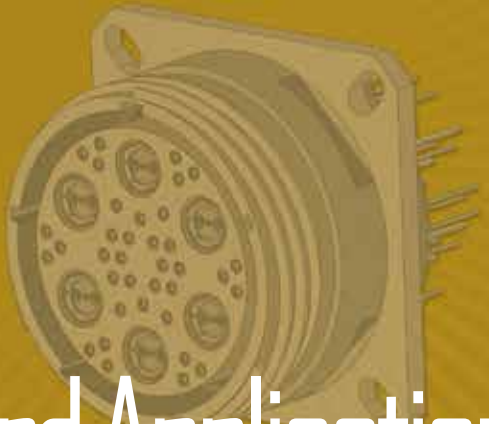
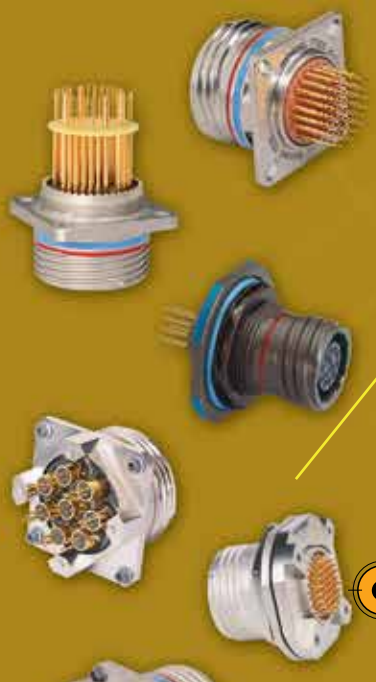
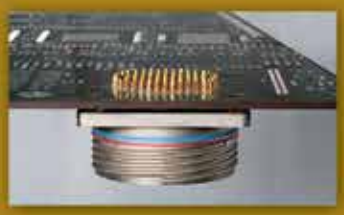
Amphenol
Circular Connectors for Printed Circuit Board Applications





New Featured



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PCB Connector Typical Markets:

- Military and Commercial Aviation
- Space & Satellites
- Military Vehicles
- Shipboard
- Instrumentation

Amphenol Aerospace

Amphenol provides circular connectors with PC Tail contacts. This catalog section features the 38999 Series III, II, and I connectors which are ideal for printed circuit board applications, either with rigid attachment or with flex print assembly attachment. For information on other Amphenol circular connectors with PC Tail contacts, consult Amphenol, Sidney NY.

MIL-DTL-38999 CONNECTORS, METAL & COMPOSITE

- Lightweight, compact, high density and high reliability cylindrical
- Operating voltage to 900 VAC (RMS) at sea level
- Environmentally resistant
- Solder or crimp rear release contacts in mating plug
- Series I (LJT) - Bayonet coupling
  - Scoop-proof (recessed pins) offers maximum contact protection
- Series II (JT) - Bayonet coupling
  - For applications requiring maximum weight/space savings and reliability
- Series III (Tri-Start) - Threaded, quick coupling in one complete turn
  - Designed for general duty as well as severe environmental applications
  - Superior EMI shielding with grounding fingers and metal-to-metal mating
  - Filter/Transient protection versions available
  - Scoop-proof contact protection
  - Stainless steel firewall versions, and composite versions
  - Available in Hermetics

See MIL-DTL-38999 Series I, II, and III sections of this catalog for more detailed information.
Note: MIL-DTL-38999 supersedes MIL-C-38999.

38999 Series III Box Mount Connector with PC Tails

Special 38999 Connector with Stand-off Shell and PC Tails

38999 Series III Connector with a Special Configuration Composite Shell and PC Tails

How to Measure the PCB Tail Length

The tail length of the PCB is the portion of the contact that extends beyond the rear of the shell. This length will vary in relationship to the mounting flange, depending on the series of connector selected. Standard lengths are shown on the connector shell style drawings in this catalog. These shell style drawing pages also provide how to order part numbering for standard PCB cylindrical connectors. When computing the desired tail length, it is important to take into consideration the following factors:

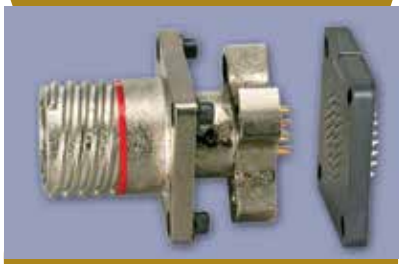
- The connector series and shell style.
- The mounting style of the receptacle; jam nut (D hole) or panel mount (four holes). This can affect the overall length of the tail.
- The extension of the tail beyond the opposite side of the board or the flex.
- The space required to adequately clean flux from between the board or flex and the rear of the connector shell. Connectors that are mounted flush against the board may trap soldering flux which could lead to corrosion of the solder joints.

Stand-off Adapter on a Jam Nut Receptacle.

Would Alignment Discs, Headers or Special Stand-off Shells be Beneficial?

The answer is yes any mechanical methods needed to stabilize the board or flex to the connector and/or the panel is beneficial. The PCB tails shown in this catalog are of one diameter. Stepped tails or PCB tails with an increased diameter on a designated portion may be required for certain applications.

Alignment discs are available which provide ease of alignment of pins to boards, protection during shipment and optimized electrical circuit separation. Header assemblies (see pages 120 & 121) are available which provide time and cost saving potentials. Standoffs may be required for certain applications. Amphenol has developed a new stand-off adapter (see page 185) which may eliminate the need for special stand-off shell designs. Connectors with clinch nuts can be provided. Please call Amphenol to discuss any optional designs or any special requirements.



Universal Header Assemblies are available for Flex Print/PC Board Mounting. Beneficial especially when electrical testing of the connector requires it to be removed and reattached.

What Determines the Diameter of the PCB Tail?

The outside diameter of the PCB tail is determined by the inside diameter of the plated through-hole on the board or flex print. The standard or most popular diameters are shown in the chart on the next page and are called out in the connector illustrations in this catalog.

Standard diameters of PCB tails

Connector Series	Size 16 Contact	Size 20 Contact	Size 22D Contact
MIL-DTL-38999	.062 ±.001	.019 ±.001	.019 ±.001

Compliant Pin Contacts in a Bayonet 38999 Catalog

Should PCB Tails be Gold Plated or Pre-tinned?

The standard PCB tails for MIL-DTL-38999 receptacles have gold plating,.00005 inches over nickel. Amphenol can substitute a pre-tinned version of these tails to facilitate the termination process. This pre-tinning is a 60/40 lead-tin alloy. Call Amphenol for further information on pre-tinning and any other plating of contacts not covered in this catalog.

Would Flex Assemblies be Necessary or Beneficial for the Application?

Flex print can radically simplify the assembly of a connector to a system, as well as eliminate wiring errors. Amphenol offers connector flex assemblies through APC, Amphenol Printed Circuit division. Features and benefits of using flex technology include:

- Available for MIL-DTL-38999 (including filter EMI/EMP types) circular connectors
- Sculptures® Flexible Circuits with built-in terminations
- Eliminates failures associated with crimped or solder-on contacts
- Geometrically fit tight space requirements and create a self-locking terminal pad

Should Other PC Tail Contact Types be Considered?

Press-Fit Connectors with compliant pins are available which engage the plated through-holes in the board without the need for soldering. This optional contact style offers the following benefits:

- Improved board processing time
- Excellent temperature performance
- Ideal for low-lead applications

For more information on Press-Fit connectors with compliant pins see page 557.

Special Quadrax contacts have been designed with PC tails. Coax, twinax and triax contacts can also have PC tails. Refer to the High Speed contacts section of this catalog.

Special Design with Longer PC Tails in a 38999 Composite Shell Connector. Also shows an Alignment Disc.

Flex Termination for Attachment to PC Boards

Quadrax PC Tail Contacts Combined with Standard PC Tail Contacts

Quadrax Contacts with PC Tails in a 38999 Connector with Special Stand-off Shell

The following table lists the most commonly used insert arrangements for printed circuit board application of MIL-DTL-38999 circular connectors. This represents the most readily available patterns within these series. See illustrations of these selected patterns on the following pages. If you require other arrangements than what are shown here, consult Amphenol for further availability.

Example: Shell Size is the first number (8–3) Insert Arrangement is second number.

MIL-DTL-38999			Service Rating	Total Contacts	Contact Size*		
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III			22D	20	16
8-3	9-3		M/I	3		3	
8-35	9-35	9-35	M	6	6		
8-98	9-98	9-98	I	3		3	
10-5	11-5	11-5	I	5		5	
	11-6		I	6		6	
10-35	11-35	11-35	M	13	13		
12-3	13-3		II	3			3
12-35	13-35	13-35	M	22	22		
14-18	15-18	15-18	I	18		18	
14-19	15-19	15-19	I	19		19	
14-35	15-35	15-35	M	37	37		
16-26	17-26	17-26	I	26		26	
16-35	17-35	17-35	M	55	55		
18-11	19-11	19-11	II	11			11
18-32	19-32	19-32	I	32		32	
18-35	19-35	19-35	M	66	66		
20-27	21-27		I	27		27	
20-35	21-35	21-35	M	79	79		
20-41	21-41	21-41	I	41		41	
22-35	23-35	23-35	M	100	100		
22-55	23-55	23-55	I	55		55	
24-31			I	31			31
24-35	25-35	25-35	M	128	128		
24-61	25-61	25-61	I	61		61	

* For information on size 12 PC tail contacts consult Amphenol Aerospace.

Printed Circuit Boards are available in other series like MIL-DTL-26482 and MIL-5015 Connectors. Please contact Amphenol Aerospace for more information.

MIL-DTL-26482

- Medium size, widely used circular
- Operating voltage to 1,000 VAC (RMS) at sea level
- Series 1 (PT) - Bayonet coupling - most commonly used in PCB applications
- Environmentally resistant
- Solder or crimp front and rear release contacts in mating plug

Black/green zinc alloy plating (cadmium-free) available

MIL-5015 Connector

- Medium–heavy weight, time-tested circular
- Operating voltage to 1,500 VAC (RMS) at sea level
- Environmentally resistant or general duty
- Threaded coupling
- Solder or crimp rear insertion contacts in mating plug

Black/green zinc alloy plating (cadmium-free) available

Amphenol Aerospace

To avoid cross-plugging problems in applications requiring the use of more than one connector of the same series, size and arrangement, alternate rotations are available as indicated in the accompanying charts.

In MIL-DTL-38999 Series I, II and III connectors the rotation is based on rotating the master key/keyway in the connector shell.

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. Only the master key/keyway rotates in the shell, and the insert always remains in the same position relative to the minor keys. Refer to diagrams below for each connector series.

LJT (MIL-DTL-38999 Series I) KEY/KEYWAY ROTATION

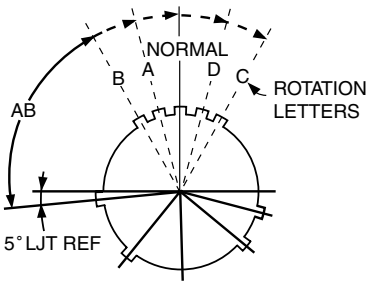
AB ANGLE OF ROTATION (Degrees)					
Shell Size	Normal°	A°	B°	C°	D°
9	95	77	–	–	113
11	95	81	67	123	109
13	95	75	63	127	115
15	95	74	61	129	116
17	95	77	65	125	113
19	95	77	65	125	113
21	95	77	65	125	113
23	95	80	69	121	110
25	95	80	69	121	110

JT **(MIL-DTL-38999 Series II) KEY/KEYWAY ROTATION**

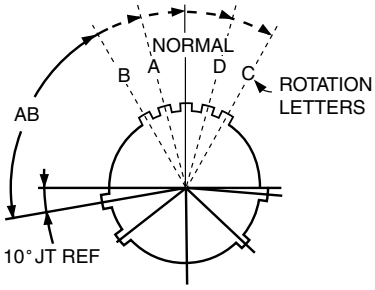
AB ANGLE OF ROTATION (Degrees)					
Shell Size	Normal°	A°	B°	C°	D°
8	100	82	–	–	118
10	100	86	72	128	114
12	100	80	68	132	120
14	100	79	66	134	121
16	100	82	70	130	118
18	100	82	70	130	118
20	100	82	70	130	118
22	100	85	74	126	115
24	100	85	74	126	115

Tri-Start **(MIL-DTL-38999 Series III) KEY/KEYWAY ROTATION**

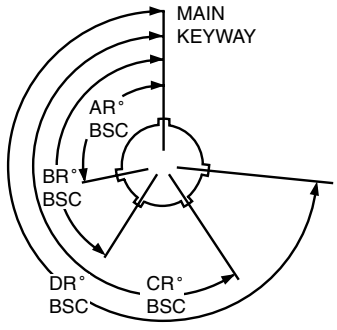
Shell Size	Key & Keyway Arrangement Identification Letter	AR° BSC	BR° BSC	CR° BSC	DR° BSC
9	N	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
	E	91	131	197	240
11, 13, and 15	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
	D	119	146	176	298
	E	51	141	184	242
17 and 19	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
21, 23, and 25	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of LJT connector receptacle shown)



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of JT connector receptacle shown)



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of Tri-Start connector receptacle shown)

MIL-DTL-38999 SERIES I LJT & SERIES II JT CONNECTORS ALTERNATE ROTATION CROSS -REFERENCE LETTERS

Pins in Alternate Rotations	Sockets in Alternate Rotations
PA = E	SA = F
PB = R	SB = T
PC = W	SC = X
PD = Y	SD = Z

Explanation:
Use P at end of part number for pin contacts in Normal position. Use S at end of part number for socket contacts in Normal position. Use cross-reference letters given in chart above for alternate rotations.

MIL-DTL-38999 SERIES III, TRI-START CONNECTORS ALTERNATE ROTATION CROSS-REFERENCE LETTERS

Pins in Alternate Rotations	Sockets in Alternate Rotations
PA = G	SA = H
PB = I	SB = J
PC = K	SC = L
PD = M	SD = N
PE = R	SE = T

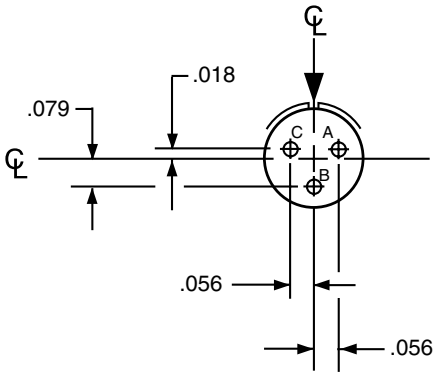
Explanation:
Use P at end of part number for pin contacts in Normal position. Use S at end of part number for socket contacts in Normal position. Use cross-reference letters given in chart above for alternate rotations.

