

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

Insert Availability and Identification Chart

38999

III
II
I
SJT
Access
Aquacon

Series	Series	Series	Military	MIL-DTL-27599 JT/LJT Solder	Crimp	Class H	Class Y	TV*	Service Rating	Total Contacts	■	23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)
8-2■				P					M	2						2						
8-3■				X	NA	P	P		M	3						3						
	9-3■			X					Grounded	1												1
		9-5★■																				
8-6				X	X	P	P		M	6				6								
	9-6			X	X	P	P		M	7				7								
	9-7■			X					M	9		9										
		9-9■							N	9												
	9-22■			X					I	2						2						
8-35					X	P	P		M	6			6									
	9-35	9-35	A35		X	P	P	P	M	4					4							
8-44					X	P	P		M	2						2						
	9-44				X				M	4						4						
		9-94■			◆				M	2							2					
8-97■				X					M	4				2		2						
8-98				S	X	P	P		I	3						3						
	9-98	9-98	A98	X	X	P	P	P	I	2							2					
	11-2★	11-2★	B2		X	P**			I	4						4						
10-4					3				I	5						5						
	11-4	11-4		X	2				I	6						6						
10-5				X	X	P	P		I	13				13								
	11-5	11-5	B5	X	X			P	I	19		19										
	11-6■			S					M	13												
10-13				X	X	P/S	P/S		N	13												
	11-13			X	X	P/S	P/S		M	19												
		11-19■							M	13			13									
10-35					X	P/S	P/S		M	4			4									
	11-35	11-35	B35		X	P/S	P/S	P	II	6						6						
		11-54■			X	◆			I	7						7						
10-98				X	X	P/S	P/S		I	3							3					
	11-98	11-98	B98	X	X	P/S	P/S	P	I	4						4						
10-99					X	P	P		I	7						7						
	11-99	11-99	B99		X	X		P	II	3							3					
12-3				X	X	◆	P	P	I	4							4					
	13-3■				P				I	8						8						
12-4				X	X	P	P		I	3							3					
	13-4★	13-4★	C4	X	X	P	P	P	I	4							4					
12-8				X	X	P	P		I	8						8						
	13-8	13-8	C8	X	X	P	P	P	I, Fiber Optic	4						2**	2					
		13-13■							M	22				22								
12-22				X	X	P/S	P/S		M	8							2					
	13-22				2				N	32		32										
		13-26■							M	22			22									
		13-32■							I	4						2	2					
12-35					X	P/S	P/S		I	10												
	13-35	13-35	C35		X	P/S	P/S	P	I	13		10					3					
		13-63■			◆				I	4												
12-98				X	X	P/S	P/S		I	10						10						
	13-98	13-98	C98	X	X	P/S	P/S	P	I	13												
		15-AT■			X				I	4							4					
14-4■					2				I	5							5					
	15-4■	15-4■			2	◆			II	5												
14-5				X	X	P	P															
	15-5★	15-5★	D5	X	X	P	P	P														

- X Completely tooled.
- + Majority of tooling is completed (contact Amphenol Aerospace for availability).
- ◆ Not tooled for 02-R.
- P Available with Pin contacts only
- S Available with Socket contacts only
- P/S Available with Pin contacts or Socket contacts
- ★ Ground plane proprietary option available. Arrg. 9-5 is exclusively ground plane type.
- Not Mil-Qualified.
- ◇ 21-75 is Mil-Qualified with twinax contacts only.
Note: MS connector 21-75 is supplied with size 8 twinax.
Commercial connector 21-75 is supplied with size 8 coax.

- HD designates High Density 38999 Series III insert patterns which use size 23 contacts only. Not rated over 175°C.
- * Hermetic inserts - solder termination standard. (Contact Amphenol Aerospace for optional PCB or eyelet termination).
- ** Two size 16 contacts dedicated to fiber optics. See the Fiber Optic section for more information.
- *** For use in MIL-STD-1760 applications (see pages 75 and 76).
For RG 180/U and RG 195/U cables only.
- † Size 8 Coax and Twinax are interchangeable.
- †† Not Tooled for RP or 02RE
- (2) Pin inserts only, not tooled for RP or 02RE (Consult Amphenol Aerospace for avail.)
- (5) MS Connector 21-79 has provision for two size 8 coax contacts. Coax contacts are not supplied unless specified by customer.

