  
Insert Arrg. for:

<b>Series II JT</b>	23-97	23-99	24-1	24-2
<b>Series I LJT</b>			25-1	25-2
<b>Series III TV</b>			23-151 HD	
Service Rating	II	II	M	M
Number of Contacts	16	11	128	100
Contact Size	16	16	22M	22



CONTACT LEGEND

HD: High Density HD38999 (use size 23 contacts only)

^ Supplied with D38999/62-A for Twinax, D38999/62-B for Coax

# MIL-DTL-38999, Series I LJT, II JT, III TV

## Insert Arrangements

Front face of pin inserts illustrated

38999

III

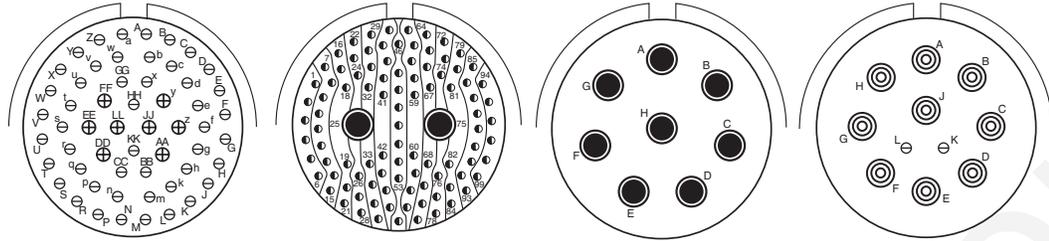
II

I

SJT

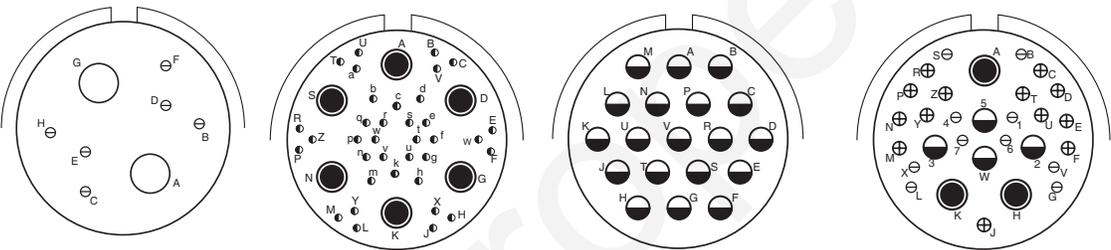
Access

Aquacon



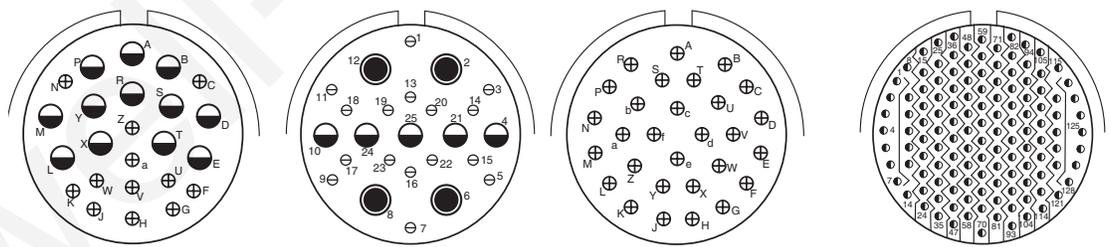
Shell Size & Insert Arrg. for:

Series II JT	24-4		25-7   25-9 <sup>^</sup>		25-8   25-10 <sup>^</sup>   25-88		25-11	
Series I LJT	25-4		25-7   25-9 <sup>^</sup>		25-8   25-10 <sup>^</sup>   25-88		25-11***	
Series III TV	25-4		25-7   25-9 <sup>^</sup>		25-8   25-10 <sup>^</sup>   25-88		25-11***	
Service Rating	I		M		Twinax / Coax		N	
Number of Contacts	48	8	97	2	8	8	2	9
Contact Size	20	16	22D	8 Twinax	8 Twinax / 8 Coax (88)	20	20	10



Shell Size & Insert Arrg. for:

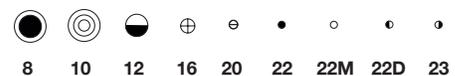
Series II JT	25-16		25-17		24-19		25-19		25-20   25-21 <sup>^</sup>	
Series I LJT	25-16		25-17		24-19		25-19		*** 25-20   25-21 <sup>^</sup>	
Series III TV	25-16		25-17		24-19		25-19		*** 25-20   25-21 <sup>^</sup>	
Service Rating	M		M		I		I		N	
Number of Contacts	6	2	36	6	19	19	10	13	3	4
Contact Size	20	4	22D	8 Twinax	12	12	20	16	8 Twinax	12 Coax (With Matched Impedance)



Shell Size & Insert Arrg. for:

Series II JT	24-24		25-24		24-29		24-35	
Series I LJT	24-24		25-24		24-29		24-35	
Series III TV	24-24		25-24		24-29		24-35	
Service Rating	I		I		I		M	
Number of Contacts	12	12	16	5	4	29	128	128
Contact Size	16	12	20	12	8 Coax	16	22D	22D

\*\*\* For use in MIL-STD-1760 applications (see pages 75 and 76).  
 HD: High Density HD38999 (use size 23 contacts only)  
<sup>^</sup> Supplied with D38999/62-A for Twinax, D38999/62-B for Coax



CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23

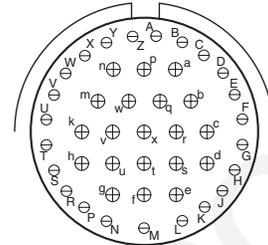
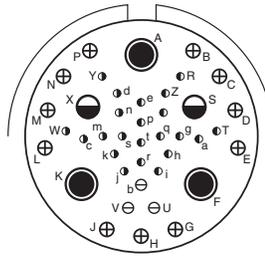
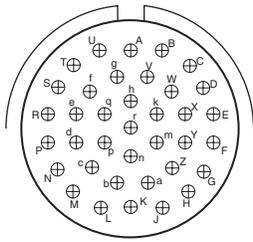
# MIL-DTL-38999, Series I LJT, II JT, III TV, HD

## Insert Arrangements

Front face of pin inserts illustrated

38999

III
II
I
SJT
Access
Aquacon



Shell Size &  
Insert Arrg. for:

Series II JT

Series I LJT

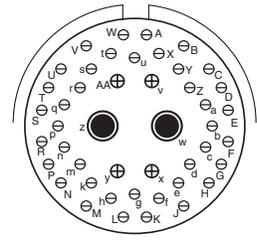
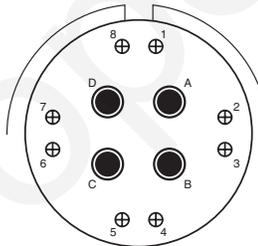
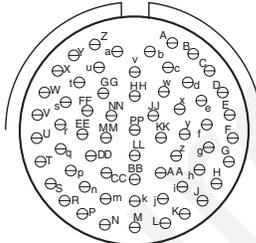
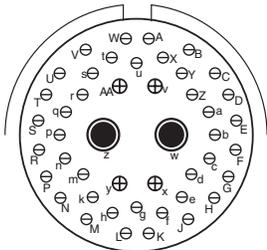
Series III TV

Service Rating

Number of Contacts

Contact Size

	24-37						24-43	
	25-37						25-43	
	25-37		25-41				25-43	
	I		N/Inst.				I	
	37	22	3	11	2	3	23	20
	16	22D	20	16	12 Coax	8 Twinax	20	16



Shell Size &  
Insert Arrg. for:

Series II JT

Series I LJT

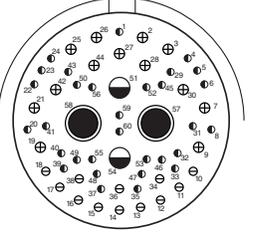
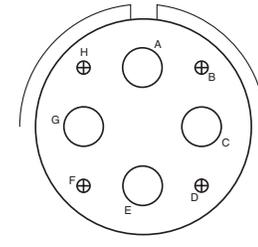
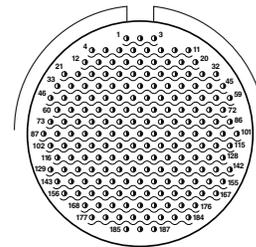
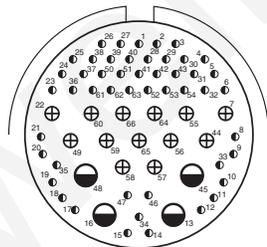
Series III TV

Service Rating

Number of Contacts

Contact Size

	25-46   25-47^	25-61	25-61	25-62	25-90   25-91^
	25-46   25-47^	25-61	25-61	25-62	25-90   25-91^
	I	I	I	I	I
	40	4	2	8	4
	20	16	8 Coax †	16	8
				Ground Plane Only	
		61	20		40
					4
					2
					20
					16
					8 Twinax



Shell Size &  
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

	25-F4	25-187 HD	25-1A	25-AT
	Size 22D=M, Balance =I	N	N	N
	49	13	4	2
	13	187	4	2
	4	23	4	13
	22D		4	12
				16S
				20
				22D
				31



† Coax contacts for RG180/U or RG195/U cable.

HD: High Density HD38999 (use size 23 contacts only)

^ Supplied with D38999/62-A for Twinax, D38999/62-B for Coax

CONTACT LEGEND

# MIL-DTL-38999, Series III TV

## Special Insert Arrangements

38999

III

II

I

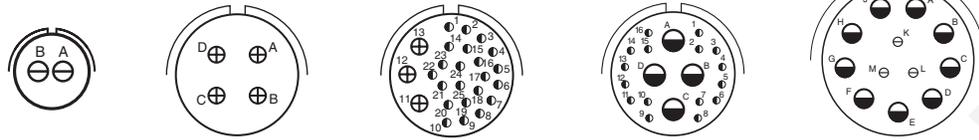
SJT

Access

Aquacon

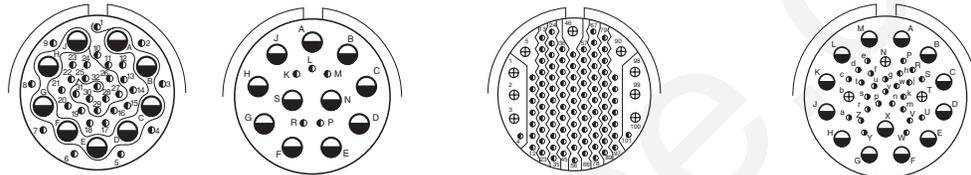
Series III

Front face of pin inserts illustrated



Shell Size & Insert Arrg. for:

Series III TV	9-2	15-4*	15-25	17-20	21-12
Service Rating	I	II	M	M	I
Number of Contacts	2	4	22	16	3
Contact Size	20	16	22D	22D	20



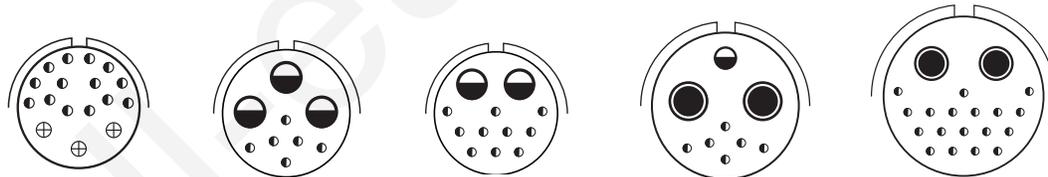
Shell Size & Insert Arrg. for:

Series III TV	21-21	21-99	25-92	25-97
Service Rating	M/Inst.	M	M	M
Number of Contacts	32	5	92	26
Contact Size	22D	22D	22D	22D

## Tracer Power/Signal Arrangements-Direct Current (VDC) With and Without Ground

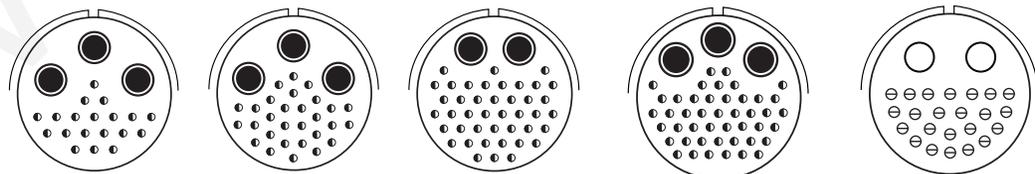
Available now with Amphenol's **Tracer Rapid Prototyping Insert Technology**, contact [tracer@amphenol-aao.com](mailto:tracer@amphenol-aao.com)  
Contact factory for lead time on standard D38999 insert technology.

**TRACER**  
Rapid Prototyping



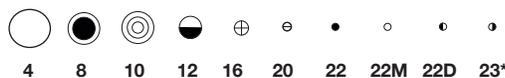
Shell Size & Insert Arrg. for:

Series III TV	13-AX	15-AX	15-AZ	17-AZ	19-AX
Service Rating	M	II	II	II	II
Number of Contacts	3	3	2	2	2
Contact Size	16	12	12	8	8



Shell Size & Insert Arrg. for:

Series III TV	21-AZ	23-AZ	23-AX	25-AX	25-22
Service Rating	II	II	II	II	M
Number of Contacts	3	3	2	3	2
Contact Size	8	8	8	8	4



CONTACT LEGEND

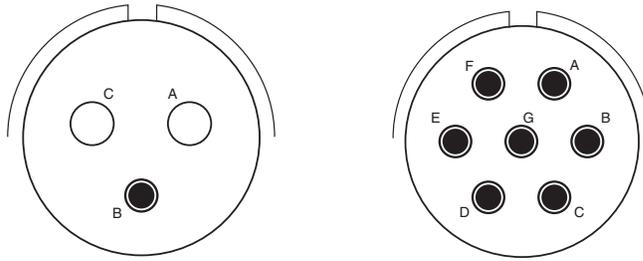
A

# MIL-DTL-38999, Series III TV

## Special Insert Arrangements

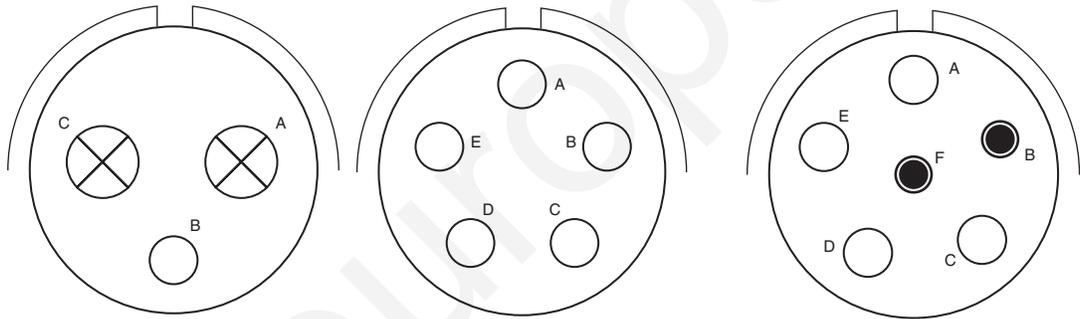
### Non-Standard Shells or Large Contacts