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
Insert Designation:	8-3	9-3	NA

Number of Contacts	Contact Size	Service Rating
3	20	M

Contact Locations
Front face of pin insert shown



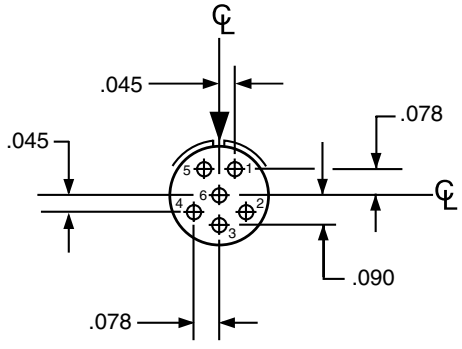
*Service Rating: M for MIL-DTL-38999

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
Insert Designation:	8-35	9-35	9-35

Number of Contacts	Contact Size	Service Rating
6	22D	M

Contact Locations
Front face of pin insert shown



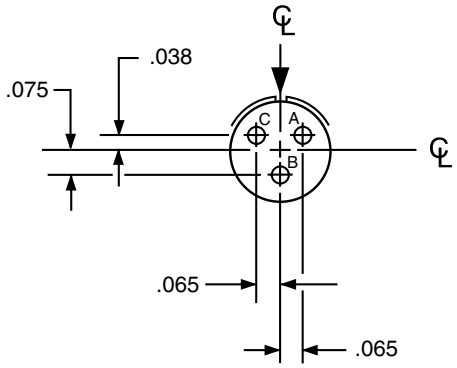
All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	8-98	9-98	9-98

Number of Contacts	Contact Size	Service Rating
3	20	I

Contact Locations
Front face of pin insert shown

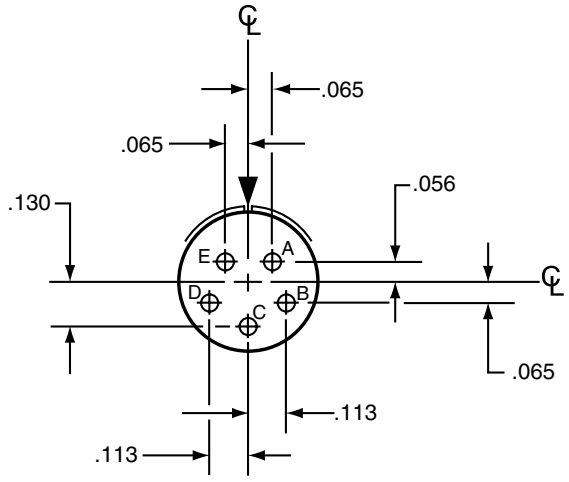


Insert Arrangement #10-5 / 11-5

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	10-5	11-5	11-5

Number of Contacts	Contact Size	Service Rating
5	20	I

Contact Locations
Front face of pin insert shown



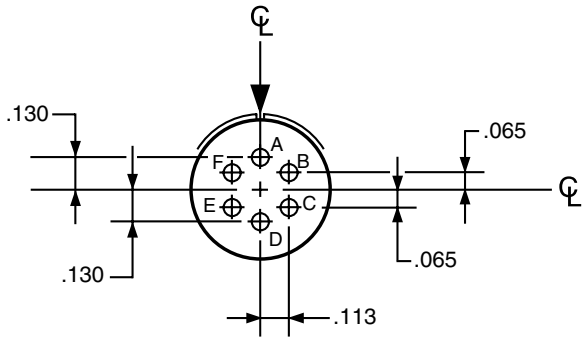
All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	NA	11-6	NA

Number of Contacts	Contact Size	Service Rating
6	20	I

Contact Locations
Front face of pin insert shown

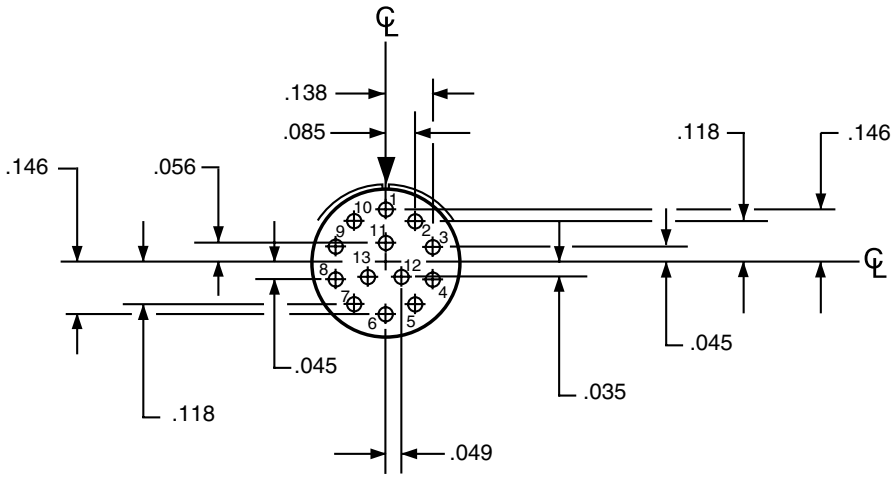


Insert Arrangement #10-35 / 11-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	10-35	11-35	11-35

Number of Contacts	Contact Size	Service Rating
13	22D	M

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

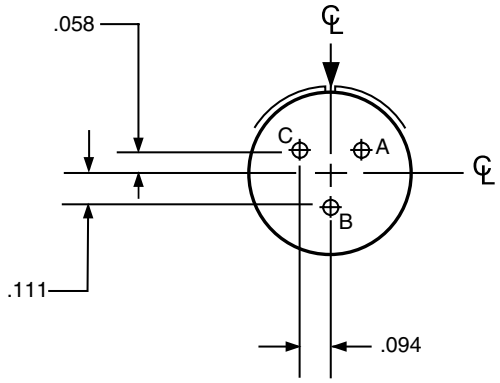
Insert Arrangement #12-3 / 13-3

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	12-3	13-3	NA

Number of Contacts	Contact Size	Service Rating
3	16	II

Contact Locations

Front face of pin insert shown



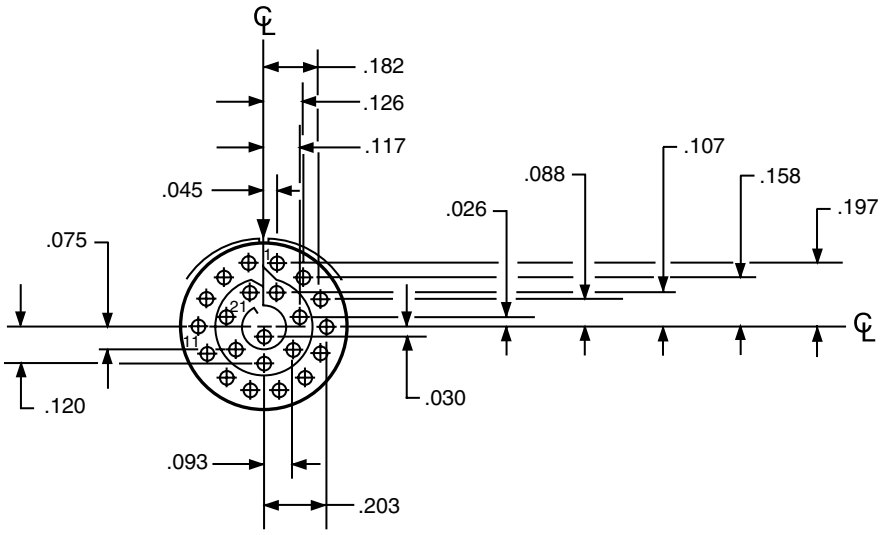
Insert Arrangement #12-35 / 13-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	12-35	13-35	13-35

Number of Contacts	Contact Size	Service Rating
22	22D	M

Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

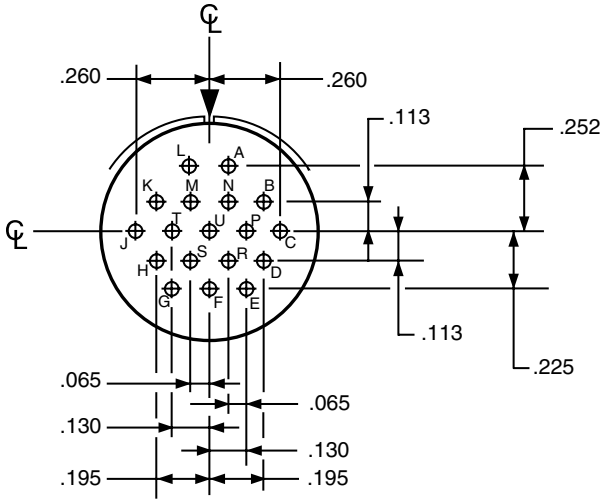
Insert Arrangement #14-18 / 15-18

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	14-18	15-18	15-18

Number of Contacts	Contact Size	Service Rating
18	20	I

Contact Locations

Front face of pin insert shown



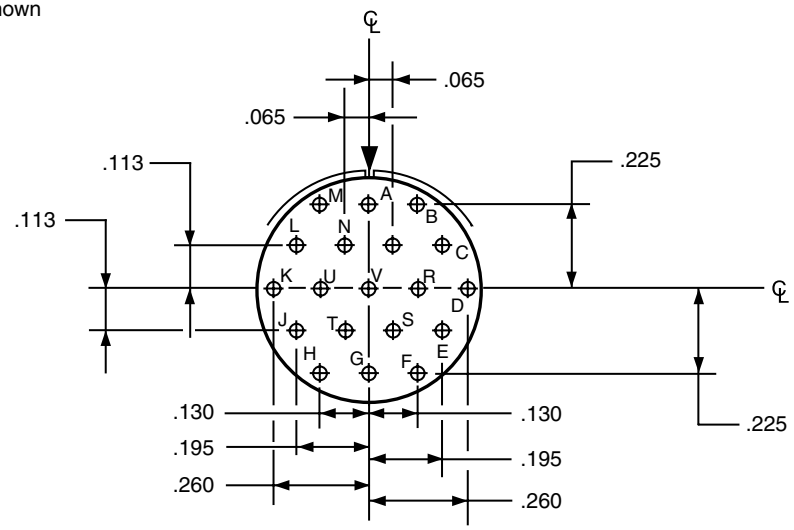
Insert Arrangement #14-19 / 15-19

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	14-19	15-19	15-19

Number of Contacts	Contact Size	Service Rating
19	20	I

Contact Locations

Front face of pin insert shown



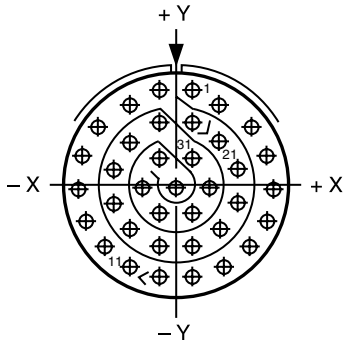
All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

Insert Arrangement #14-35 / 15-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	14-35	15-35	15-35

Number of Contacts	Contact Size	Service Rating
37	22D	M

Contact Locations
Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	+.045	+.262
2	+.123	+.217
3	+.211	+.160
4	+.254	+.080
5	+.266	–.010
6	+.247	–.098
7	+.200	–.175
8	+.130	–.232
9	+.045	–.262
10	–.045	–.262
11	–.130	–.232
12	–.200	–.175
13	–.247	–.098
14	–.266	–.010
15	–.254	+.080
16	–.211	+.160
17	–.123	+.217
18	–.045	+.262
19	+.045	+.172
20	+.123	+.119

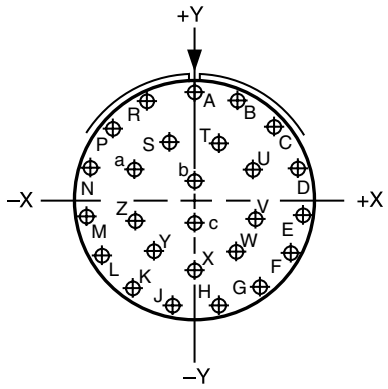
Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
21	+.170	+.040
22	+.170	–.050
23	+.123	–.127
24	+.045	–.172
25	–.045	–.172
26	–.123	–.127
27	–.170	–.050
28	–.170	+.040
29	–.123	+.119
30	–.045	+.172
31	+.045	+.074
32	+.090	–.004
33	+.045	–.082
34	–.045	–.082
35	–.090	–.004
36	–.045	+.074
37	.000	–.004

Insert Arrangement #16-26 / 17-26

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	NA	17-26	17-26

Number of Contacts	Contact Size	Service Rating
26	20	I

Contact Locations
Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
A	.000	+.321
B	+.131	+.293
C	+.239	+.214
D	+.305	+.099
E	+.319	–.034
F	+.278	–.161
G	+.189	–.260
H	+.067	–.314
J	–.067	–.314
K	–.189	–.260
L	–.278	–.161
M	–.319	–.034
N	–.305	+.099
P	–.239	+.214

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
R	–.131	+.293
S	–.070	+.177
T	+.070	+.177
U	+.175	+.094
V	+.178	–.036
W	+.119	–.151
X	.000	–.203
Y	–.119	–.151
Z	–.178	–.036
a	–.175	+.094
b	.000	+.065
c	.000	–.065

All dimensions for reference only. For alternate rotations see page 147 .
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

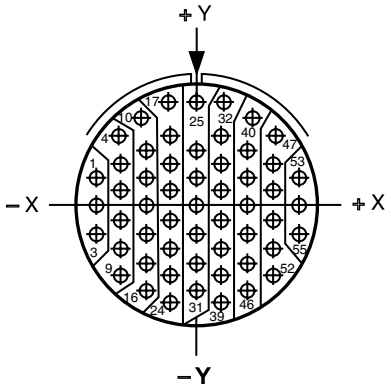
Insert Arrangement #16-35 / 17-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	16-35	17-35	17-35

Number of Contacts	Contact Size	Service Rating
55	22D	M

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	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
28	.000	–.004
29	.000	–.094
30	.000	–.184

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
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 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

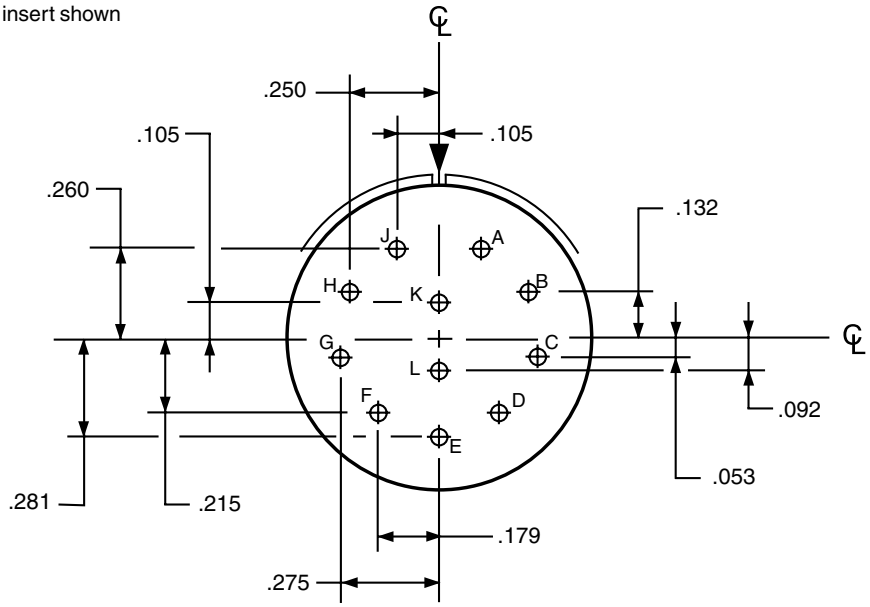
Insert Arrangement #18-11 / 19-11

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	18-11	19-11	19-11

Number of Contacts	Contact Size	Service Rating
11	16	II

Contact Locations

Front face of pin insert shown



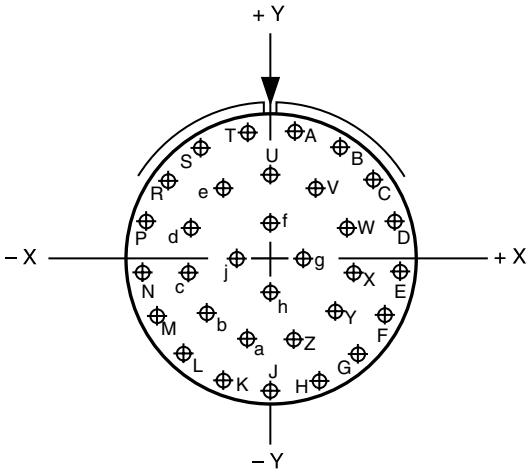
Insert Arrangement #18-32 / 19-32

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	18-32	19-32	19-32

Number of Contacts	Contact Size	Service Rating
32	20	I

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Letter	Location X Axis	Location Y Axis
A	+.066	+.353
B	+.189	+.305
C	+.286	+.217
D	+.345	+.098
E	+.357	–.033
F	+.321	–.160
G	+.242	–.265
H	+.130	–.335
J	.000	–.359
K	–.130	–.335
L	–.242	–.265
M	–.321	–.160
N	–.357	–.033
P	–.345	+.098
R	–.286	+.217
S	–.189	+.305

Contact Hole Locations		
Contact Letter	Location X Axis	Location Y Axis
T	–.066	+.353
U	.000	+.230
V	+.124	+.193
W	+.209	+.095
X	+.228	–.033
Y	+.174	–.151
Z	+.065	–.221
a	–.065	–.221
b	–.174	–.151
c	–.228	–.033
d	–.209	+.095
e	–.124	+.193
f	.000	+.096
g	+.096	.000
h	.000	–.096
j	–.096	.000