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

Insert Availability and Identification Chart

Series	Series	Series	Military	MIL-DTL-27599		Hermetics					Contact Size										
JT II	LJT I	TV III	III	JT/LJT Solder	Crimp	Class H	Class Y	TV*	Service Rating	Total Contacts	23 HD	22D	22M	22	20	16	12	12 (Coax)	8 (Coax)	8†† (Twinax)	4
14-15				X	X	P	P		I	15					14	1					
	15-15	15-15	D15	X	X	P/S	P/S	P	I												
14-18				X	X	P/S	P/S		I	18					18						
	15-18	15-18	D18	X	X	P/S	P/S	P													
14-19				X	X				I	19					19						
	15-19	15-19	D19		X	P	P	P													
14-35					X	P	P		M	37		37									
	15-35	15-35	D35		X	P/S	P/S	P													
14-37				X	X	P	P		M	37			37								
	15-37			X	X	P	P														
		15-55							N	55	55										
14-68					2	P	P		1	8						8					
	15-68			X	X																
14-97					X	P	P		I	12					8	4					
	15-97	15-97	D97	X	X	P	P	P													
	17-2	17-2	E2		X	♦			M	39		38								1	
		17-EA							M	19		10			3	2	4				
		17-EC							M	41		32			9						
16-6					X	P	P		I	6							6				
	17-6	17-6	E6		X	P	P	P													
16-8				X	X	P	P		II	8						8					
	17-8★	17-8★	E8	X	X	P/S	P/S	P													
16-13					2				I	13						13					
	17-13				2																
	17-22	17-22★			♦				Coax	4								2	2		
	17-25	17-25			2				M	24		22							2		
16-26				X	X	P/S	P/S		I	26					26						
	17-26	17-26	E26	X	X	P/S	P/S	P													
16-35				X	X	P	P		M	55		55									
	17-35	17-35	E35	X	X	P	P	P													
16-42					X				M	42				42							
	17-42				P																
		17-52			X	♦			M	2										2	
16-55				X	X	P/S	P/S		M	55			55								
	17-55			X	X	P/S	P/S														
		17-60			X				I/Coax	10		8							2		
		17-73							N	73	73										
16-99				X	X	P	P		I	23					21	2					
	17-99	17-99	E99	X	X	P	P														
		19-AD			X	♦			Inst.	17					16					1	
		19-FA							M	23		6			8	7	2				
18-11				X	X	P	P		II	11						11					
	19-11★	19-11★	F11	X	X	P	P	P													
	19-18	19-18	F18		2	2			M	18		14								4	
18-28				X	X				I	28					26	2					
	19-28	19-28	F28	X	P	X															
18-30				X	X				I	30					29	1					
	19-30			X	P																
		19-31			X				M	15		12					1		2		
18-32				X	X	P/S	P/S		I	32					32						
	19-32	19-32	F32	X	X	P/S	P/S	P													
18-35					X	P	P		M	66		66									
	19-35	19-35	F35		X	P	P	P													
18-53				X	X				M	53				53							
	19-53				P																
18-66				X	X	P	P		M	66			66								
	19-66				X	P	P														
	19-67			X	3	S	S		M	67			67								
18-68					2				I	18						18					
	19-68	19-68			3	S															
18-96					2				I	9							9				
		19-88							N	88	88										
20-1					X	P	P		M	79			79								
	21-1				X	P/S	P/S														

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III
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Insert Availability and Identification Chart