Front face of pin inserts illustrated



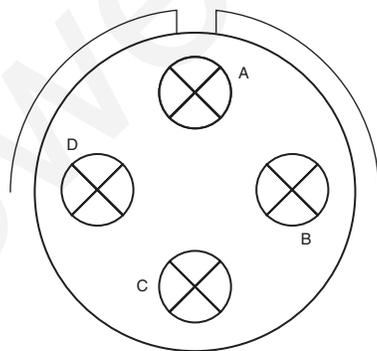
Shell Size &  
Insert Arrg. for:

Series III TV	25L-3		25L-7
Service Rating	II		II
Number of Contacts	1	2	7
Contact Size	8	4	8



Shell Size &  
Insert Arrg. for:

Series III TV	33-3		33-5	33-6	
Service Rating	II		II	II	
Number of Contacts	1	2	5	2	4
Contact Size	4	0	4	8	4



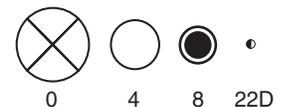
Shell Size &  
Insert Arrg. for:

Series III TV	37-5
Service Rating	II
Number of Contacts	4
Contact Size	0

NOTE: Some specials shown here were formerly known as Pyle arrangements. Consult Amphenol for how to order information for connectors with these inserts.

Consult Amphenol Aerospace for longer shell drawings.

CONTACT LEGEND



38999

III  
II  
I  
SJT  
Access  
Aquacon

Series III

A

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

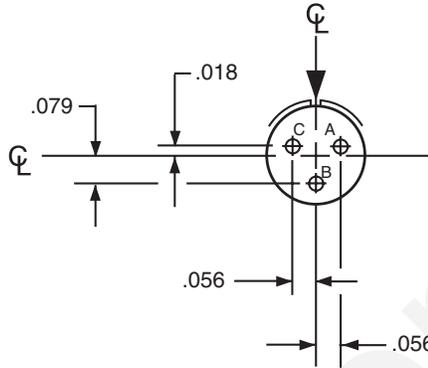
38999

### INSERT ARRANGEMENT #8-3 / 9-3

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	8-3	9-3	NA	3	20	M

#### Contact Locations

Front face of pin insert shown



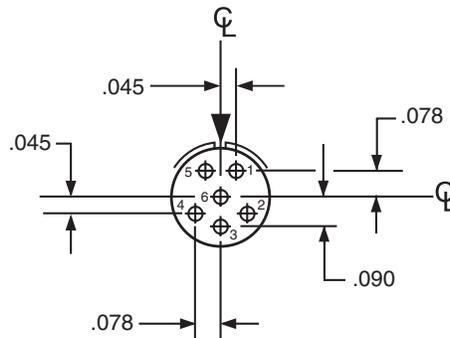
\*Service Rating: M for MIL-DTL-38999

### INSERT ARRANGEMENT #8-35 / 9-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	8-35	9-35	9-35	6	22D	M

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

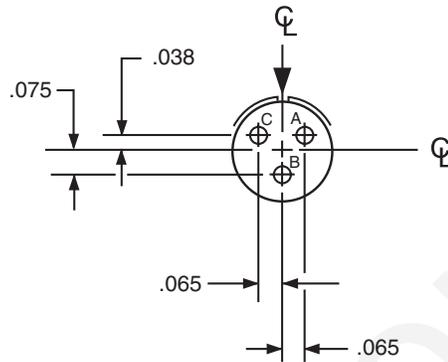
## Insert Arrangements

### INSERT ARRANGEMENT #8-98 / 9-98

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	8-98	9-98	9-98	3	20	I

#### Contact Locations

Front face of pin insert shown

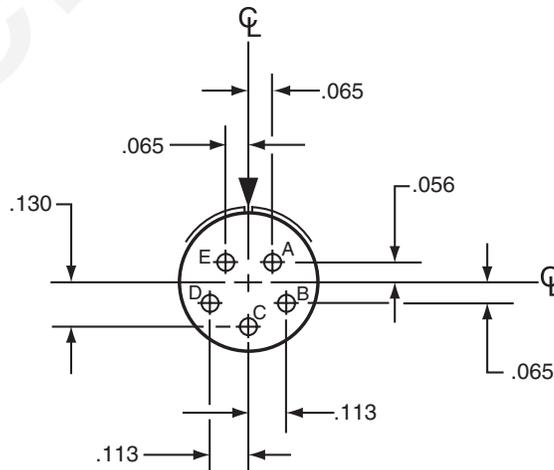


### INSERT ARRANGEMENT #10-5 / 11-5

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	10-5	11-5	11-5	5	20	I

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 Series III, page 86 Series II, and page 114 Series I.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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III

II

I

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Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

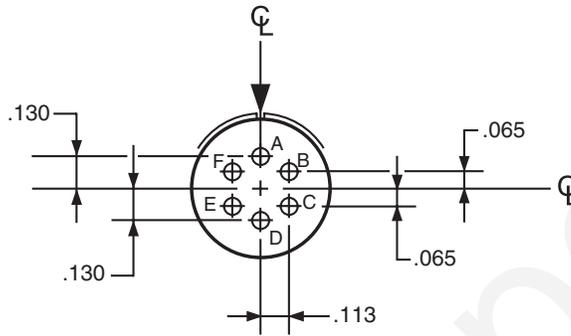
38999

### INSERT ARRANGEMENT #10-6 / 11-6

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	NA	11-6	NA	6	20	I

#### Contact Locations

Front face of pin insert shown

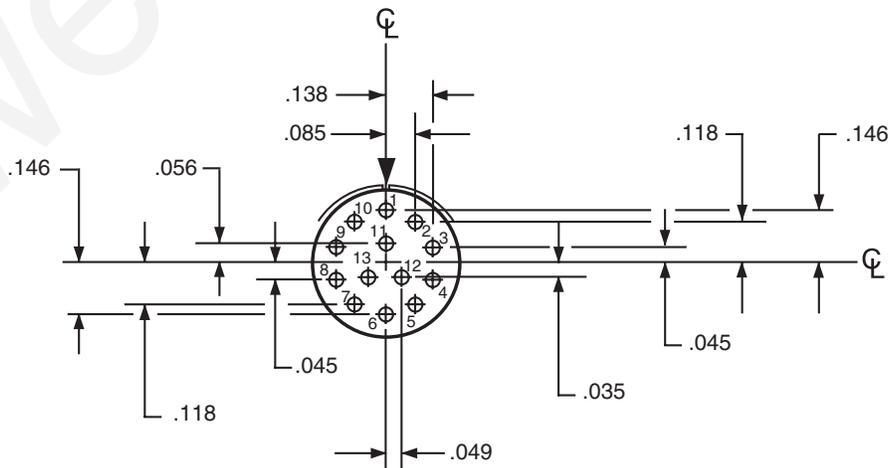


### INSERT ARRANGEMENT #10-35 / 11-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	10-35	11-35	11-35	13	22D	M

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I. Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