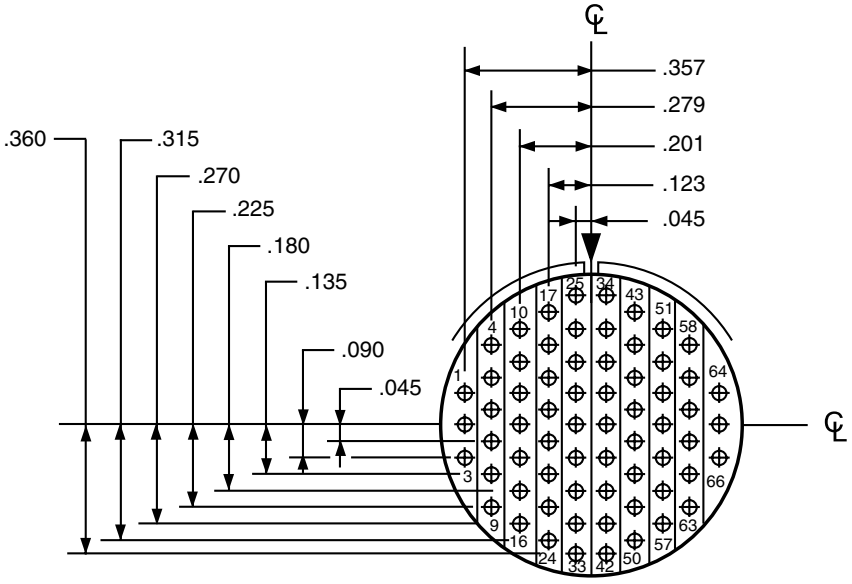
All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	18-35	19-35	19-35

Number of Contacts	Contact Size	Service Rating
66	22D	M

Contact Locations
Front face of pin insert shown

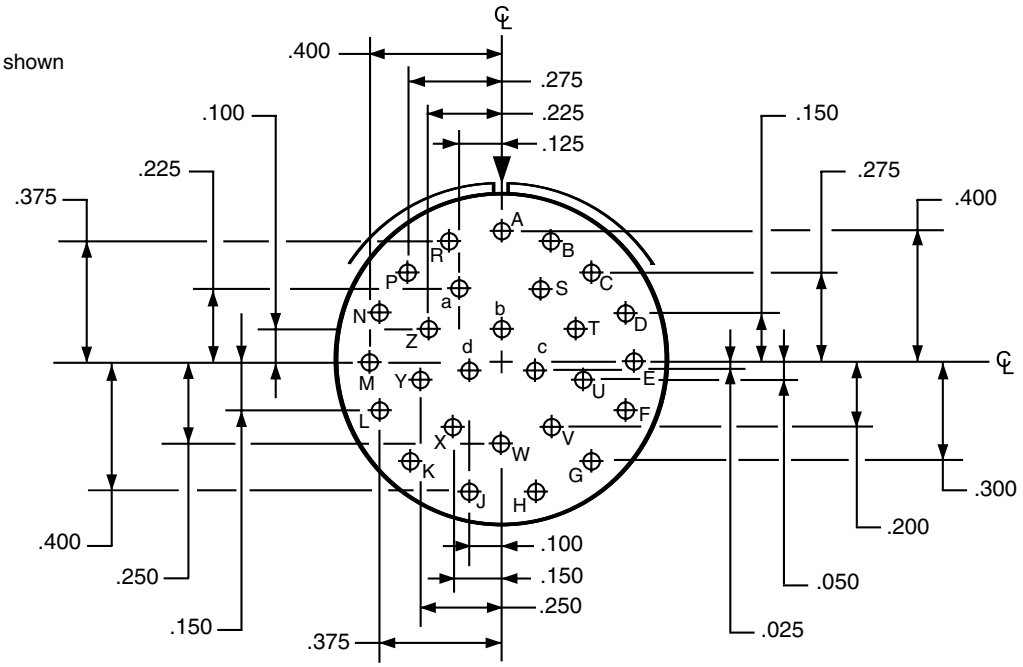


Insert Arrangement #20-27 / 21-27

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	20-27	21-27	NA

Number of Contacts	Contact Size	Service Rating
27	20	I

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

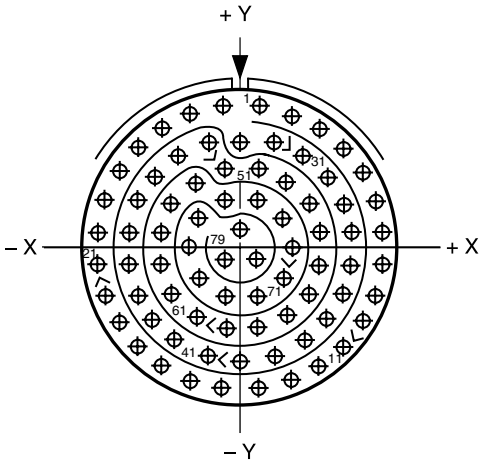
Insert Arrangement #20-35 / 21-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	20-35	21-35	21-35

Number of Contacts	Contact Size	Service Rating
79	22D	M

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	+.053	+.426
2	+.146	+.404
3	+.232	+.362
4	+.306	+.302
5	+.365	+.227
6	+.406	+.141
7	+.427	+.048
8	+.427	–.048
9	+.406	–.141

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
10	+.365	–.227
11	+.306	–.302
12	+.232	–.362
13	+.146	–.404
14	+.053	–.426
15	–.053	–.426
16	–.146	–.404
17	–.232	–.362
18	–.306	–.302
19	–.365	–.227
20	–.406	–.141
21	–.427	–.048
22	–.427	+.048
23	–.406	+.141
24	–.365	+.227
25	–.306	+.302
26	–.232	+.362
27	–.146	+.404
28	–.053	+.426
29	.000	+.323
30	+.098	+.322
31	+.184	+.280
32	+.258	+.220
33	+.311	+.141
34	+.332	+.048
35	+.332	–.048
36	+.311	–.141
37	+.258	–.220
38	+.184	–.280
39	+.098	–.322
40	.000	–.347
41	–.098	–.322
42	–.184	–.280
43	–.258	–.220
44	–.311	–.141

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
45	–.332	–.048
46	–.332	+.048
47	–.311	+.141
48	–.258	+.220
49	–.184	+.280
50	–.098	+.322
51	–.048	+.241
52	+.048	+.241
53	+.134	+.199
54	+.208	+.139
55	+.237	+.048
56	+.237	–.048
57	+.208	–.139
58	+.134	–.199
59	+.048	–.241
60	–.048	–.241
61	–.134	–.199
62	–.208	–.139
63	–.237	–.048
64	–.237	+.048
65	–.208	+.139
66	–.134	+.199
67	–.048	+.146
68	+.048	+.146
69	+.125	+.090
70	+.155	.000
71	+.125	–.090
72	+.048	–.146
73	–.048	–.146
74	–.125	–.090
75	–.155	.000
76	–.125	+.090
77	.000	+.053
78	+.048	–.029
79	–.048	–.029

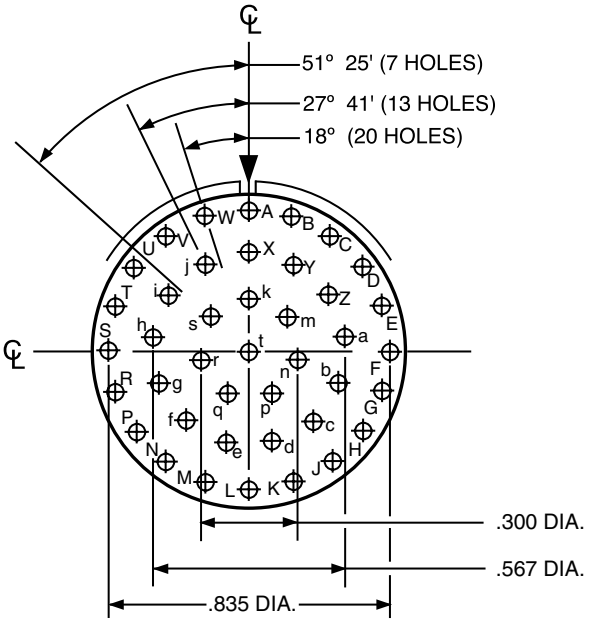
All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	20-41	21-41	21-41

Number of Contacts	Contact Size	Service Rating
41	20	I

Contact Locations
Front face of pin insert shown



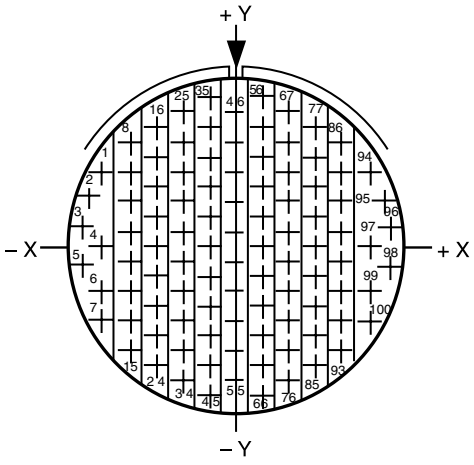
All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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

Contact Locations
Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location X Axis	Location 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
20	–.249	.000

Contact Hole Locations		
Contact Number	Location X Axis	Location Y Axis
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
60	+.083	+.095

Contact Hole Locations		
Contact Number	Location X Axis	Location Y Axis
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

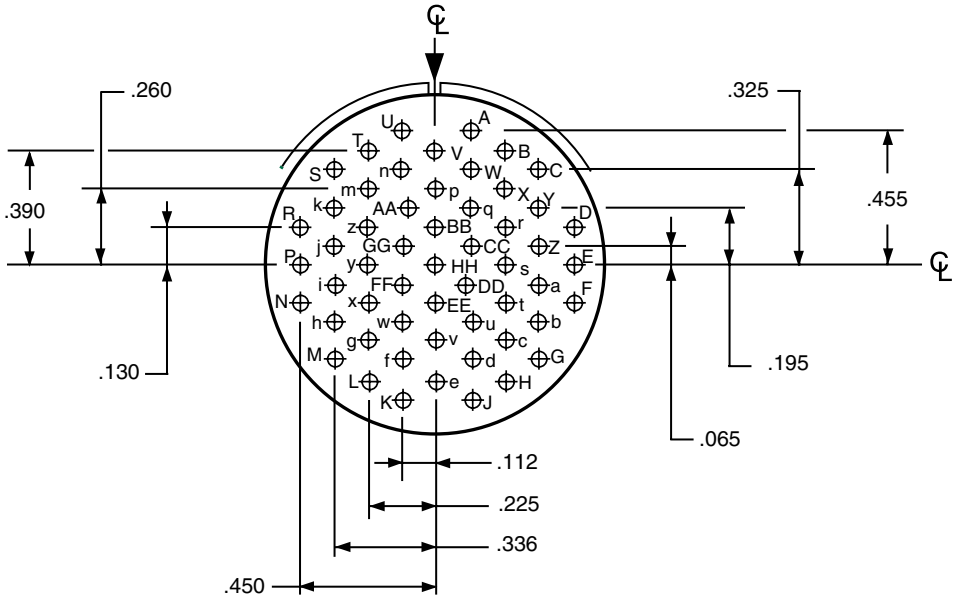
All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	22-55	23-55	23-55

Number of Contacts	Contact Size	Service Rating
55	20	I

Contact Locations
Front face of pin insert shown

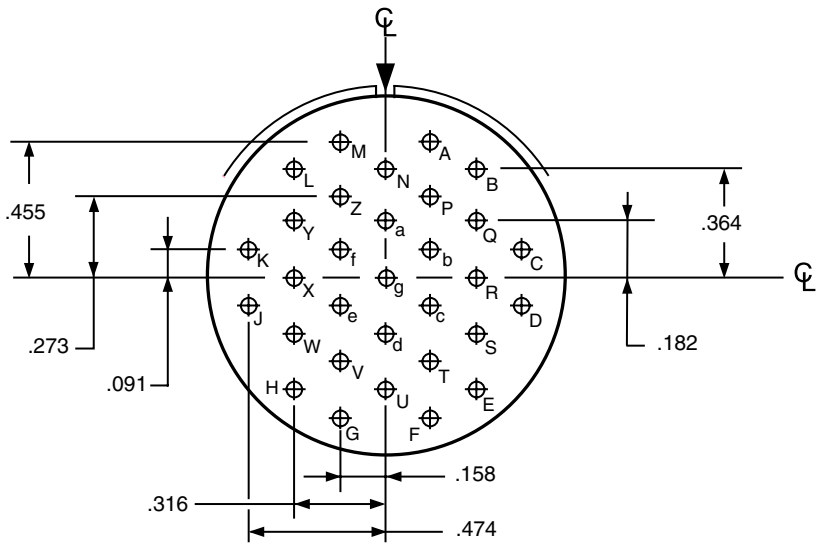


Insert Arrangement #24-31 / 25-31

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	24-31	NA	NA

Number of Contacts	Contact Size	Service Rating
31	16	I

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

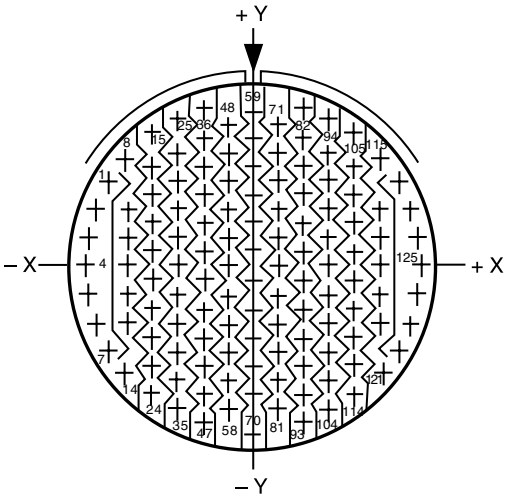
Insert Arrangement #24-35 / 25-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	24-35	25-35	25-35

Number of Contacts	Contact Size	Service Rating
128	22D	M

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location X Axis	Location 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	Location Y Axis
29	–.249	+.095
30	–.249	.000
31	–.249	–.095
32	–.249	–.190
33	–.249	–.285
34	–.249	–.380
35	–.249	–.475
36	–.160	+.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	Location Y Axis
79	+.083	–.285
80	+.083	–.380
81	+.083	–.475
82	+.160	+.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

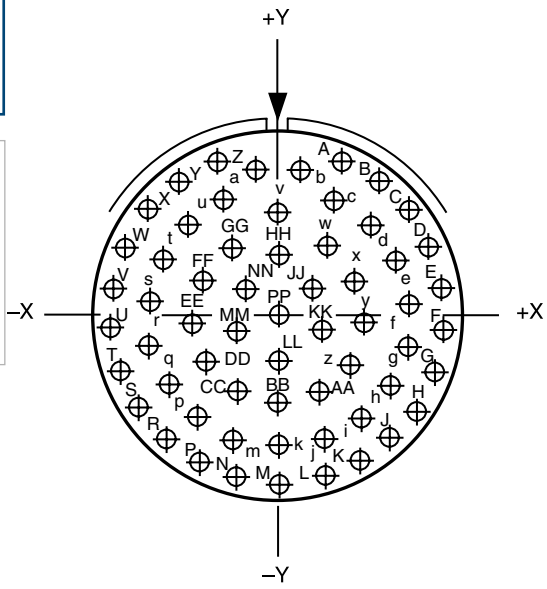
All dimensions for reference only. For alternate rotations see page 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

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
Insert Designation:	24-61	25-61	25-61

Number of Contacts	Contact Size	Service Rating
61	20	I

Contact Locations
Front face of pin insert shown



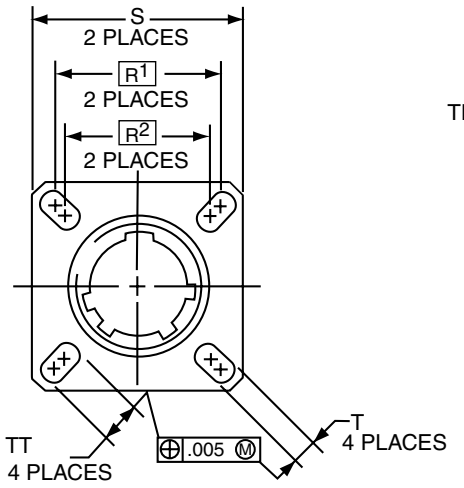
Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
A	+.196	+.500
B	+.314	+.435
C	+.413	+.343
D	+.485	+.230
E	+.527	+.101
F	+.536	–.030
G	+.511	–.164
H	+.454	–.287
J	+.368	–.391
K	+.259	–.470
L	+.134	–.519
M	.000	–.537
N	–.134	–.519
P	–.259	–.470
R	–.368	–.391
S	–.454	–.287
T	–.511	–.164
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