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Series	Series	Series	Military	MIL-DTL-27599 JT/LJT Solder	Crimp	Hermetics			Service Rating	Total	Contact Size												
						H	Y	TV*			23 HD	22D	22M	22	20	16	16 (Cx)	12 (Cx)	10 (Power)	8 (Power)	8 (Cx)	8†† (Twinax)	4
20-2					X				M	65				65									
	21-2■				X																		
20-11■					3				I	11							11						
	21-11★	21-11★	G11		X																		
20-16				X	X	P/S	P/S		II	16						16							
	21-16★	21-16★	G16	X	X	P	P	P															
	21-25■								I	25						25							
	21-27■			X					I	27						27							
		21-29■			X				I	27						19	4	4					
20-35					X				M	79		79											
	21-35	21-35	G35		X	P/S	P/S	P															
20-39				X	X	P	P	P	I	39						37	2						
	21-39	21-39	G39	X	X	P	P	P															
20-41				X	X	P	P	P	I	41						41							
	21-41	21-41	G41	X	X	P/S	P/S	P															
		21-48■							M	4									4				
	21-75★	21-75★◇	G75		2	X			N	M	4										4	(4)	
	21-79■	21-79■			2	X			II	19			17								2	(2)	
		21-121■							N	121	121												
22-1					X	P/S	P/S		M	100			100										
	23-1				X	P	P																
22-2				X	X	P	P		M	85				85									
	23-2			X	X	P	P																
	23-6★■	23-6★■		X	P				M	6												6	
22-14■					2	◆			I	14							14						
	23-14■	23-14■			2	◆																	
22-21				X	X	P	P		II	21						21							
	23-21★	23-21★	H21	X	X	P	P	P															
22-32				X	X	P	P		I	32						32							
	23-32■			X	P				I	34						34							
	23-34■			X																			
22-35					X	P/S	P/S		M	100		100											
	23-35	23-35	H35		X	P	P	P															
22-53■					P				I	53						53							
	23-53	23-53	H53	X	X	P/S	P/S	P															
		23-54■			X				M	53		40				9	4						
22-55				X	X	P	P		I	55						55							
	23-55	23-55	H55		X			P															
		23-63■			S				M	57		49					4	4					
	23-97■			X					II	16						16							
	23-99■			X					II	11						11							
		23-151■							N	151	151												
24-1					X	P	P		M	128			128										
	25-1				X	P	P																
24-2					X				M	100				100									
	25-2				X																		
24-4					X	P	P		I	56					48	8							
	25-4	25-4	J4		X			P															
	25-7■	25-7	J7		X				M	Twx	99		97								2		
		25-8★	J8		◆				Twx	8												8	
		25-11***	J11		2	◆			N	11					2			9					
		25-16■							M	8					6								2
		25-17■			◆				M	42		36										6	
24-19■					X	P	P		I	19							19						
	25-19★	25-19★	J19		X			P															
	25-20■	25-20***	J20		2	◆			N	30					10	13		4				3	

- X Completely tooled.
- + Majority of tooling is completed (contact Amphenol Aerospace for availability).
- ◆ Not tooled for 02-R.
- P Available with Pin contacts only
- S Available with Socket contacts only
- P/S Available with Pin contacts or Socket contacts
- ★ Ground plane proprietary option available. Arrg. 9-5, 26-62 is exclusively ground plane type.
- Not Mil-Qualified.
- ◇ 21-75 is Mil-Qualified with twinax contacts only.
- * Hermetic inserts - solder termination standard. (Contact Amphenol Aerospace for optional PCB or eyelet termination).

- HD designates High Density 38999 Series III insert patterns which use size 23 contacts only. Not rated over 175°C.
- ** Two size 16 contacts dedicated to fiber optics. See the Fiber Optic Section for more information.
- *** For use in MIL-STD-1760 applications (see pages 75 and 76).
- † For RG 180/U and RG 195/U cables only.
- †† Size 8 Coax and Twinax are interchangeable.
- (2) Not Tooled for RP or 02RE
- (3) Pin inserts only, not tooled for RP or 02RE (Consult Amphenol for avail.)
- (4) MS connector 21-75 is supplied with size 8 twinax. Commercial connector 21-75 is supplied with size 8 coax.
- (5) MS Connector 21-79 has provision for two size 8 coax contacts. Coax contacts are not supplied unless specified by customer.
- (PWR) Suffix at end of part number to replace coax, twinax, and fiber contacts with power contacts.