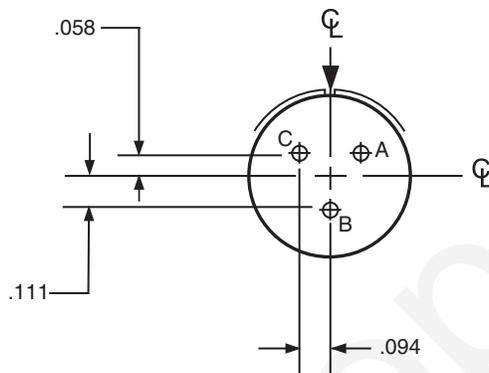
## Insert Arrangements

### INSERT ARRANGEMENT #12-3 / 13-3

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	12-3	13-3	NA	3	16	II

#### Contact Locations

Front face of pin insert shown

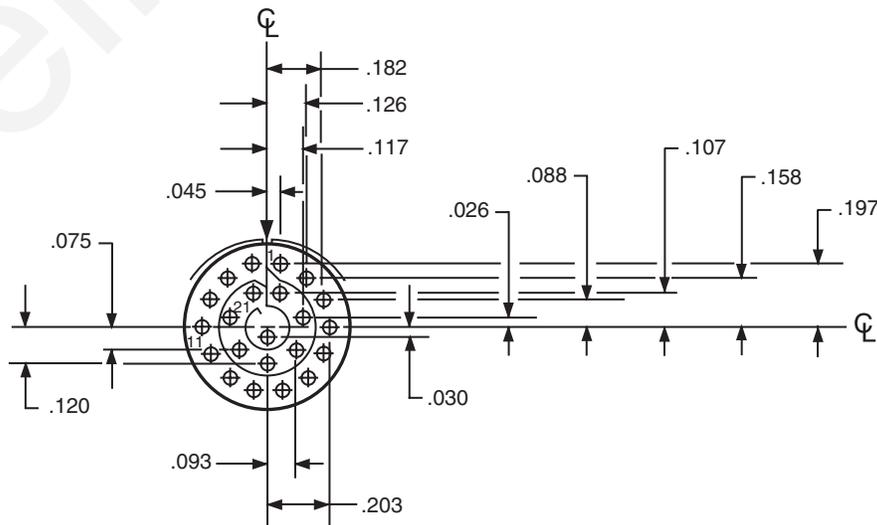


### INSERT ARRANGEMENT #12-35 / 13-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	12-35	13-35	13-35	22	22D	M

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I. Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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III

II

I

SJT

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Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

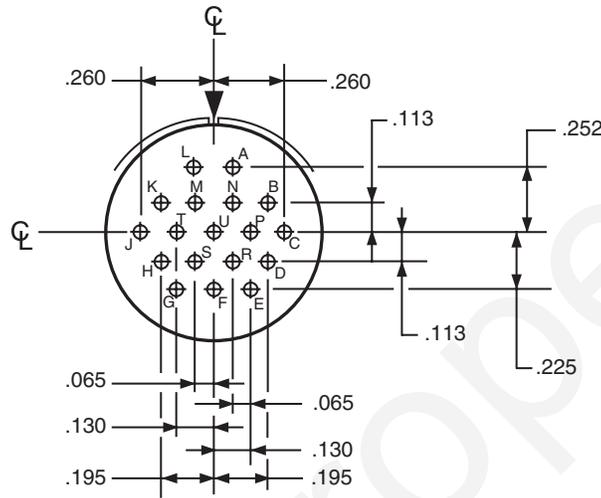
38999

### INSERT ARRANGEMENT #14-18 / 15-18

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	14-18	15-18	15-18	18	20	I

#### Contact Locations

Front face of pin insert shown

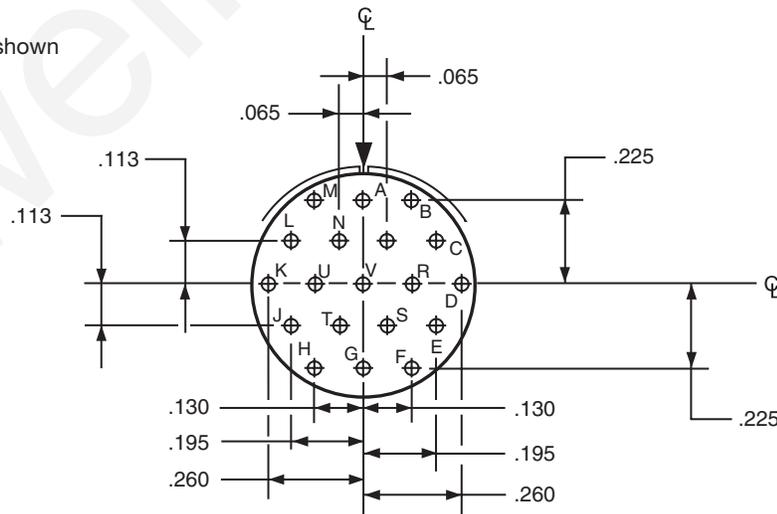


### INSERT ARRANGEMENT #14-19 / 15-19

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	14-19	15-19	15-19	19	20	I

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I. Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

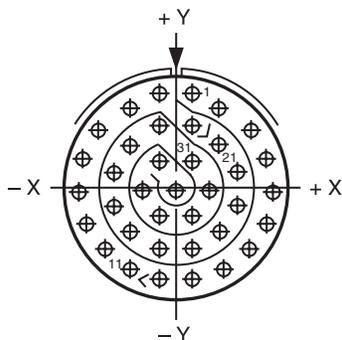
## Insert Arrangements

### INSERT ARRANGEMENT #14-35 / 15-35

<b>Connector Type:</b>	<b>JT</b> MIL-DTL-38999 Series II	<b>LJT</b> MIL-DTL-38999 Series I	<b>Tri-Start</b> MIL-DTL-38999 Series III	<b>Number of Contacts</b>	<b>Contact Size</b>	<b>Service Rating</b>
<b>Insert Designation:</b>	14-35	15-35	15-35	37	22D	M

#### Contact Locations

Front face of pin insert shown



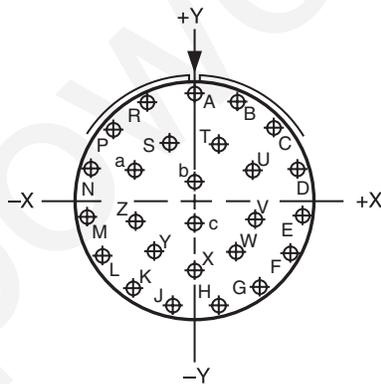
Contact Hole Locations			Contact Hole Locations		
Contact Number	Location		Contact Number	Location	
	X Axis	Y Axis		X Axis	Y Axis
1	+0.045	+0.262	19	+0.045	+0.172
2	+0.123	+0.217	20	+0.123	+0.119
3	+0.211	+0.160	21	+0.170	+0.040
4	+0.254	+0.080	22	+0.170	-0.050
5	+0.266	-0.010	23	+0.123	-0.127
6	+0.247	-0.098	24	+0.045	-0.172
7	+0.200	-0.175	25	-0.045	-0.172
8	+0.130	-0.232	26	-0.123	-0.127
9	+0.045	-0.262	27	-0.170	-0.050
10	-0.045	-0.262	28	-0.170	+0.040
11	-0.130	-0.232	29	-0.123	+0.119
12	-0.200	-0.175	30	-0.045	+0.172
13	-0.247	-0.098	31	+0.045	+0.074
14	-0.266	-0.010	32	+0.090	-0.004
15	-0.254	+0.080	33	+0.045	-0.082
16	-0.211	+0.160	34	-0.045	-0.082
17	-0.123	+0.217	35	-0.090	-0.004
18	-0.045	+0.262	36	-0.045	+0.074
			37	.000	-0.004

### INSERT ARRANGEMENT #16-26 / 17-26

<b>Connector Type:</b>	<b>JT</b> MIL-DTL-38999 Series II	<b>LJT</b> MIL-DTL-38999 Series I	<b>Tri-Start</b> MIL-DTL-38999 Series III	<b>Number of Contacts</b>	<b>Contact Size</b>	<b>Service Rating</b>
<b>Insert Designation:</b>	NA	17-26	17-26	26	20	I