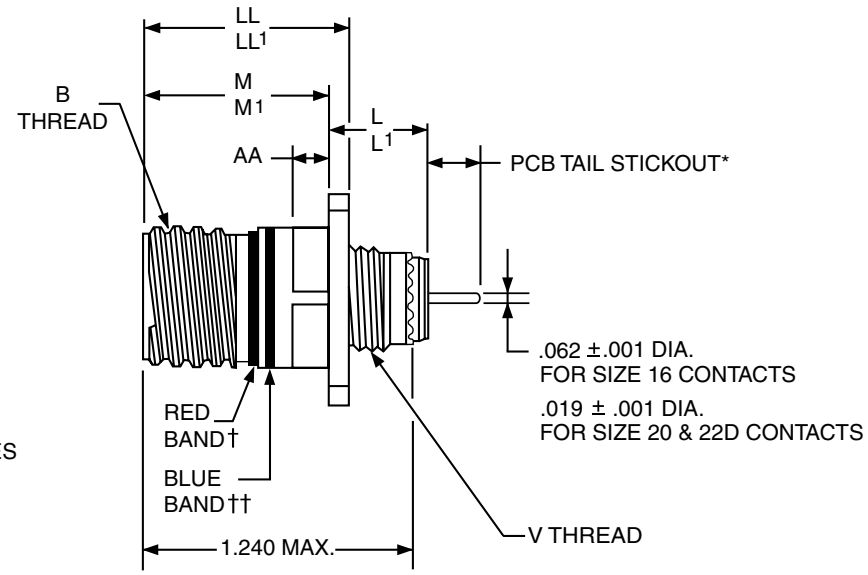
Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
g	+.392	–.088
h	+.341	–.213
i	+.251	–.314
j	+.133	–.379
k	.000	–.402
m	–.133	–.379
n	–.251	–.314
p	–.341	–.213
q	–.392	–.088
r	–.399	+.046
s	–.362	+.175
t	–.285	+.283
u	–.173	+.363
v	.000	+.338
w	+.147	+.223
x	+.237	+.122
y	+.267	–.010
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 147.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

Wall Mounting Receptacle (Back Panel Mounting)

Series III TV





	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	76 X	- 35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **761-769**, designates size 9-25 shell size.
Example: **761**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

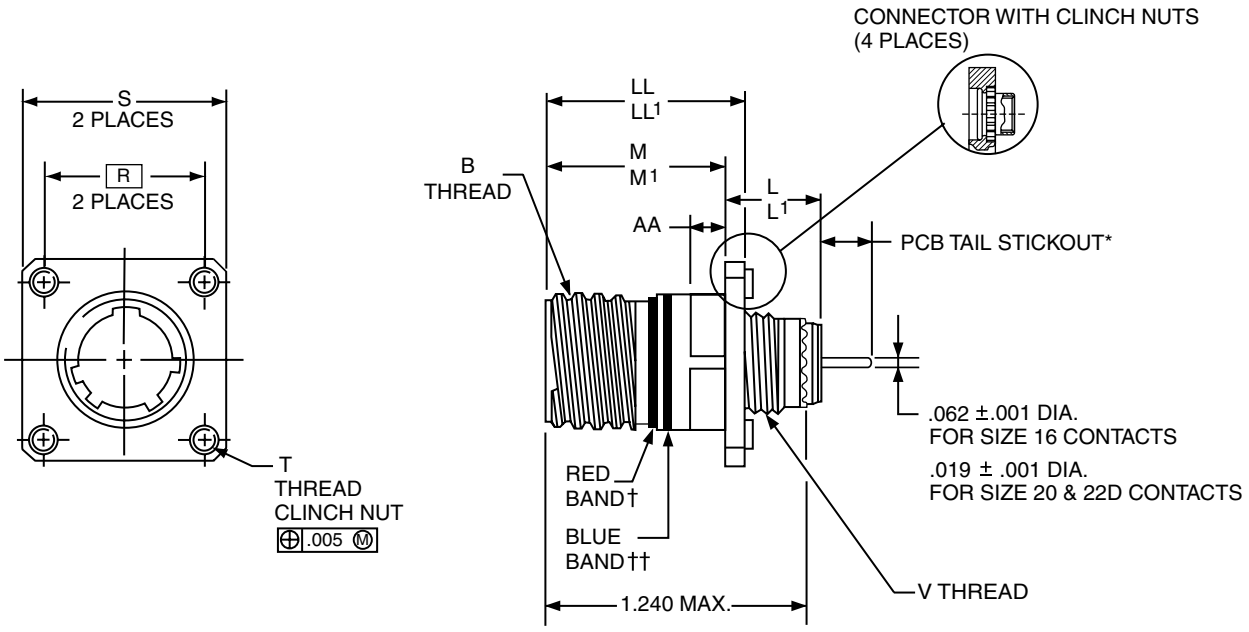
Shell Size	Coded Shell Size	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max. (TV)	L1 Max. (CTV)	M +.000 –.005 (TV)	M1 +.000 –.005 (CTV)	R1	R2	S Max.	T +.008 –.006	V Thread Metric	AA Max. Panel Thickness	LL +.006 –.000 (TV)	LL1 ±.005 (CTV)	TT +.008 –.006
9	**761**	.6250	.469	.514	.820	.773	.719	.594	.948	.128	M12X1-6g	.234	.905	.908	.216
11	**762**	.7500	.469	.514	.820	.773	.812	.719	1.043	.128	M15X1-6g	.234	.905	.908	.194
13	**763**	.8750	.469	.514	.820	.773	.906	.812	1.137	.128	M18X1-6g	.234	.905	.908	.194
15	**764**	1.0000	.469	.514	.820	.773	.969	.906	1.232	.128	M22X1-6g	.234	.905	.908	.173
17	**765**	1.1875	.469	.514	.820	.773	1.062	.969	1.323	.128	M25X1-6g	.234	.905	.908	.194
19	**766**	1.2500	.469	.514	.820	.773	1.156	1.062	1.449	.128	M28X1-6g	.234	.905	.908	.194
21	**767**	1.3750	.500	.545	.790	.741	1.250	1.156	1.575	.128	M31X1-6g	.204	.905	.904	.194
23	**768**	1.5000	.500	.545	.790	.741	1.375	1.250	1.701	.154	M34X1-6g	.204	.905	.904	.242
25	**769**	1.6250	.500	.545	.790	.741	1.500	1.375	1.823	.154	M37X1-6g	.204	.905	.904	.242

All dimensions for reference only.
Most common options are shown; other options are available.

☐ Designates true position dimensioning
† Red band indicates fully mated
†† Blue band indicates rear release contact retention system

Series III TV

Wall Mounting Receptacle
(Back Panel Mounting) (With Clinch Nuts)



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	628	74X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

628	Base Number

3. Select a Coded Shell Size:

See chart below **741-749**, designates size 9-25 shell size.
Example: **741** = Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

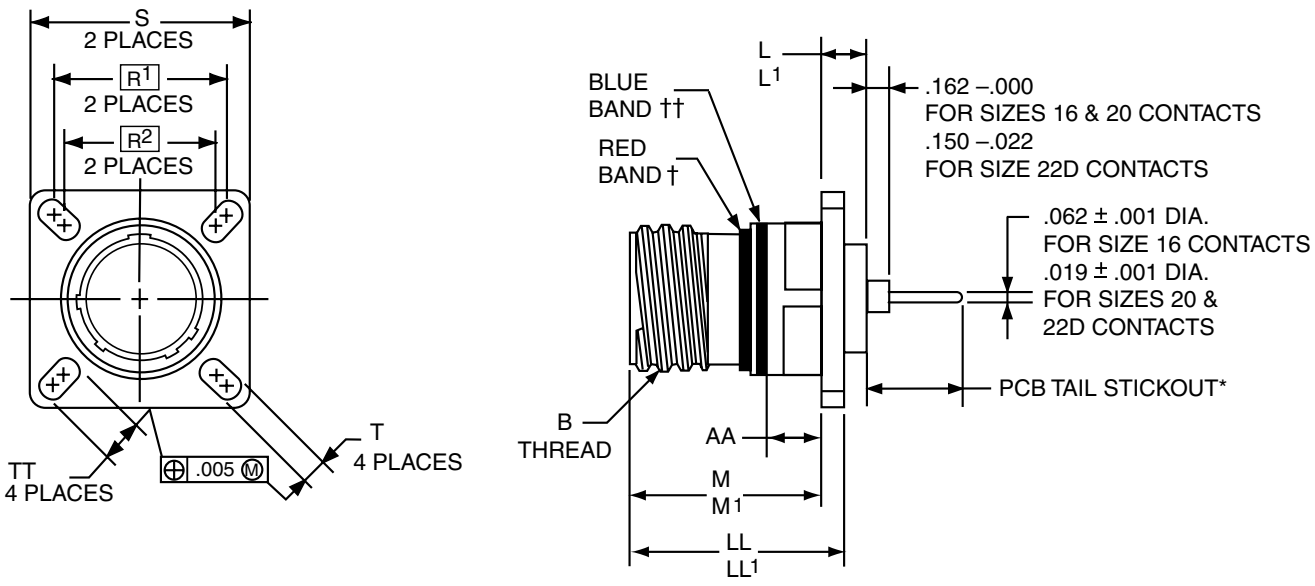
Shell Size	Coded Shell Size	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max. (TV)	L1 Max. (CTV)	M +.000 –.005 (TV)	M1 +.000 –.005 (CTV)	R	S Max.	T Thread	V Thread Metric	AA Max. Panel Thickness	LL +.006 –.000 (TV)	LL1 ±.005 (CTV)
9	741	.6250	.469	.514	.820	.773	.719	1.094	.112-40UNC-3B	M12X1-6g	.234	.905	.908
11	742	.7500	.469	.514	.820	.773	.812	1.187	.112-40UNC-3B	M15X1-6g	.234	.905	.908
13	743	.8750	.469	.514	.820	.773	.906	1.281	.112-40UNC-3B	M18X1-6g	.234	.905	.908
15	744	1.0000	.469	.514	.820	.773	.969	1.344	.112-40UNC-3B	M22X1-6g	.234	.905	.908
17	745	1.1875	.469	.514	.820	.773	1.062	1.437	.112-40UNC-3B	M25X1-6g	.234	.905	.908
19	746	1.2500	.469	.514	.820	.773	1.156	1.531	.112-40UNC-3B	M28X1-6g	.234	.905	.908
21	747	1.3750	.500	.545	.790	.741	1.250	1.625	.112-40UNC-3B	M31X1-6g	.204	.905	.904
23	748	1.5000	.500	.545	.790	.741	1.375	1.750	.138-32UNC-3B	M34X1-6g	.204	.905	.904
25	749	1.6250	.500	.545	.790	.741	1.500	1.875	.138-32UNC-3B	M37X1-6g	.204	.905	.904

All dimensions for reference only.
Consult Amphenol for more information on ordering connectors with clinch nuts.
Most common options are shown; other options are available.

☐ Designates true position dimensioning
† Red band indicates fully mated
†† Blue band indicates rear release contact retention system

Box Mounting Receptacle

Series III TV



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	77X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **771-779**, designates size 9-25 shell size.
Example: **771**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

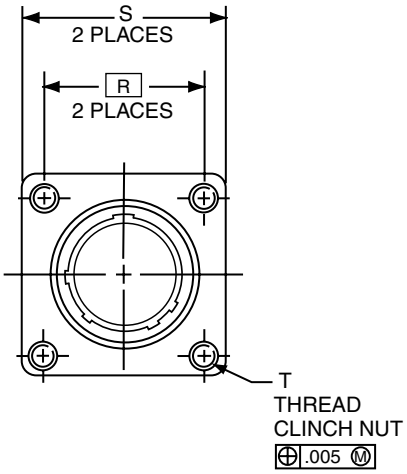
Shell Size	Coded Shell Size	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max. (TV)	L1 Max. (CTV)	M +.000 –.005 (TV)	M1 +.000 –.005 (CTV)	R1	R2	S Max.	T +.008 –.006	AA Max. Panel Thickness	LL +.006 –.000 (TV)	LL1 ±.005 (CTV)	TT ±.008
9	771	.6250	.205	.250	.820	.773	.719	.594	.948	.128	.234	.905	.908	.216
11	772	.7500	.205	.250	.820	.773	.812	.719	1.043	.128	.234	.905	.908	.194
13	773	.8750	.205	.250	.820	.773	.906	.812	1.137	.128	.234	.905	.908	.194
15	774	1.0000	.205	.250	.820	.773	.969	.906	1.232	.128	.234	.905	.908	.173
17	775	1.1875	.205	.250	.820	.773	1.062	.969	1.323	.128	.234	.905	.908	.194
19	776	1.2500	.205	.250	.820	.773	1.156	1.062	1.449	.128	.234	.905	.908	.194
21	777	1.3750	.235	.280	.790	.741	1.250	1.156	1.575	.128	.204	.905	.904	.194
23	778	1.5000	.235	.280	.790	.741	1.375	1.250	1.701	.154	.204	.905	.904	.242
25	779	1.6250	.235	.280	.790	.741	1.500	1.375	1.823	.154	.204	.905	.904	.242

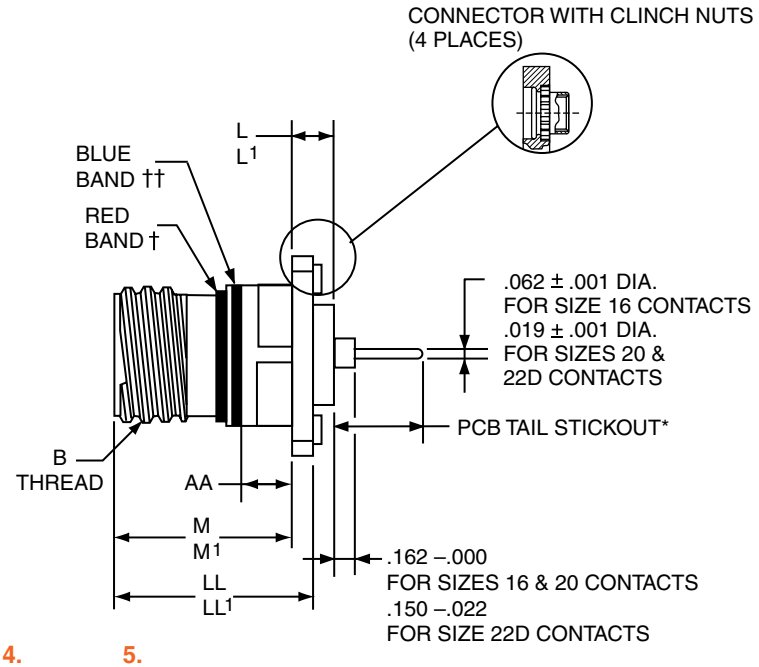
All dimensions for reference only.
Most common options are shown; other options are available.

☐ Designates true position dimensioning
† Red band indicates fully mated
†† Blue band indicates rear release contact retention system

Box Mounting Receptacle (With Clinch Nuts)

Series III TV





PART # See chart below	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
	88/91	628	75X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

628	Base Number

3. Select a Coded Shell Size:

See chart below **751-759**, designates size 9-25 shell size.
Example: **751**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

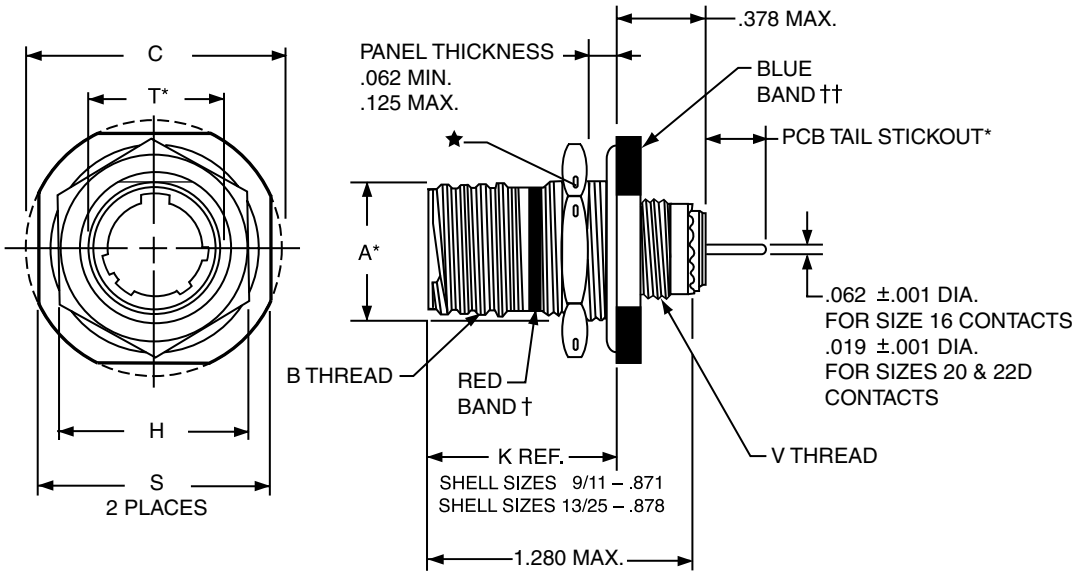
P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

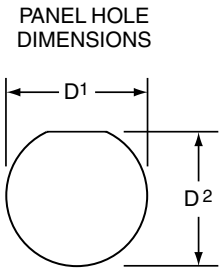
Shell Size	Coded Shell Size	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max. (TV)	L1 Max. (CTV)	M +.000 –.005 (TV)	M1 +.000 –.005 (CTV)	R	S Max.	T Thread	AA Max. Panel Thickness	LL +.006 –.000 (TV)	LL1 +.006 –.000 (CTV)
9	751	.6250	.205	.250	.820	.773	.719	1.031	.112-40UNC-3B	.234	.905	.908
11	752	.7500	.205	.250	.820	.773	.812	1.125	.112-40UNC-3B	.234	.905	.908
13	753	.8750	.205	.250	.820	.773	.906	1.172	.112-40UNC-3B	.234	.905	.908
15	754	1.0000	.205	.250	.820	.773	.969	1.281	.112-40UNC-3B	.234	.905	.908
17	755	1.1875	.205	.250	.820	.773	1.062	1.375	.112-40UNC-3B	.234	.905	.908
19	756	1.2500	.205	.250	.820	.773	1.156	1.469	.112-40UNC-3B	.234	.905	.908
21	757	1.3750	.235	.280	.790	.741	1.250	1.562	.112-40UNC-3B	.204	.905	.904
23	758	1.5000	.235	.280	.790	.741	1.375	1.750	.112-40UNC-3B	.204	.905	.904
25	759	1.6250	.235	.280	.790	.741	1.500	1.875	.112-40UNC-3B	.204	.905	.904

All dimensions for reference only.
Most common options are shown; other options are available.

☐ Designates true position dimensioning
† Red band indicates fully mated
†† Blue band indicates rear release contact retention system

Jam Nut Receptacle





PART # See chart below	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
	88/91	569	78X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **781-789**, designates size 9-25 shell size.
Example: **781**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

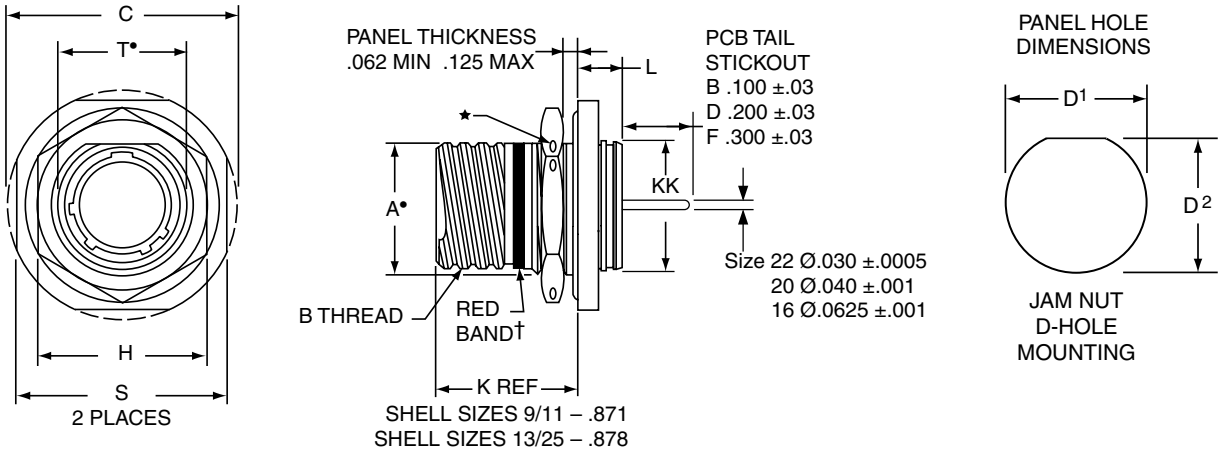
P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

Shell Size	Coded Shell Size	A* +.000 –.010	B Thread Class 2A (Plated) 0.1P-0.3L-TS	C Max.	D1 +.010 –.000	D2 +.010 –.000	H Hex +.017 –.016	S ±.010	T +.010 –.000	V Thread Metric
9	781	.669	.6250	1.199	.700	.670	.875	1.062	.697	M12X1-6g
11	782	.769	.7500	1.386	.825	.770	1.000	1.250	.822	M15X1-6g
13	783	.955	.8750	1.511	1.010	.955	1.188	1.375	1.007	M18X1-6g
15	784	1.084	1.0000	1.636	1.135	1.085	1.312	1.500	1.134	M22X1-6g
17	785	1.208	1.1875	1.761	1.260	1.210	1.438	1.625	1.259	M25X1-6g
19	786	1.333	1.2500	1.949	1.385	1.335	1.562	1.812	1.384	M28X1-6g
21	787	1.459	1.3750	2.073	1.510	1.460	1.688	1.938	1.507	M31X1-6g
23	788	1.575	1.5000	2.199	1.635	1.585	1.812	2.062	1.634	M34X1-6g
25	789	1.709	1.6250	2.323	1.760	1.710	2.000	2.188	1.759	M37X1-6g

All dimensions for reference only.
Most common options are shown; other options are available.

† Red band indicates fully mated
†† Blue band indicates rear release contact retention system
★.059 dia. min. 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.
*"D" shaped mounting hole dimensions

Jam Nut Receptacle



	1.	2.	3.	4.	5.	6.
PART # See chart below	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions	Shell Finish	Tail Length
	10-626	47X	-35	P	7	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **471-479**, designates size 9-25 shell size.

3. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell Size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

6. Select a Tail Length:

B	100 ±.03
D	.200 ±.03
F	.300 ±.03

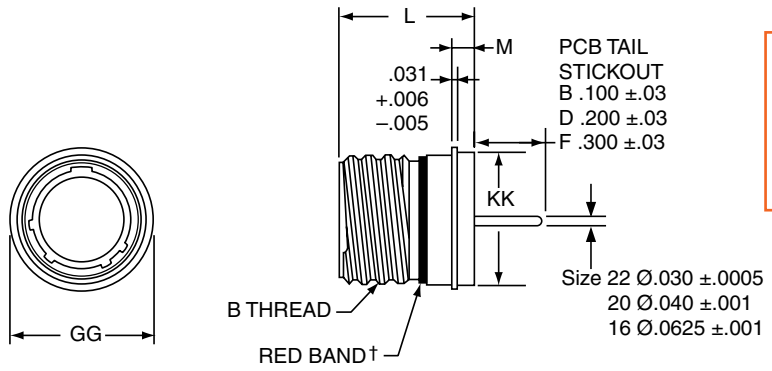
† Red band indicates fully mated
★.059 dia. min. (1.5 dia. min.) 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.

Shell Size	Part Number	A• +.000 –.010	B Thread Class 2A 0.1P-0.3L-TS (Plated)	C Max	D1 +.010 –.000	D1 +.000 –.010	H Hex +.017 –.016	L Max	S ±.010	T• +.010 –.000	KK +.011 –.000
9	**10-626**471-XXX	.669	.6250	1.199	.700	.670	.875	.357	1.062	.697	.642
11	472-XXX	.769	.7500	1.386	.825	.770	1.000	.357	1.250	.822	.766
13	473-XXX	.955	.8750	1.511	1.010	.955	1.188	.357	1.375	1.007	.892
15	474-XXX	1.084	1.0000	1.636	1.135	1.085	1.312	.357	1.500	1.134	1.018
17	475-XXX	1.208	1.1875	1.761	1.260	1.210	1.438	.357	1.625	1.259	1.142
19	476-XXX	1.333	1.2500	1.949	1.385	1.335	1.562	.381	1.182	1.384	1.268
21	477-XXX	1.459	1.3750	2.073	1.510	1.460	1.688	.381	1.938	1.507	1.392
23	478-XXX	1.575	1.5000	2.199	1.635	1.585	1.812	.381	2.062	1.634	1.518
25	479-XXX	1.709	1.6250	2.323	1.760	1.710	2.000	.381	2.188	1.759	1.642

All dimensions for reference only.

Amphenol Aerospace

Solder Mounting Receptacle



PART #
See chart below

1. Base Number	2. Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	48 *1*	*-35*	*P*	*1*	*B*

Follow HOW TO ORDER instructions below.

† Red band indicates fully mated

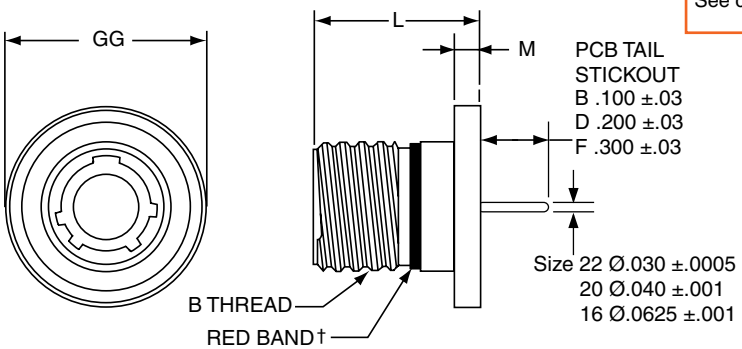
Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 –.005	M +.006 –.005	GG Dia. +.011 –.010	KK Dia +.011 –.005
9	**10-626**481-XXX	.6250	.806	.125	.750	.672
11	482-XXX	.7500	.806	.125	.844	.781
13	483-XXX	.8750	.806	.125	.969	.906
15	484-XXX	1.0000	.806	.125	1.094	1.031
17	485-XXX	1.1875	.806	.125	1.218	1.156
19	486-XXX	1.2500	.806	.125	1.312	1.250
21	487-XXX	1.3750	.806	.125	1.438	1.375
23	488-XXX	1.5000	.838	.156	1.563	1.500
25	489-XXX	1.6250	.838	.156	1.688	1.625

38999, Series III Hermetic, Stainless Steel - PCB Contacts

TVSHIY Weld Mounting Receptacle

PART #
See chart below

1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	49 *1*	*-35*	*P*	*1*	*B*



† Red band indicates fully mated

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 –.000	M +.006 –.005	GG Dia. +.011 –.010
9	**10-626**491-XXX	.6250	.806	.125	.973
11	492-XXX	.7500	.806	.125	1.095
13	493-XXX	.8750	.806	.125	1.221
15	494-XXX	1.0000	.806	.125	1.347
17	495-XXX	1.1875	.806	.125	1.434
19	496-XXX	1.2500	.806	.125	1.579
21	497-XXX	1.3750	.806	.125	1.721
23	498-XXX	1.5000	.838	.156	1.886
25	499-XXX	1.6250	.838	.156	1.973

* Not available for weld mount

All dimensions for reference only.

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below 491-499, designates size 9-25 shell size.

3. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell Size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

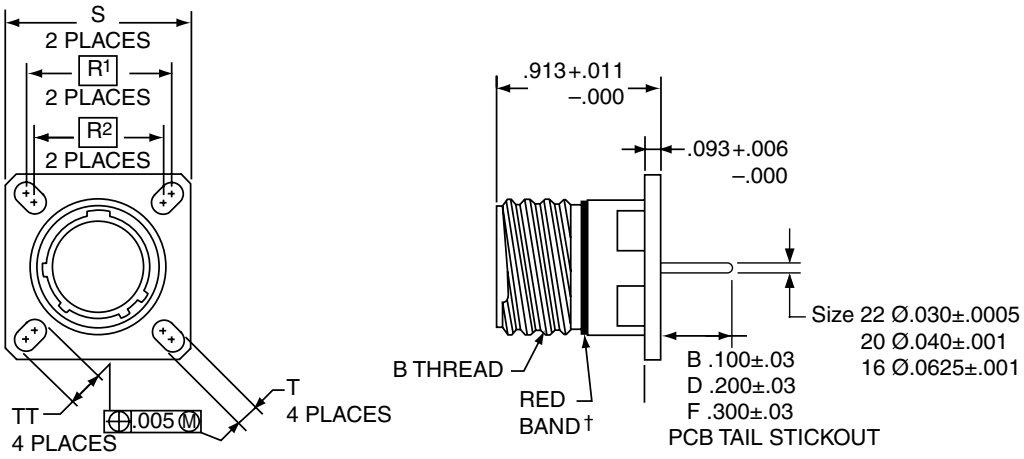
5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	*Hermetic seal, Stainless Steel w/Nickel Plate
3	*Carbon Steel w/reflowed tin plate

6. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

Box Mounting Receptacle



PART #	1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
See chart below	10-626	501	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **501-509**, designates size 9-25 shell size.
Example: **501** = Size 9 Shell

3. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell Size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

6. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

Shell Size	Part Number	B Thread 0.1P-0.3L-TS (Plated)	R1	R2	S ±.010	T ±.008	TT ±.008
9	10-626**501**-XXX	.6250	.719	.594	.938	.128	.216
11	**502**-XXX	.7500	.812	.719	1.031	.128	.194
13	**503**-XXX	.8750	.906	.812	1.125	.128	.194
15	**504**-XXX	1.0000	.969	.906	1.219	.128	.173
17	**505**-XXX	1.1875	1.062	.969	1.312	.128	.194
19	**506**-XXX	1.2500	1.156	1.062	1.438	.128	.194
21	**507**-XXX	1.3750	1.250	1.156	1.562	.128	.194
23	**508**-XXX	1.5000	1.375	1.250	1.688	.154	.242
25	**509**-XXX	1.6250	1.500	1.375	1.812	.154	.242

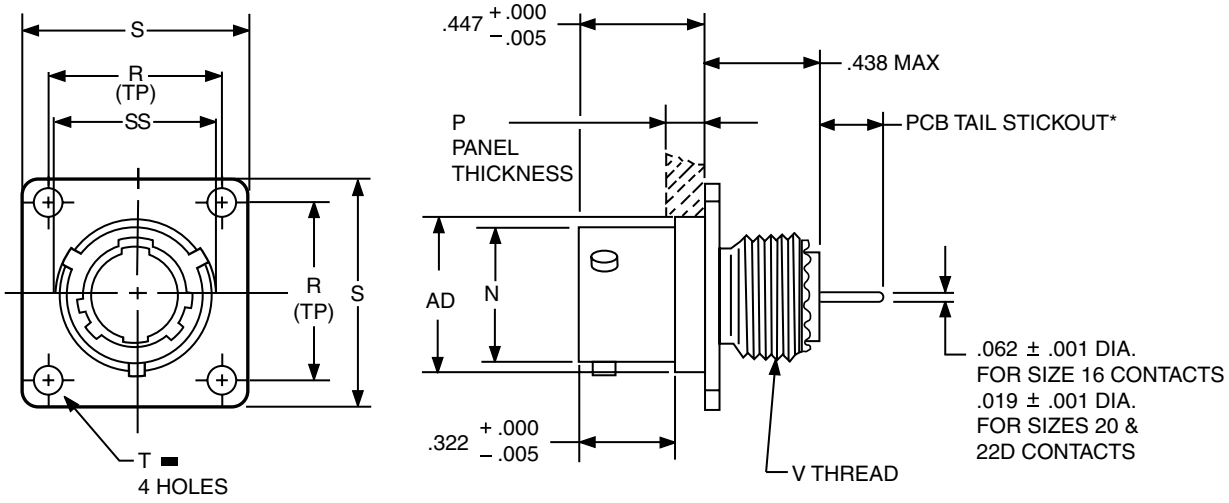
All dimensions for reference. ☐ Designates true position dimensioning

† Red band indicates fully mated

NOTE: Consult Amphenol Aerospace for availability of non-glass-sealed versions with printed circuit tail contacts.