#### Contact Locations

Front face of pin insert shown



Contact Hole Locations			Contact Hole Locations		
Contact Number	Location		Contact Number	Location	
	X Axis	Y Axis		X Axis	Y Axis
A	.000	+0.321	R	-0.131	+0.293
B	+0.131	+0.293	S	-0.070	+0.177
C	+0.239	+0.214	T	+0.070	+0.177
D	+0.305	+0.099	U	+0.175	+0.094
E	+0.319	-0.034	V	+0.178	-0.036
F	+0.278	-0.161	W	+0.119	-0.151
G	+0.189	-0.260	X	.000	-0.203
H	+0.067	-0.314	Y	-0.119	-0.151
J	-0.067	-0.314	Z	-0.178	-0.036
K	-0.189	-0.260	a	-0.175	+0.094
L	-0.278	-0.161	b	.000	+0.065
M	-0.319	-0.034	c	.000	-0.065
N	-0.305	+0.099			
P	-0.239	+0.214			

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
Note: Shown in this catalog are the most common insert patterns for PCB applications.  
For availability of other arrangements, consult Amphenol Aerospace.

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III

II

I

SJT

Access

Aquacon

Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

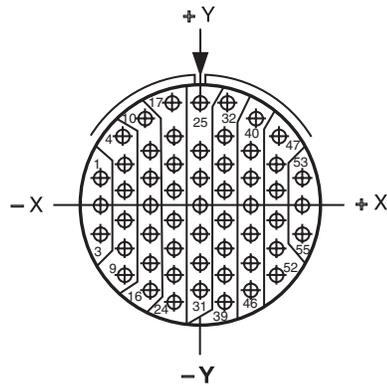
38999

### INSERT ARRANGEMENT #16-35 / 17-35

<b>Connector Type:</b>	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	<b>Number of Contacts</b>	<b>Contact Size</b>	<b>Service Rating</b>
<b>Insert Designation:</b>	16-35	17-35	17-35	55	22D	M

#### Contact Locations

Front face of pin insert shown



Contact Number	Contact Hole Locations	
	X Axis	Y Axis
1	-.312	+.086
2	-.312	-.004
3	-.312	-.094
4	-.242	+.221
5	-.234	+.131
6	-.234	+.041
7	-.234	-.049
8	-.234	-.139
9	-.234	-.229
10	-.172	+.279
11	-.156	+.176
12	-.156	+.086
13	-.156	-.004
14	-.156	-.094
15	-.156	-.184
16	-.156	-.274
17	-.089	+.316
18	-.078	+.221
19	-.078	+.131
20	-.078	+.041
21	-.078	-.049
22	-.078	-.139
23	-.078	-.229
24	-.078	-.319
25	.000	+.329
26	.000	+.176
27	.000	+.086

Contact Number	Contact Hole Locations	
	X Axis	Y Axis
28	.000	-.004
29	.000	-.094
30	.000	-.184
31	.000	-.274
32	+.089	+.316
33	+.078	+.221
34	+.078	+.131
35	+.078	+.041
36	+.078	-.049
37	+.078	-.139
38	+.078	-.229
39	+.078	-.319
40	+.172	+.279
41	+.156	+.176
42	+.156	+.086
43	+.156	-.004
44	+.156	-.094
45	+.156	-.184
46	+.156	-.274
47	+.242	+.221
48	+.234	+.131
49	+.234	+.041
50	+.234	-.049
51	+.234	-.139
52	+.234	-.229
53	+.312	+.086
54	+.312	-.004
55	+.312	-.094

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
 Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

38999

- III
- II
- I
- SJT
- Access
- Aquacon

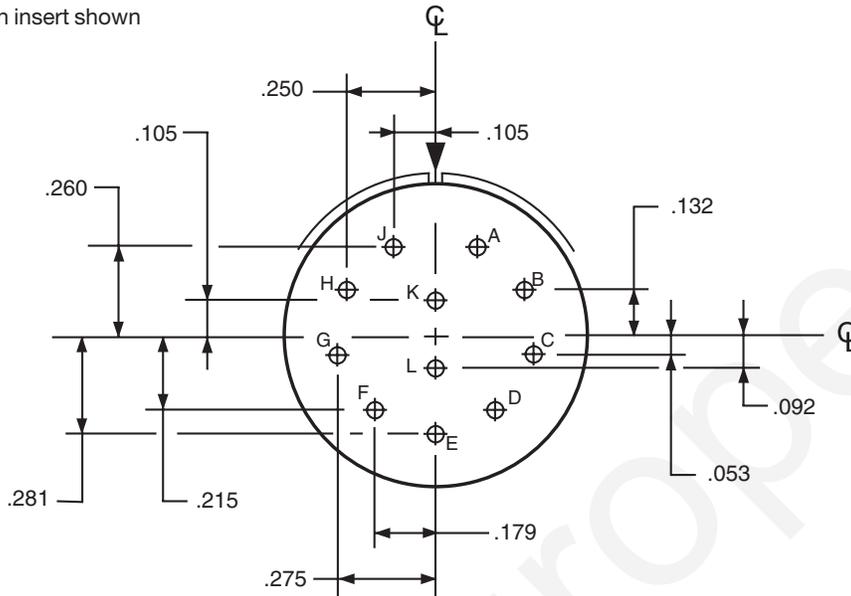
Series III, II, I

### INSERT ARRANGEMENT #18-11 / 19-11

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Number of Contacts	Contact Size	Service Rating
	18-11	19-11			

#### Contact Locations

Front face of pin insert shown

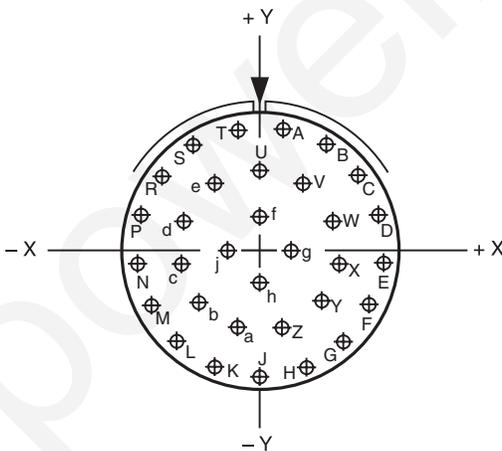


### INSERT ARRANGEMENT #18-32 / 19-32

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	18-32	19-32	19-32			

#### Contact Locations

Front face of pin insert shown



Contact Hole Locations			Contact Hole Locations		
Contact Letter	Location		Contact Letter	Location	
	X Axis	Y Axis		X Axis	Y Axis
A	+0.066	+0.353	T	-.066	+0.353
B	+0.189	+0.305	U	.000	+0.230
C	+0.286	+0.217	V	+0.124	+0.193
D	+0.345	+0.098	W	+0.209	+0.095
E	+0.357	-.033	X	+0.228	-.033
F	+0.321	-.160	Y	+0.174	-.151
G	+0.242	-.265	Z	+0.065	-.221
H	+0.130	-.335	a	-.065	-.221
J	.000	-.359	b	-.174	-.151
K	-.130	-.335	c	-.228	-.033
L	-.242	-.265	d	-.209	+0.095
M	-.321	-.160	e	-.124	+0.193
N	-.357	-.033	f	.000	+0.096
P	-.345	+0.098	g	+0.096	.000
R	-.286	+0.217	h	.000	-.096
S	-.189	+0.305	j	-.096	.000