Wall Mounting Receptacle

Series II JT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	73X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **731-739**, designates size 9-25 shell size.
Example: **731**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

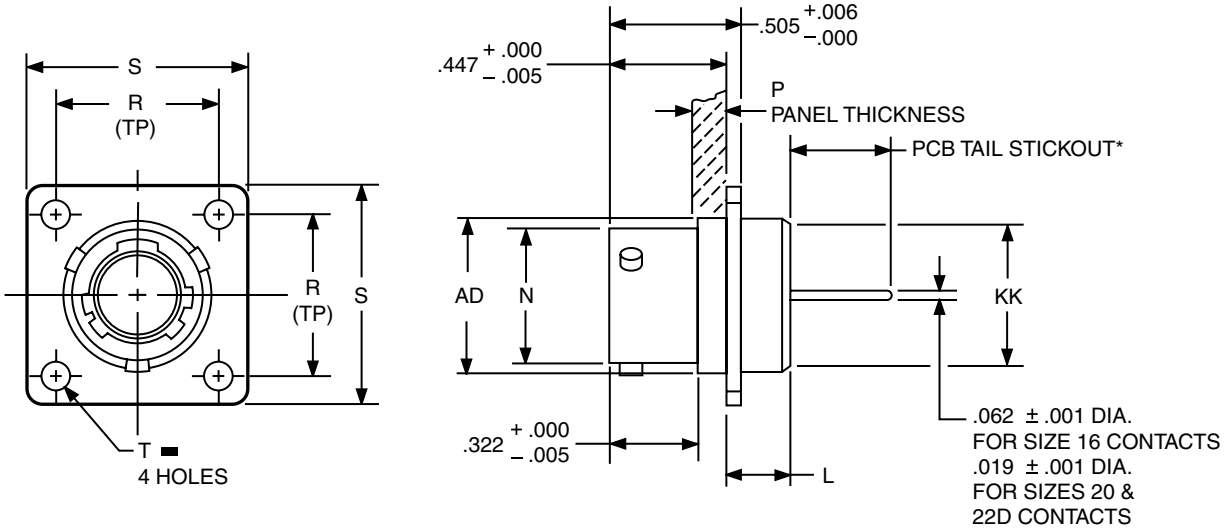
▬ ⊕ .005 DIA Ⓜ

Shell Size	Coded Shell Size	N +.001 −.005	P Max. Panel Thickness	R (TP)	S ±.016	T Dia. ±.005	V Thread Class 2A (Plated)	AD Dia. ±.005	SS Dia. +.000 −.016
8	731	.473	.142	.594	.812	.120	.4375-28 UNEF	.516	.563
10	732	.590	.142	.719	.938	.120	.5625-24 UNEF	.633	.680
12	733	.750	.142	.812	1.031	.120	.6875-24 UNEF	.802	.859
14	734	.875	.142	.906	1.125	.120	.8125-20 UNEF	.927	.984
16	735	1.000	.142	.969	1.219	.120	.9375-20 UNEF	1.052	1.108
18	736	1.125	.142	1.062	1.312	.120	1.0625-18 UNEF	1.177	1.233
20	737	1.250	.142	1.156	1.438	.120	1.1875-18 UNEF	1.302	1.358
22	738	1.375	.142	1.250	1.562	.120	1.3125-18 UNEF	1.427	1.483
24	739	1.500	.142	1.375	1.688	.147	1.4375-18 UNEF	1.552	1.610

All dimensions for reference only. Most common options are shown; other options are available.

Box Mounting Receptacle (Back Panel Mounting)

Series II JT



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	74X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **741-749**, designates size 9-25 shell size.
Example: **741**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

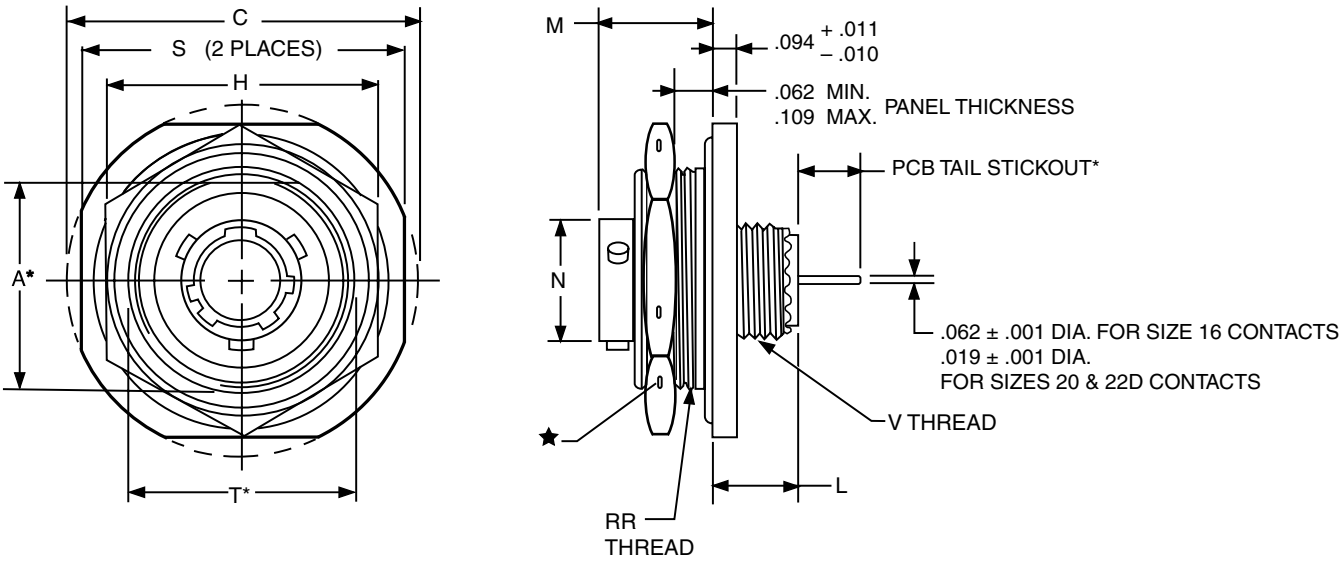
▬ ⊕ .005 DIA Ⓜ

Shell Size	Coded Shell Size	L Max.	N +.001 –.005	P Max. Panel Thickness	R (TP)	S ±.016	T Dia. ±.005	AD Dia. ±.005	KK Dia. Max.
8	741	.225	.473	.147	.594	.812	.120	.516	.531
10	742	.225	.590	.152	.719	.938	.120	.633	.656
12	743	.225	.750	.152	.812	1.031	.120	.802	.828
14	744	.225	.875	.152	.906	1.125	.120	.927	.953
16	745	.225	1.000	.152	.969	1.219	.120	1.052	1.078
18	746	.225	1.125	.152	1.062	1.312	.120	1.177	1.203
20	747	.225	1.250	.179	1.156	1.438	.120	1.302	1.328
22	748	.225	1.375	.179	1.250	1.562	.120	1.427	1.453
24	749	.225	1.500	.169	1.375	1.688	.147	1.552	1.578

All dimensions for reference only.
Most common options are shown; other options are available

Jam Nut Receptacle

Series II JT



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	75X	- 35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **751-759**, designates size 9-25 shell size.
Example: **751**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

Shell Size	Coded Shell Size	A* +.000 –.010	C Max.	H Hex +.017 –.016	L Max.	M ±.005	N +.001 –.005	S ±.016	T* +.010 –.000	V Thread Class 2A (Plated)	RR Thread Class 2A (Plated)
8	751	.830	1.390	1.062	.453	.438	.473	1.250	.884	.4375-28 UNEF	.8750-20 UNEF
10	752	.955	1.515	1.188	.453	.438	.590	1.375	1.007	.5625-24 UNEF	1.0000-20 UNEF
12	753	1.084	1.640	1.312	.453	.438	.750	1.500	1.134	.6875-24 UNEF	1.1250-18 UNEF
14	754	1.208	1.765	1.438	.453	.438	.875	1.625	1.259	.8125-20 UNEF	1.2500-18 UNEF
16	755	1.333	1.953	1.562	.453	.438	1.000	1.781	1.384	.9375-20 UNEF	1.3750-18 UNEF
18	756	1.459	2.031	1.688	.453	.438	1.125	1.890	1.507	1.0625-18 UNEF	1.5000-18 UNEF
20	757	1.576	2.156	1.812	.422	.464	1.250	2.016	1.634	1.1875-18 UNEF	1.6250-18 UNEF
22	758	1.701	2.280	2.000	.422	.464	1.375	2.140	1.759	1.3125-18 UNEF	1.7500-18 UNS
24	759	1.826	2.405	2.125	.422	.464	1.500	2.265	1.884	1.4375-18 UNEF	1.8750-16 UN

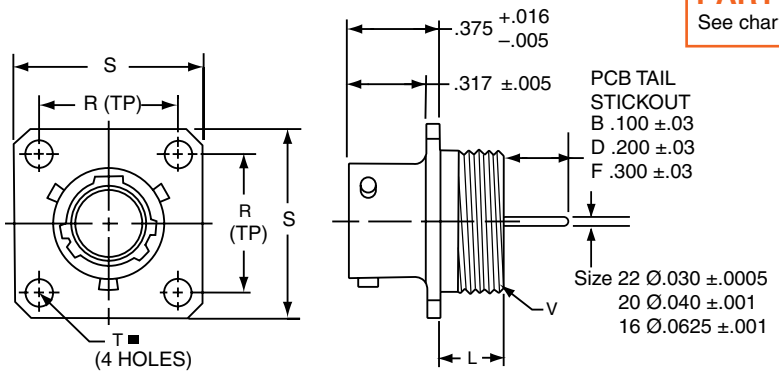
All dimensions for reference only.
Most common options are shown; other options are available

★ .059 dia. min. 3 lockwire holes.
Formed lockwire hole design (6 holes) is optional.
* "D" shaped mounting hole dimensions

Series II JT

Wall Mounting Receptacle

PART #	1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
See chart below	10-626	43*1*	*-35*	*P*	*1*	*B*



■ ⊕ .005 DIA Ⓜ

Shell Size	Part Number	L Max.	N +.001 –.005	R (TP)	S ±.016	T ±.005	V Thread Class 2A
8	10-626**431**-XXX	.234	.473	.594	.812	.120	.5625-24UNEF
10	**432**-XXX	.234	.590	.719	.938	.120	.6875-24UNEF
12	**433**-XXX	.234	.750	.812	1.031	.120	.8125-20UNEF
14	**434**-XXX	.234	.875	.906	1.125	.120	.9375-20UNEF
16	**435**-XXX	.234	1.000	.969	1.219	.120	1.0625-18UNEF
18	**436**-XXX	.234	1.125	1.062	1.312	.120	1.1875-18UNEF
20	**437**-XXX	.234	1.250	1.156	1.438	.120	1.3125-18UNEF
22	**438**-XXX	.234	1.375	1.250	1.562	.120	1.4375-18UNEF
24	**439**-XXX	.313	1.500	1.375	1.688	.147	1.5625-18UNEF

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **431-439**, designates size 9-25 shell size.

3. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell Size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

6. Select a Tail Length:

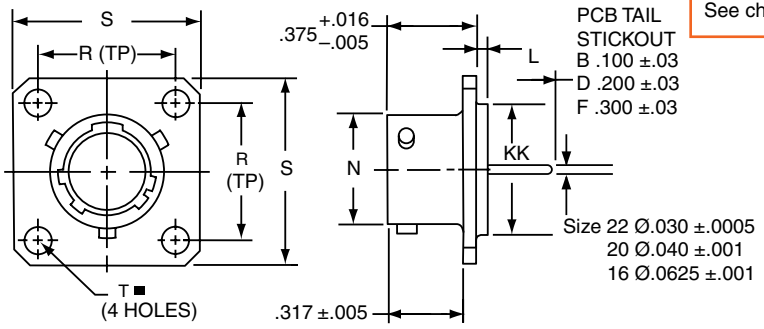
B	.100±.03
D	.200±.03
F	.300±.03

38999, Series II Hermetic – PCB Contacts

JT02 Box Mounting Receptacle

PART #	1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
See chart below	10-626	46*1*	*-35*	*P*	*1*	*B*

Follow HOW TO ORDER instructions above.



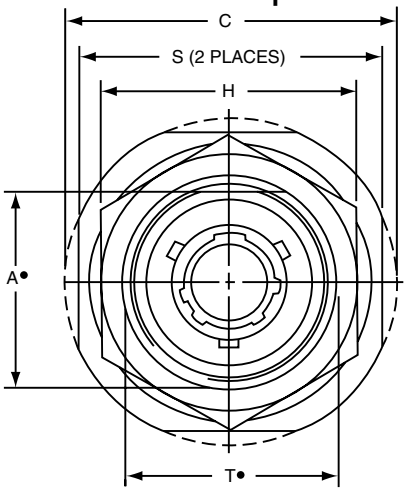
■ ⊕ .005 DIA Ⓜ

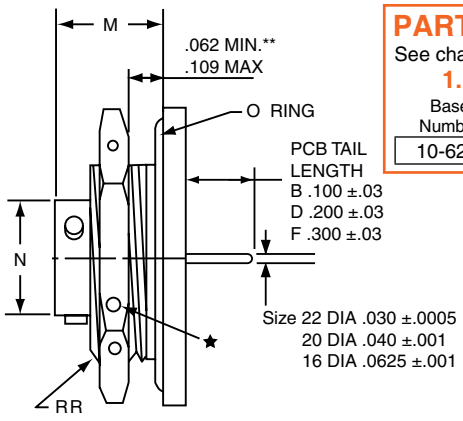
Shell Size	Part Number	L +.006 –.015	N +.001 –.005	R (TP)	S ±.016	T ±.005	KK +.001 –.005
8	**10-626461**-XXX	.051	.473	.594	.812	.120	.562
10	**462**-XXX	.051	.590	.719	.938	.120	.672
12	**463**-XXX	.051	.750	.812	1.031	.120	.781
14	**464**-XXX	.051	.875	.906	1.125	.120	.906
16	**465**-XXX	.051	1.000	.969	1.219	.120	1.031
18	**466**-XXX	.051	1.125	1.062	1.312	.120	1.156
20	**467**-XXX	.051	1.250	1.156	1.438	.120	1.250
22	**468**-XXX	.080	1.375	1.250	1.562	.120	1.375
24	469-XXX	.080	1.500	1.375	1.688	.147	1.500

All dimensions for reference only.

Amphenol Aerospace

Jam Nut Receptacle





PART #
See chart below

1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	44*1*	*-35*	*P*	*1*	*B*

Follow HOW TO ORDER instructions below.

Shell Size	Part Number	A• +.000 –.010	C Max.	H +.017 –.016	M ±.005	N +.001 –.005	S ±.016	T• +.010 –.000	RR Thread Class 2A
8	**10-626441**-XXX	.830	1.390	1.062	.438	.473	1.250	.884	.8750-20UNEF
10	**442**-XXX	.955	1.515	1.188	.438	.590	1.375	1.007	1.0000-20UNEF
12	**443**-XXX	1.084	1.640	1.312	.438	.750	1.500	1.134	1.1250-18UNEF
14	444-XXX	1.208	1.765	1.438	.438	.875	1.625	1.259	1.2500-18UNEF
16	**445**-XXX	1.333	1.953	1.562	.438	1.000	1.781	1.384	1.3750-18UNEF
18	**446**-XXX	1.459	2.031	1.688	.438	1.125	1.890	1.507	1.5000-18UNEF
20	**447**-XXX	1.576	2.156	1.812	.464	1.250	2.016	1.634	1.6250-18UNEF
22	448-XXX	1.701	2.280	2.000	.464	1.375	2.140	1.759	1.7500-18UNS
24	**449**-XXX	1.826	2.405	2.125	.464	1.500	2.265	1.884	1.8750-16UN

★ .059 Dia. Min. 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.

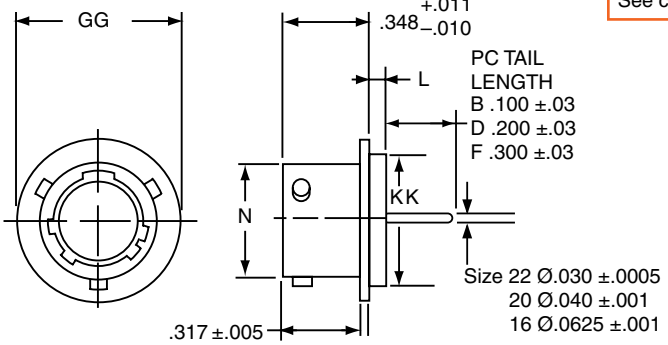
• "D" shaped mounting hole dimensions.

** Panel Thickness

All dimensions for reference only.

38999, Series II Hermetic – PCB Contacts

JTI Solder Mounting Receptacle



PART #
See chart below

1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	45*1*	*-35*	*P*	*1*	*B*

Shell Size	Part Number	L +.011 –.010	N +.001 –.005	GG +.011 –.010	KK +.001 –.005
8	**10-626451**-XXX	.078	.473	.687	.562
10	**452**-XXX	.078	.590	.797	.672
12	453-XXX	.078	.750	.906	.781
14	**454**-XXX	.078	.875	1.031	.906
16	455-XXX	.078	1.000	1.156	1.031
18	**456**-XXX	.078	1.125	1.281	1.156
20	**457**-XXX	.078	1.250	1.375	1.250
22	458-XXX	.107	1.375	1.500	1.375
24	459-XXX	.107	1.500	1.625	1.500

All dimensions for reference only. Weld mounting hermetic receptacle also available. Consult Amphenol Aerospace for availability and dimensions.

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **451-459**, designates size 9-25 shell size.

3. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell Size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

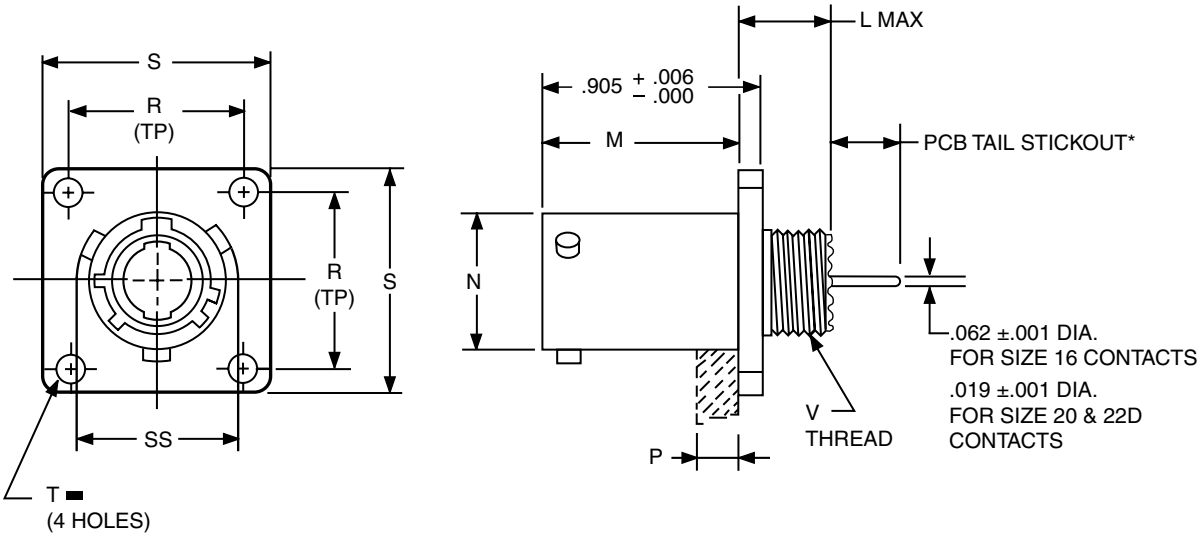
1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

6. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

Wall Mounting Receptacle (Back Panel Mounting)

Series I LJT



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	70X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **701-709**, designates size 9-25 shell size.
Example: **701**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

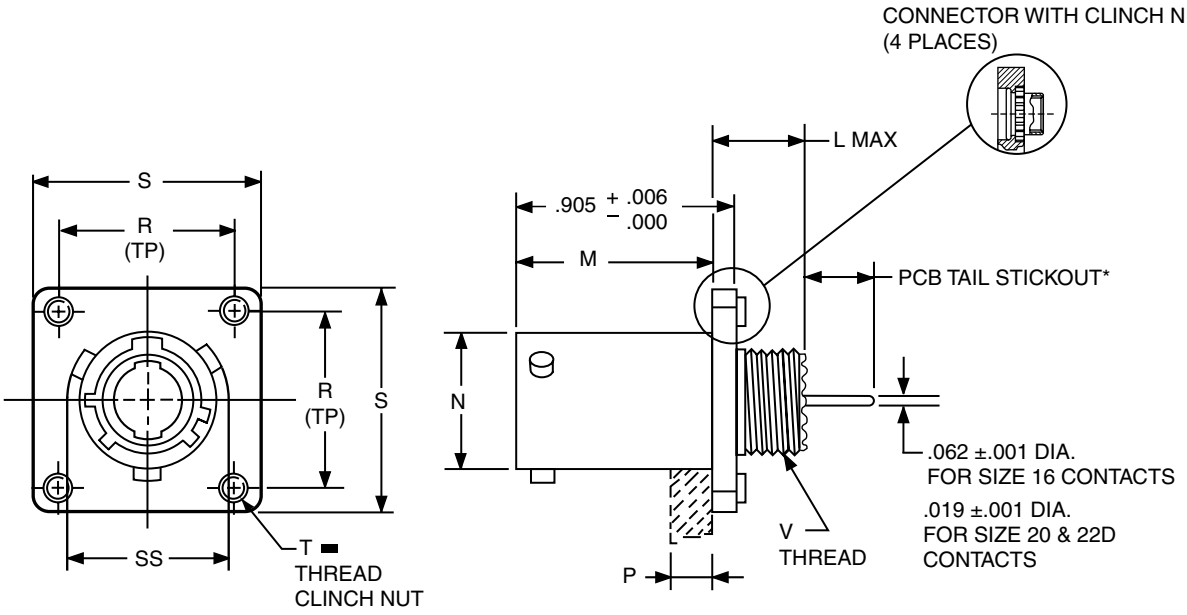
▬ ⊕ .005 DIA Ⓜ

Shell Size	Coded Shell Size	L Max.	M +.000 –.005	N Dia.	P Max. Panel Thickness	R (TP)	S +.011 –.010	T Dia. ±.005	V Thread Class 2A (Plated)	SS Dia. +.000 –.016
9	701	.453	.820	.572	.234	.719	.938	.128	.4375-28 UNEF	.662
11	702	.453	.820	.700	.234	.812	1.031	.128	.5625-24 UNEF	.810
13	703	.453	.820	.850	.234	.906	1.125	.128	.6875-24 UNEF	.960
15	704	.453	.820	.975	.234	.969	1.219	.128	.8125-20 UNEF	1.085
17	705	.453	.820	1.100	.234	1.062	1.312	.128	.9375-20 UNEF	1.210
19	706	.453	.820	1.207	.234	1.156	1.438	.128	1.0625-18 UNEF	1.317
21	707	.484	.790	1.332	.204	1.250	1.562	.128	1.1875-18 UNEF	1.442
23	708	.484	.790	1.457	.204	1.375	1.688	.147	1.3125-18 UNEF	1.567
25	709	.484	.790	1.582	.193	1.500	1.812	.147	1.4375-18 UNEF	1.692

All dimensions for reference only.
Most common options are shown; other options are available.

Wall Mounting Receptacle (Back Panel Mounting) (With Clinch Nuts)

Series I LJT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	70X	- 35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

628	Base Number

3. Select a Coded Shell Size:

See chart below **701-709**, designates size 9-25 shell size.
Example: **701**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

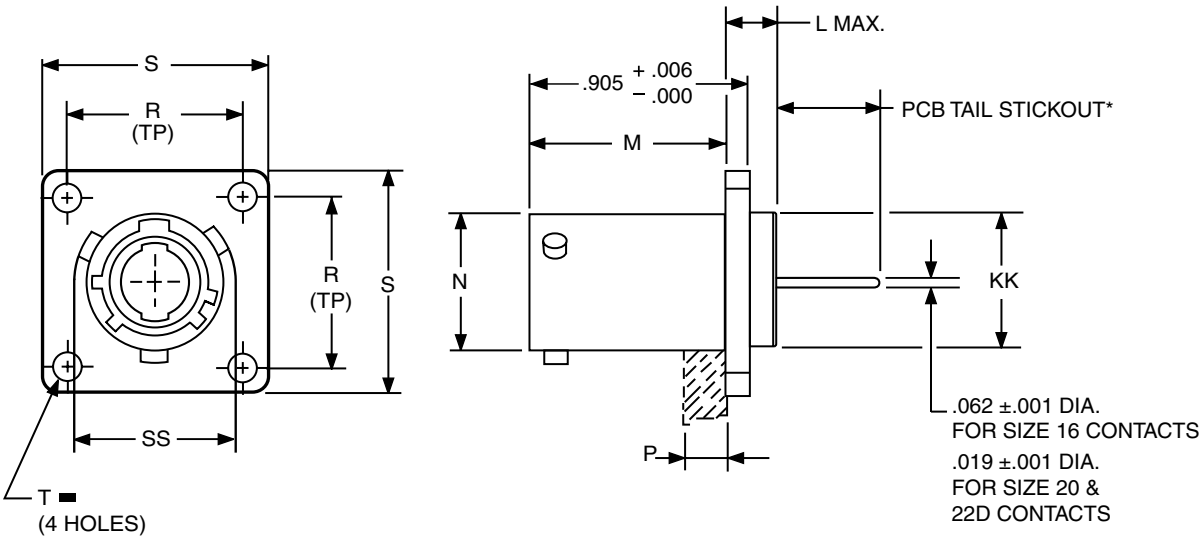
▬ ⊕ .005 DIA Ⓜ

Shell Size	Coded Shell Size	L Max.	M +.000 −.005	N Dia.	P Max. Panel Thickness	R (TP)	S +.011 −.010	T Thread	V Thread Class 2A (Plated)	SS Dia. +.000 −.016
9	701	.453	.820	.572	.234	.719	.938	.112-40UNJC-3B	.4375-28 UNEF	.662
11	702	.453	.820	.700	.234	.812	1.031	.112-40UNJC-3B	.5625-24 UNEF	.810
13	703	.453	.820	.850	.234	.906	1.125	.112-40UNJC-3B	.6875-24 UNEF	.960
15	704	.453	.820	.975	.234	.969	1.219	.112-40UNJC-3B	.8125-20 UNEF	1.085
17	705	.453	.820	1.100	.234	1.062	1.312	.112-40UNJC-3B	.9375-20 UNEF	1.210
19	706	.453	.820	1.207	.234	1.156	1.438	.112-40UNJC-3B	1.0625-18 UNEF	1.317
21	707	.484	.790	1.332	.204	1.250	1.562	.112-40UNJC-3B	1.1875-18 UNEF	1.442
23	708	.484	.790	1.457	.204	1.375	1.688	.138-32UNJC-3B	1.3125-18 UNEF	1.567
25	709	.484	.790	1.582	.193	1.500	1.812	.138-32UNJC-3B	1.4375-18 UNEF	1.692

All dimensions for reference only.
*Consult Amphenol for more information on ordering connectors with clinch nuts. There is also a 3mm clinch nut available (part number 88/91-628401/409)
Most common options are shown; other options are available.

Box Mounting Receptacle (Back Panel Mounting)

Series I LJT



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	71X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **711-719**, designates size 9-25 shell size.
Example: **711**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

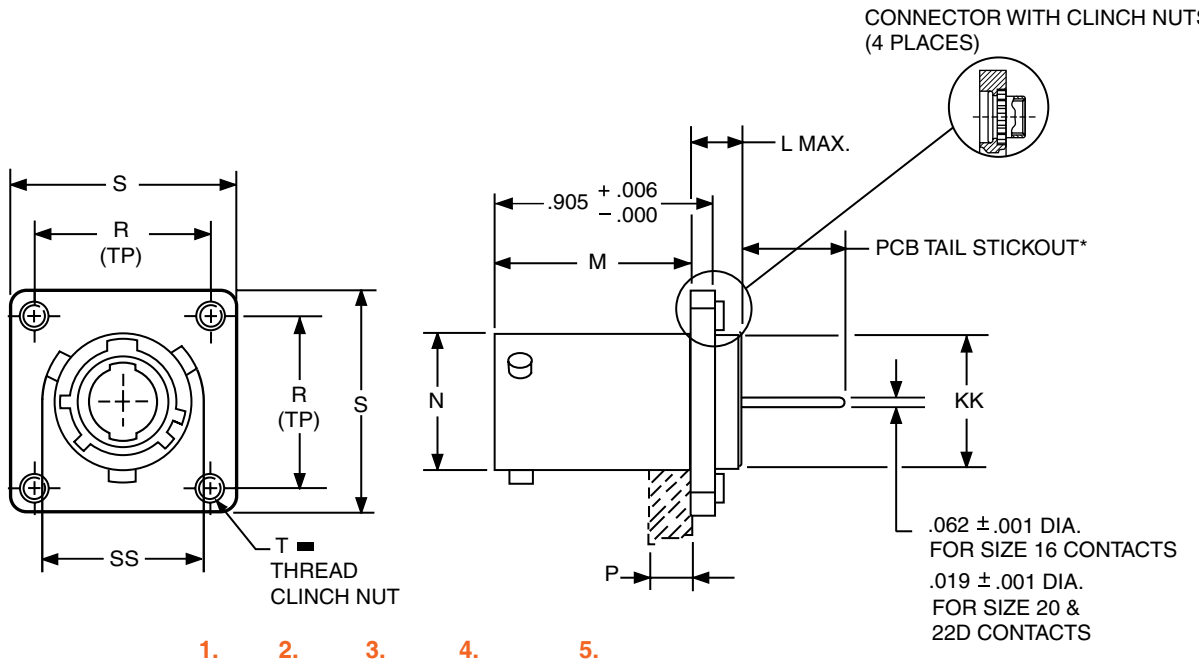
▬ Ⓢ .005 DIA Ⓜ

Shell Size	Coded Shell Size	L Max.	M +.000 −.005	N +.001 −.005	P Max. Panel Thickness	R (TP)	S +.011 −.010	T Dia. ±.005	KK Dia. +.006 −.005	SS Dia. +.000 −.016
9	711	.203	.820	.572	.234	.719	.938	.128	.433	.662
11	712	.203	.820	.700	.234	.812	1.031	.128	.557	.810
13	713	.203	.820	.850	.234	.906	1.125	.128	.676	.960
15	714	.203	.820	.975	.234	.969	1.219	.128	.801	1.085
17	715	.203	.820	1.100	.234	1.062	1.312	.128	.926	1.210
19	716	.203	.820	1.207	.234	1.156	1.438	.128	1.032	1.317
21	717	.234	.790	1.332	.204	1.250	1.562	.128	1.157	1.442
23	718	.234	.790	1.457	.204	1.375	1.688	.147	1.282	1.567
25	719	.234	.790	1.582	.193	1.500	1.812	.147	1.407	1.692

All dimensions for reference only.
Most common options are shown; other options are available.