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

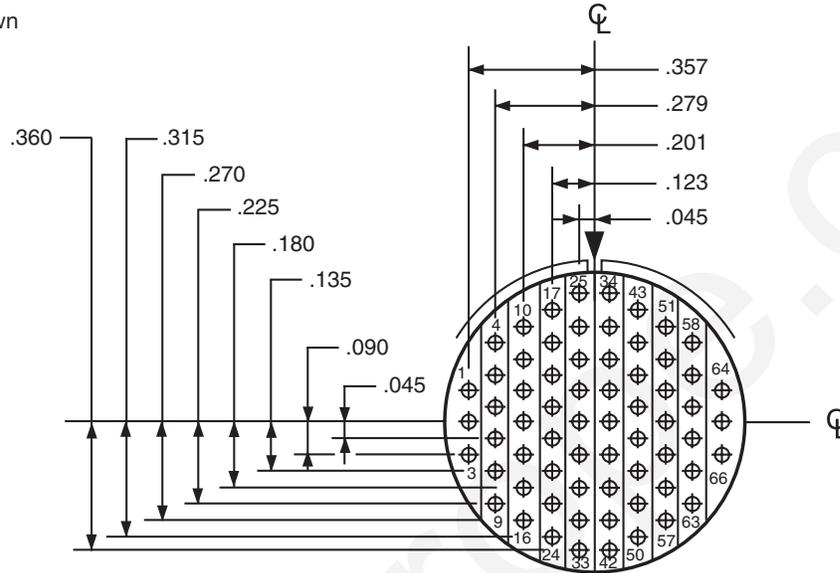
38999

### INSERT ARRANGEMENT #18-35 / 19-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	18-35	19-35	19-35	66	22D	M

#### Contact Locations

Front face of pin insert shown

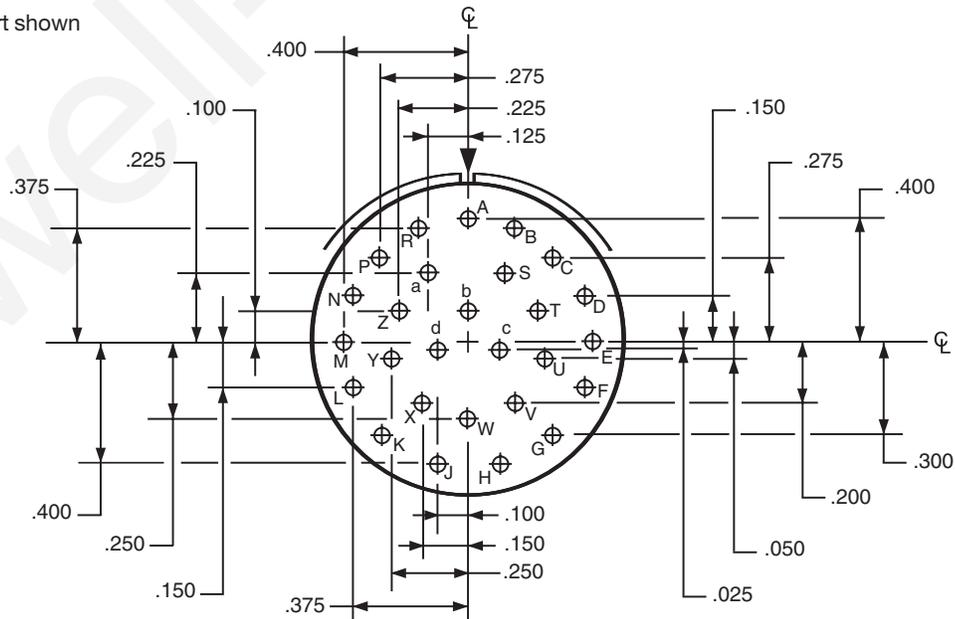


### INSERT ARRANGEMENT #20-27 / 21-27

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	20-27	21-27	NA	27	20	I

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol.

Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

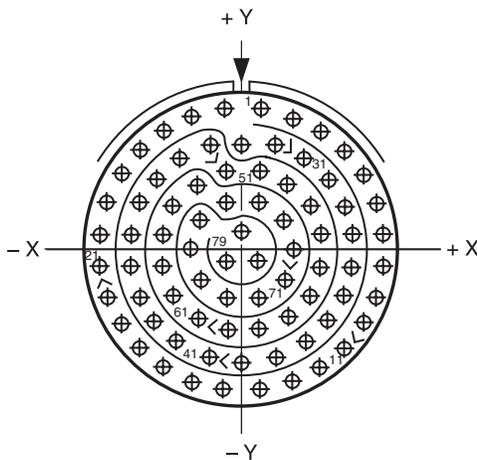
## Insert Arrangements

### INSERT ARRANGEMENT #20-35 / 21-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	20-35	21-35	21-35	79	22D	M

### Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	+0.053	+0.426
2	+0.146	+0.404
3	+0.232	+0.362
4	+0.306	+0.302
5	+0.365	+0.227
6	+0.406	+0.141
7	+0.427	+0.048
8	+0.427	-0.048

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
9	+0.406	-0.141
10	+0.365	-0.227
11	+0.306	-0.302
12	+0.232	-0.362
13	+0.146	-0.404
14	+0.053	-0.426
15	-0.053	-0.426
16	-0.146	-0.404
17	-0.232	-0.362
18	-0.306	-0.302
19	-0.365	-0.227
20	-0.406	-0.141
21	-0.427	-0.048
22	-0.427	+0.048
23	-0.406	+0.141
24	-0.365	+0.227
25	-0.306	+0.302
26	-0.232	+0.362
27	-0.146	+0.404
28	-0.053	+0.426
29	.000	+0.323
30	+0.098	+0.322
31	+0.184	+0.280
32	+0.258	+0.220
33	+0.311	+0.141
34	+0.332	+0.048
35	+0.332	-0.048
36	+0.311	-0.141
37	+0.258	-0.220
38	+0.184	-0.280
39	+0.098	-0.322
40	.000	-0.347
41	-0.098	-0.322
42	-0.184	-0.280

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
43	-0.258	-0.220
44	-0.311	-0.141
45	-0.332	-0.048
46	-0.332	+0.048
47	-0.311	+0.141
48	-0.258	+0.220
49	-0.184	+0.280
50	-0.098	+0.322
51	-0.048	+0.241
52	+0.048	+0.241
53	+0.134	+0.199
54	+0.208	+0.139
55	+0.237	+0.048
56	+0.237	-0.048
57	+0.208	-0.139
58	+0.134	-0.199
59	+0.048	-0.241
60	-0.048	-0.241
61	-0.134	-0.199
62	-0.208	-0.139
63	-0.237	-0.048
64	-0.237	+0.048
65	-0.208	+0.139
66	-0.134	+0.199
67	-0.048	+0.146
68	+0.048	+0.146
69	+0.125	+0.090
70	+0.155	.000
71	+0.125	-0.090
72	+0.048	-0.146
73	-0.048	-0.146
74	-0.125	-0.090
75	-0.155	.000
76	-0.125	+0.090
77	.000	+0.053
78	+0.048	-0.029
79	-0.048	-0.029