Box Mounting Receptacle (Back Panel Mounting) (With Clinch Nuts)

Series I LJT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	71X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

628	Base Number

3. Select a Coded Shell Size:

See chart below **711-719**, designates size 9-25 shell size.
Example: **711** = Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

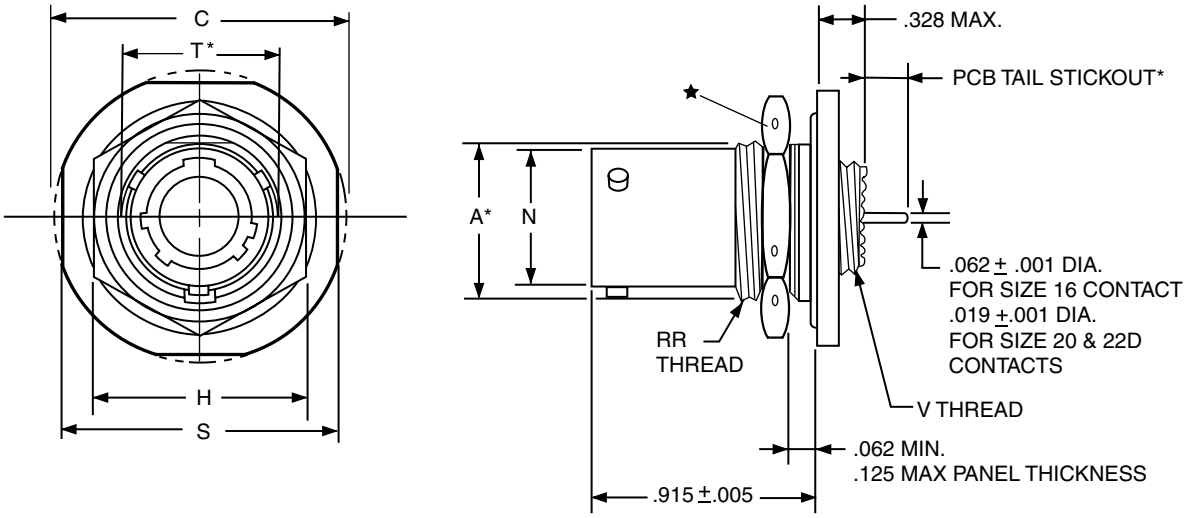
▬ ⊕ .005 DIA Ⓜ

Shell Size	Coded Shell	L Max.	M +.000 −.005	N +.001 −.005	P Max. Panel Thickness	R (TP)	S +.011 −.010	T Thread	KK Dia. +.006 −.005	SS Dia. +.000 −.016
9	711	.203	.820	.572	.234	.719	1.031	.112-40UNJC-3B	.433	.662
11	712	.203	.820	.700	.234	.812	1.125	.112-40UNJC-3B	.557	.810
13	713	.203	.820	.850	.234	.906	1.172	.112-40UNJC-3B	.676	.960
15	714	.203	.820	.975	.234	.969	1.281	.112-40UNJC-3B	.801	1.085
17	715	.203	.820	1.100	.234	1.062	1.375	.112-40UNJC-3B	.926	1.210
19	716	.203	.820	1.207	.234	1.156	1.469	.112-40UNJC-3B	1.032	1.317
21	717	.234	.790	1.332	.204	1.250	1.625	.112-40UNJC-3B	1.157	1.442
23	718	.234	.790	1.457	.204	1.375	1.750	.138-32UNJC-3B	1.282	1.567
25	719	.234	.790	1.582	.193	1.500	1.875	.138-32UNJC-3B	1.407	1.692

All dimensions for reference only.
*Consult Amphenol for more information on ordering connectors with clinch nuts. There is also a 3mm clinch nut available (part number 88/91-628410/419)
Most common options are shown; other options are available.

Jam Nut Receptacle

Series I LJT



PART # See chart below	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
	88/91	569	72X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

Consult Amphenol Aerospace for ordering of composite styles.

2. Base Number:

569	Base Number

3. Select a Coded Shell Size:

See chart below **721-729**, designates size 9-25 shell size.
Example: **721**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 146 and pin-out illustrations on pages 148-162. In the chart the first number represents the Shell size and the second number is the Insert Arrangement.

-35	Designates Insert Arrangement Number

5. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

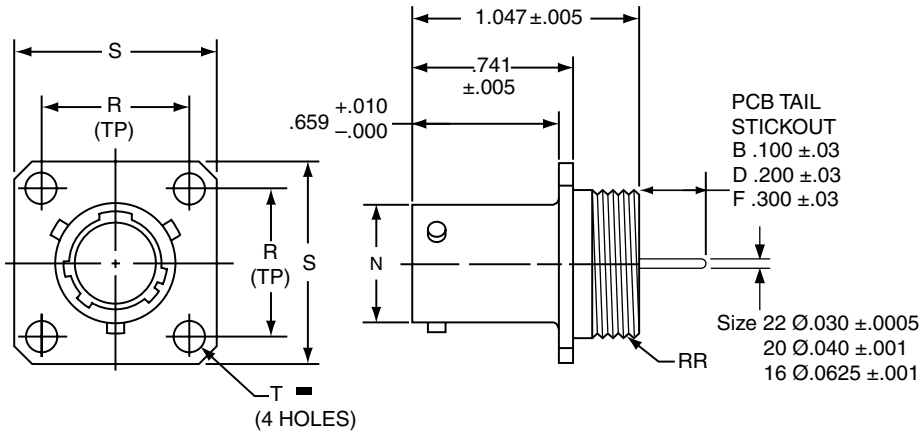
Shell Size	Coded Shell	A* +.000 –.010	C Max.	H Hex +.017 –.016	L Max.	N +.001 –.005	S ±.016	T* +.010 –.000	V Thread Class 2A (Plated)	RR Thread Class 2A (Plated)
9	721	.669	1.199	.875	.625	.572	1.062	.697	.4375-28 UNEF	.6875-24 UNEF
11	722	.769	1.386	1.000	.625	.700	1.250	.822	.5625-24 UNEF	.8125-20 UNEF
13	723	.955	1.511	1.188	.625	.850	1.375	1.007	.6875-24 UNEF	1.0000-20 UNEF
15	724	1.084	1.636	1.312	.625	.975	1.500	1.134	.8125-20 UNEF	1.1250-18 UNEF
17	725	1.208	1.761	1.438	.625	1.100	1.625	1.259	.9375-20 UNEF	1.2500-18 UNEF
19	726	1.333	1.949	1.562	.656	1.207	1.812	1.384	1.0625-18 UNEF	1.3750-18 UNEF
21	727	1.459	2.073	1.688	.750	1.332	1.938	1.507	1.1875-18 UNEF	1.5000-18 UNEF
23	728	1.580	2.199	1.812	.750	1.457	2.062	1.634	1.3125-18 UNEF	1.6250-18 UNEF
25	729	1.709	2.323	2.000	.750	1.582	2.188	1.759	1.4375-18 UNEF	1.7500-18 UNS

All dimensions for reference only.
Most common options are shown; other options are available.

★ .059 dia. min. 3 lockwire holes.
Formed lockwire hole design (6 holes) is optional.
* "D" shaped mounting hole dimensions

Amphenol Aerospace

Series I LJT



1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
PART # See chart below					
10-626	401	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **401-409**, designates size 9-25 shell size.

3. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

4. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

5. Select a Tail Length:

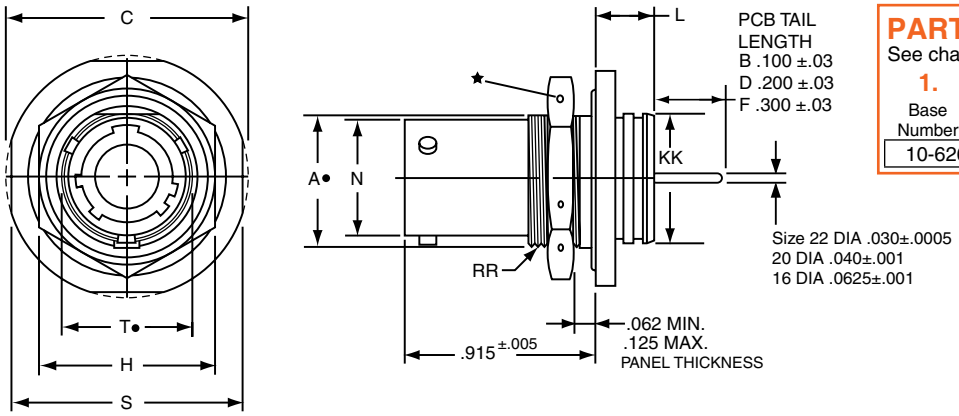
B	.100±.03
D	.200±.03
F	.300±.03

▬ Ⓣ .005 DIA Ⓜ

Shell Size	Part Number	N Dia. +.001 –.005	R TP)	S ±.016	T Dia. ±.005	RR Thread Class 2A
9	**10-626**401-XXX	.572	.719	.938	.128	.6875-24 UNEF
11	402-XXX	.700	.812	1.031	.128	.8125-20 UNEF
13	403-XXX	.850	.906	1.125	.128	.9375-20 UNEF
15	404-XXX	.975	.969	1.219	.128	1.0625-18 UNEF
17	405-XXX	1.100	1.062	1.312	.128	1.1875-18 UNEF
19	406-XXX	1.207	1.156	1.438	.128	1.3125-18 UNEF
21	407-XXX	1.332	1.250	1.562	.128	1.4375-18 UNEF
23	408-XXX	1.457	1.375	1.688	.147	1.5625-18 UNEF
25	409-XXX	1.582	1.500	1.812	.147	1.6875-18 UNEF

All dimensions for reference only.

Series I LJT



PART #
See chart below

1. Base Number	2. Coded Shell Size	3. Contact Type/Alt. Keying Positions	4. Shell Finish	5. Tail Length
10-626	41	P	1	B

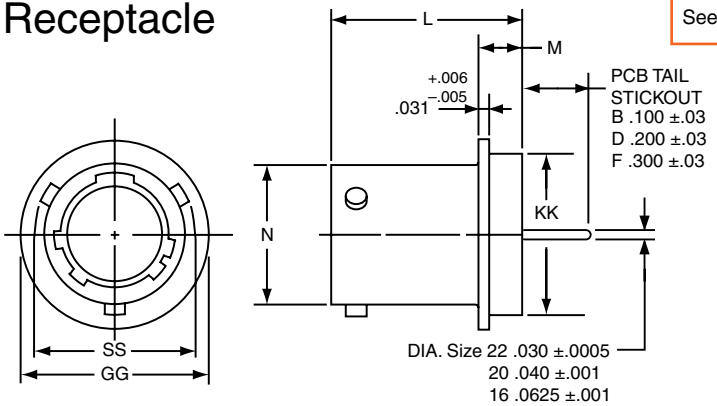
Follow HOW TO ORDER instructions below

Shell Size	Part Number	A• +.000 –.010	C Max.	H Hex +.017 –.016	L Max.	N +.000 –.005	S ±.016	T• +.010 –.000	KK +.011 –.000	RR Thread Class 2A (Plated)
9	**10-626**411-XXX	.669	1.199	.875	.297	.572	1.062	.697	.642	.6875-24 UNEF
11	**412**-XXX	.769	1.386	1.000	.297	.700	1.250	.822	.766	.8125-20 UNEF
13	**413**-XXX	.955	1.511	1.188	.297	.850	1.375	1.007	.892	1.0000-20 UNEF
15	**414**-XXX	1.084	1.636	1.312	.297	.975	1.500	1.134	1.018	1.1250-18 UNEF
17	**415**-XXX	1.208	1.761	1.438	.297	1.100	1.625	1.259	1.142	1.2500-18 UNEF
19	**416**-XXX	1.333	1.949	1.562	.328	1.207	1.812	1.384	1.268	1.3750-18 UNEF
21	**417**-XXX	1.459	2.073	1.688	.328	1.332	1.938	1.507	1.392	1.5000-18 UNEF
23	**418**-XXX	1.580	2.199	1.812	.328	1.457	2.062	1.634	1.518	1.6250-18 UNEF
25	419-XXX	1.709	2.328	2.000	.328	1.582	2.188	1.759	1.642	1.7500-18 UNS

All dimensions for reference only.

38999, Series I Hermetic – PCB Contacts

LJTI Solder Mounting Receptacle



PART #
See chart below

1. Base Number	2. Coded Shell Size	3. Contact Type/Alt. Keying Positions	4. Shell Finish	5. Tail Length
10-626	42	P	1	B

Shell Size	Part Number	N Dia. +.001 –.005	SS Dia. +.000 –.016	L +.011 –.000	M +.006 –.005	GG Dia. +.011 –.010	KK Dia. +.001 –.005
9	**10-626**421-XXX	.572	.662	.789	.125	.750	.672
11	**422**-XXX	.700	.810	.789	.125	.844	.781
13	**423**-XXX	.850	.960	.789	.125	.969	.906
15	**424**-XXX	.975	1.085	.789	.125	1.094	1.031
17	**425**-XXX	1.100	1.210	.789	.125	1.218	1.156
19	**426**-XXX	1.207	1.317	.789	.125	1.312	1.250
21	**427**-XXX	1.332	1.442	.789	.125	1.438	1.375
23	**428**-XXX	1.457	1.567	.821	.156	1.563	1.500
25	**429**-XXX	1.582	1.692	.821	.156	1.688	1.625

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below **421-429**, designates size 9-25 shell size.
Example: **421** = Size 9 Shell

3. Contact Type/Alternate Keying Positions:

Refer to page 147 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

4. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate
3	Carbon Steel w/reflowed tin plate

5. Select a Tail Length

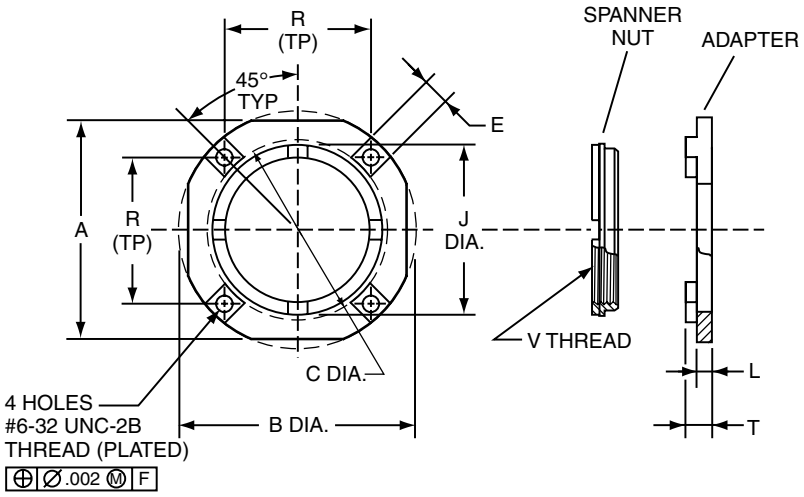
B	.100±.03
D	.200±.03
F	.300±.03

All dimensions for reference only.
Weld mounting hermetic receptacle also available.
Consult Amphenol for availability and dimensions.

Series III TV

Amphenol's stand-off adapter and spanner nut assembly allows any MIL-DTL-38999 jam nut receptacle to support PCB contacts and may eliminate the need for special stand-off shell design. Consult Amphenol for more information.

Tri-Start MIL-DTL-38999 Jam Nut Connector with Stand-off Adapter



FINISH DATA**	
Suffix Designation	**Description**
9	Olive drab cadmium plate, nickel base plate
G	Electroless nickel plate
None	Passivated Stainless Steel
8	Nickel Plated

** Other finishes available; consult Amphenol for further information.

HOW TO ORDER
Order by applicable 10-part number in table below.
Last digit designates finish - see finish table.

Shell Size	Part Number	A ± .003	B Dia. ± .003	C Dia. +.005 –.001	E ±.005	J Dia. +.005 –.000	L ±.003	R (TP)	T* ±.002	V Thread Metric Plated
9	10-658266-01( )	1.062	1.188	.750	.200	.625	.150	.688	.325	M12 X 1-6H
11	10-658266-02( )	1.250	1.375	.900	.200	.744	.150	.813	.325	M15 X 1-6H
13	10-658266-03( )	1.375	1.500	.975	.200	.862	.150	.860	.325	M18 X 1-6H
15	10-658266-04( )	1.500	1.625	1.125	.200	1.019	.150	.968	.325	M22 X 1-6H
17	10-658266-05( )	1.625	1.750	1.250	.200	1.137	.150	1.062	.325	M25 X 1-6H
19	10-658266-06( )	1.812	1.938	1.375	.200	1.255	.150	1.188	.325	M28 X 1-6H
21	10-658266-07( )	1.938	2.062	1.469	.200	1.373	.150	1.250	.325	M31 X 1-6H
23	10-658266-08( )	2.062	2.188	1.625	.200	1.492	.150	1.344	.325	M34 X 1-6H
25	10-658266-09( )	2.188	2.312	1.750	.200	1.610	.150	1.438	.325	M37 X 1-6H
9	10-658266-10( )	1.062	1.188	.750	.200	.625	.150	.688	.362	M12 X 1-6H
11	10-658266-11( )	1.250	1.375	.900	.200	.744	.150	.813	.362	M15 X 1-6H
13	10-658266-12( )	1.375	1.500	.975	.200	.862	.150	.860	.362	M18 X 1-6H
15	10-658266-13( )	1.500	1.625	1.125	.200	1.019	.150	.968	.362	M22 X 1-6H
17	10-658266-14( )	1.625	1.750	1.250	.200	1.137	.150	1.062	.362	M25 X 1-6H
19	10-658266-15( )	1.812	1.938	1.375	.200	1.255	.150	1.188	.362	M28 X 1-6H
21	10-658266-16( )	1.938	2.062	1.469	.200	1.373	.150	1.250	.362	M31 X 1-6H
23	10-658266-17( )	2.062	2.188	1.625	.200	1.492	.150	1.344	.362	M34 X 1-6H
25	10-658266-18( )	2.188	2.312	1.750	.200	1.610	.150	1.438	.362	M37 X 1-6H

All dimensions for reference only.
* For information on additional 'T' dimension lengths, consult Amphenol.
Consult Amphenol Aerospace for stainless steel availability & part numbers.