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

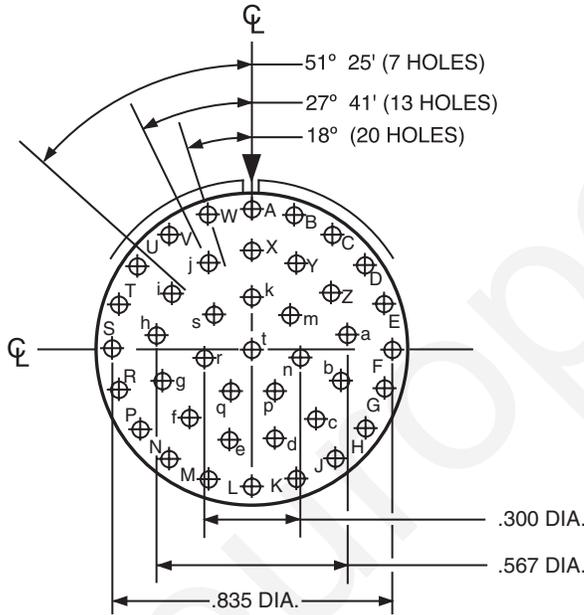
38999

### INSERT ARRANGEMENT #20-41 / 21-41

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	20-41	21-41	21-41	41	20	I

### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
 Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

### INSERT ARRANGEMENT #22-35 / 23-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	22-35	23-35	23-35

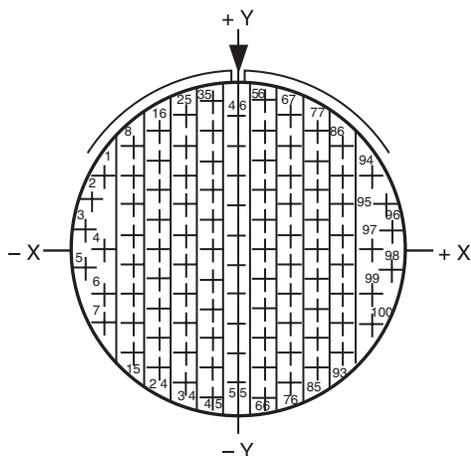
Number of Contacts	Contact Size	Service Rating
100	22D	M

38999

- III
- II
- I
- SJT
- Access
- Aquacon

### Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
20	-.249	.000
21	-.249	-.095
22	-.249	-.190
23	-.249	-.285
24	-.249	-.380
25	-.166	+.428
26	-.166	+.333
27	-.166	+.238
28	-.166	+.143
29	-.166	+.048
30	-.166	-.047
31	-.166	-.142
32	-.166	-.237
33	-.166	-.332
34	-.166	-.427
35	-.083	+.475
36	-.083	+.380
37	-.083	+.285
38	-.083	+.190
39	-.083	+.095
40	-.083	.000
41	-.083	-.095
42	-.083	-.190
43	-.083	-.285
44	-.083	-.380
45	-.083	-.475
46	.000	+.428
47	.000	+.333
48	.000	+.238
49	.000	+.143
50	.000	+.048
51	.000	-.047
52	.000	-.142
53	.000	-.237
54	.000	-.332
55	.000	-.427
56	+.083	+.475
57	+.083	+.380
58	+.083	+.285
59	+.083	+.190

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
60	+.083	+.095
61	+.083	.000
62	+.083	-.095
63	+.083	-.190
64	+.083	-.285
65	+.083	-.380
66	+.083	-.475
67	+.166	+.428
68	+.166	+.333
69	+.166	+.238
70	+.166	+.143
71	+.166	+.048
72	+.166	-.047
73	+.166	-.142
74	+.166	-.237
75	+.166	-.332
76	+.166	-.427
77	+.249	+.380
78	+.249	+.285
79	+.249	+.190
80	+.249	+.095
81	+.249	.000
82	+.249	-.095
83	+.249	-.190
84	+.249	-.285
85	+.249	-.380
86	+.332	+.333
87	+.332	+.238
88	+.332	+.143
89	+.332	+.048
90	+.332	-.047
91	+.332	-.142
92	+.332	-.237
93	+.332	-.332
94	+.428	+.241
95	+.467	+.154
96	+.488	+.061
97	+.415	.000
98	+.488	-.061
99	+.428	-.142
100	+.428	-.237

Series III, II, I

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	-.428	+.241
2	-.467	+.154
3	-.488	+.061
4	-.415	.000
5	-.488	-.061
6	-.428	-.142
7	-.428	-.237
8	-.332	+.333
9	-.332	+.238
10	-.332	+.143
11	-.332	+.048
12	-.332	-.047
13	-.332	-.142
14	-.332	-.237
15	-.332	-.332
16	-.249	+.380
17	-.249	+.285
18	-.249	+.190
19	-.249	+.095

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
 Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

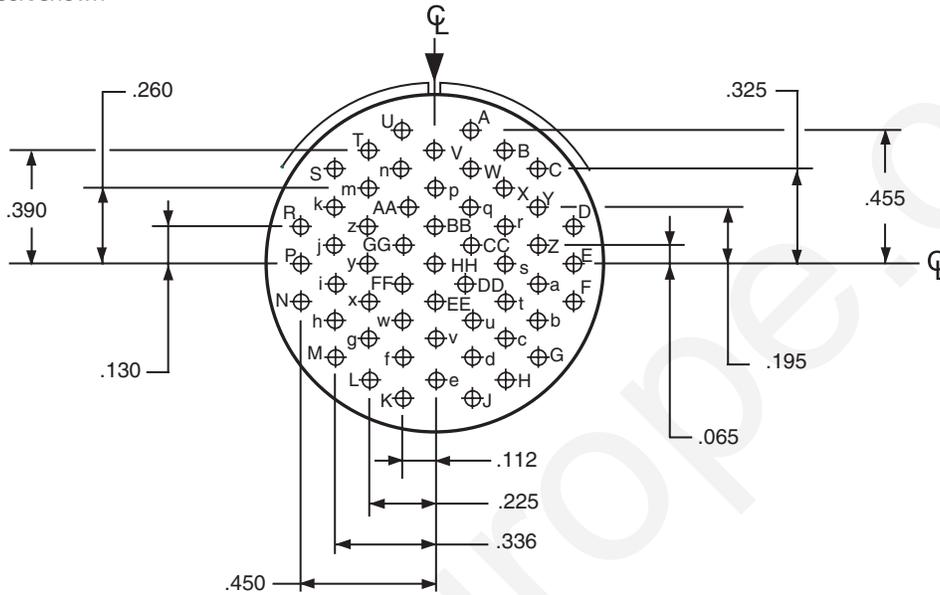
38999

### INSERT ARRANGEMENT #22-55 / 23-55

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	22-55	23-55	23-55	55	20	I

#### Contact Locations

Front face of pin insert shown

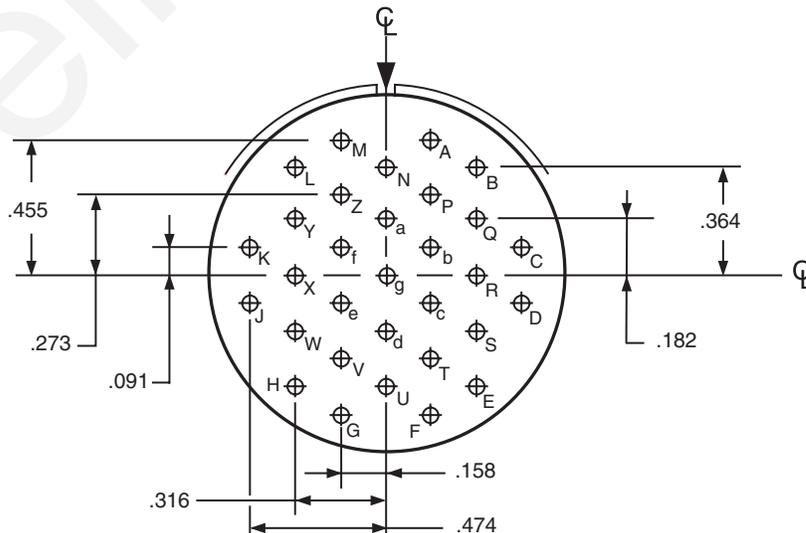


### INSERT ARRANGEMENT #24-31 / 25-31

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	24-31	NA	NA	31	16	I

#### Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

Series III, II, I

# PCB Contacts 38999, Series I LJT, II JT, III TV

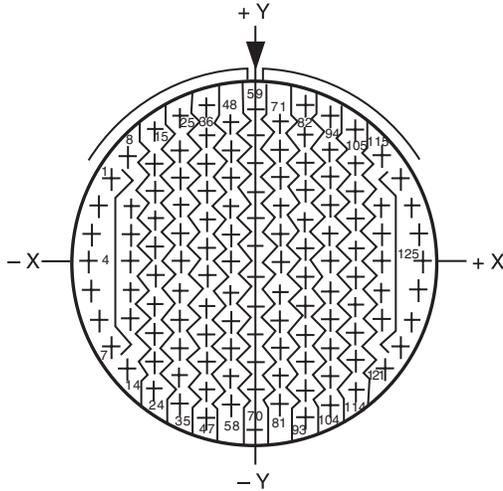
## Insert Arrangements

### INSERT ARRANGEMENT #24-35 / 25-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	24-35	25-35	25-35			
Insert Designation:	24-35	25-35	25-35	128	22D	M

### Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	-.479	+.279
2	-.520	+.190
3	-.546	+.095
4	-.555	.000
5	-.546	-.095
6	-.520	-.190
7	-.479	-.279
8	-.424	+.357
9	-.415	+.190
10	-.415	+.095
11	-.415	.000
12	-.415	-.095
13	-.415	-.190
14	-.424	-.357
15	-.332	+.444
16	-.332	+.332
17	-.332	+.237
18	-.332	+.142
19	-.332	+.047
20	-.332	-.047
21	-.332	-.142
22	-.332	-.237
23	-.332	-.332
24	-.332	-.427
25	-.249	+.496
26	-.249	+.380
27	-.249	+.285
28	-.249	+.190

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
29	-.249	+.095
30	-.249	.000
31	-.249	-.095
32	-.249	-.190
33	-.249	-.285
34	-.249	-.380
35	-.249	-.475
36	-.166	+.531
37	-.166	+.427
38	-.166	+.332
39	-.166	+.237
40	-.166	+.142
41	-.166	+.047
42	-.166	-.047
43	-.166	-.142
44	-.166	-.237
45	-.166	-.332
46	-.166	-.427
47	-.166	-.522
48	-.083	+.475
49	-.083	+.380
50	-.083	+.285
51	-.083	+.190
52	-.083	+.095
53	-.083	.000
54	-.083	-.095
55	-.083	-.190
56	-.083	-.285
57	-.083	-.380
58	-.083	-.475
59	.000	+.522
60	.000	+.427
61	.000	+.332
62	.000	+.237
63	.000	+.142
64	.000	+.047
65	.000	-.047
66	.000	-.142
67	.000	-.237
68	.000	-.332
69	.000	-.427
70	.000	-.555
71	+.083	+.475
72	+.083	+.380
73	+.083	+.285
74	+.083	+.190
75	+.083	+.095
76	+.083	.000
77	+.083	-.095
78	+.083	-.190

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
79	+.083	-.285
80	+.083	-.380
81	+.083	-.475
82	+.166	+.531
83	+.166	+.427
84	+.166	+.332
85	+.166	+.237
86	+.166	+.142
87	+.166	+.047
88	+.166	-.047
89	+.166	-.142
90	+.166	-.237
91	+.166	-.332
92	+.166	-.427
93	+.166	-.522
94	+.249	+.496
95	+.249	+.380
96	+.249	+.285
97	+.249	+.190
98	+.249	+.095
99	+.249	.000
100	+.249	-.095
101	+.249	-.190
102	+.249	-.285
103	+.249	-.380
104	+.249	-.475
105	+.332	+.444
106	+.332	+.332
107	+.332	+.237
108	+.332	+.142
109	+.332	+.047
110	+.332	-.047
111	+.332	-.142
112	+.332	-.237
113	+.332	-.332
114	+.332	-.427
115	+.424	+.357
116	+.415	+.190
117	+.415	+.095
118	+.415	.000
119	+.415	-.095
120	+.415	-.190
121	+.424	-.357
122	+.479	+.279
123	+.520	+.190
124	+.546	+.095
125	+.555	.000
126	+.546	-.095
127	+.520	-.190
128	+.479	-.279

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.  
 Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

# PCB Contacts 38999, Series I LJT, II JT, III TV

## Insert Arrangements

38999

III

II

I

SJT

Access

Aquacon

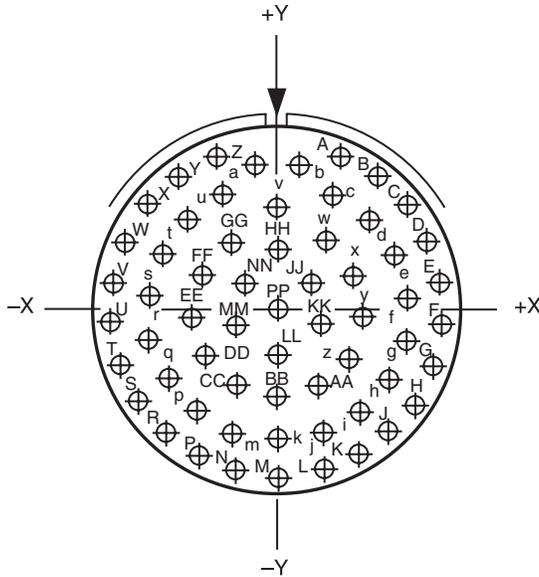
Series III, II, I

### INSERT ARRANGEMENT #24-61 / 25-61

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	24-61	25-61	25-61	61	20	I

### Contact Locations

Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
A	+ .196	+ .500
B	+ .314	+ .435
C	+ .413	+ .343
D	+ .485	+ .230
E	+ .527	+ .101
F	+ .536	- .030
G	+ .511	- .164
H	+ .454	- .287
J	+ .368	- .391
K	+ .259	- .470
L	+ .134	- .519
M	.000	- .537
N	- .134	- .519
P	- .259	- .470
R	- .368	- .391
S	- .454	- .287
T	- .511	- .164
U	- .536	- .030
V	- .527	+ .101
W	- .485	+ .230
X	- .413	+ .343
Y	- .314	+ .435
Z	- .196	+ .500
a	- .068	+ .454
b	+ .068	+ .454
c	+ .173	+ .363
d	+ .285	+ .283
e	+ .362	+ .175
f	+ .399	+ .046
g	+ .392	- .088

Contact Number	Location	
	X Axis	Y Axis
h	+ .341	- .213
i	+ .251	- .314
j	+ .133	- .379
k	.000	- .402
m	- .133	- .379
n	- .251	- .314
p	- .341	- .213
q	- .392	- .088
r	- .399	+ .046
s	- .362	+ .175
t	- .285	+ .283
u	- .173	+ .363
v	.000	+ .338
w	+ .147	+ .223
x	+ .237	+ .122
y	+ .267	- .010
z	+ .228	- .139
AA	+ .131	- .233
BB	.000	- .267
CC	- .131	- .233
DD	- .228	- .139
EE	- .267	- .010
FF	- .237	+ .122
GG	- .147	+ .223
HH	.000	+ .200
JJ	+ .105	+ .094
KK	+ .135	- .041
LL	.000	- .132
MM	- .135	- .041
NN	- .105	+ .094
PP	.000	.000

All dimensions for reference only. For alternate rotations see page 46 for Series III, page 86 for Series II, and page 114 for Series I.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.