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

Insert Availability and Identification Chart

Series	Series	Series	Military	MIL-DTL-27599		Hermetics					Contact Size												38999
JT II	LJT I	TV III	III	JT/LJT Solder	Crimp	H	Y	TV*	Service Rating	Total Contacts	23 HD	22D	20	16	12 (Fiber)	12 (Coax)	10	8 (Coax)	8†† (Twinax)	8 Quadrax	4	III	
24-24					X	P	P		I	24				12		12							II
	25-24★	25-24★	J24		X	P	P		I	25			16			5		4					I
		25-26■★			+				I	25			16			5		4					SJT
24-29					X				I	29				29									Access
	25-29★	25-29★	J29	X	X																		Aquacon
24-35					X	P	P		New	128		128											
	25-35	25-35	J35		X	P	P	P	M														
24-37					X				I	37				37									
	25-37★	25-37★	J37		X																		
		25-41■							N	Inst.	41		22	3	11		2		3				
24-43■					3				I	43				23	20								
	25-43	25-43	J43	X	2	◆			I	43				23	20								
	25-46	25-46	J46		2	◆			I	46				40	4			2					
24-61					X		P	P	I	61				61									
	25-61	25-61	J61	X	X	P	P	P															
		25-62 ■★			X	◆			I	12					8						4		
		25-90	J90		◆				I	46				40	4				2				
		25-187 ■							N	187	187												
		25-1A ■							N	8					4								4
		25-AT ■			X				M	60		31	12	11	2		2		2				
		25-F4 ■			X				M/I	66		49		13		4							

TV SERIES III

SELECT SHELL SIZE - SPECIAL INSERT ARRANGEMENT

(Not Mil-Spec Qualified)

Shell Size-Insert Arrg.	Crimp	Hermetics*	Service Rating	Total Contacts	Comments	Contact Size			
						22D	20	16	12
9-2	X		I	2	Formerly Pyle		2		
15-4	X		II	4	Formerly Pyle			4	
15-25	X		M	25	Formerly Pyle	22		3	
17-20	X		M	20	Formerly Pyle	16			4
21-12	X		I	12	Formerly Pyle		3		9
21-21	X		M/Inst.	41	Improved sealing	32			9
21-99	X		M	16	Formerly Pyle	5			11
25-92	X		M	101	Formerly Pyle	92		9	
25-97	X		M	42	Formerly Pyle	26		3	13

LJT SERIES I

SELECT SHELL SIZE - SPECIAL INSERT ARRANGEMENT

(Not Mil-Spec Qualified)

Shell Size-Insert Arrg.	Crimp	Service Rating	Total Contacts	Comments	Contact Size			
					22D	20	16	12
25-64	X		64	Formerly Pyle	40	8	10	6

SELECT NON-STANDARD SHELL SIZE

- Special Insert Arrangement

Shell Size-Insert Arrg.	Crimp	Hermetics*	Service Rating	Total Contacts	Contact Size				
					22D	20	8	4	0
25L-3	X		II	3			1	2	
25L-7	X		II	7			7		
33-3	X		II	3				1	2
33-5	X		II	5				5	
33-6	X		II	6			2	4	
37-5	X		II	4					4

(Insert arrangements requiring non-standard shells)

- X Completely tooled.
- + Majority of tooling is completed (contact Amphenol Aerospace for availability).
- ◆ Not tooled for 02-R.
- P Pin inserts only (contact Amphenol Aerospace for socket availability).
- ★ Ground plane proprietary option available. Arrangement 9-5, 25-62 is exclusively ground plane type.
- Not Mil-Qualified.
- * Hermetic inserts - solder termination standard. (Contact Amphenol Aerospace for optional PCB or eyelet termination).
- ** Two size 16 contacts dedicated to fiber optics. See the Fiber Optic section for more information.
- *** For use in MIL-STD-1760 applications (pgs. 75 and 76).
- † For RG 180/U and RG 195/U cables only.
- †† Size 8 Coax and Twinax are interchangeable.
- Note: 25L-3 and 25L-7 use longer shells.
- (PWR) Suffix at end of part number to replace coax, twinax, and fiber contacts with power contacts.

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

Insert Arrangements

Front face of pin inserts illustrated

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III
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Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

												
8-2	8-3		8-6				8-35	8-44		8-97	8-98	
	9-3		9-6	9-7		9-22	9-35	9-44			9-98	11-2
		9-5			9-9 HD		9-35		9-94		9-98	11-2
M	M	Grounded	M	M	N	I	M	M	M	M	I	I
2	3	1	6	7	9	2	6	4	2	2 2	3	2
20	20	8 Twinax	22M	22M	23	20	22D	22	20	22M 20	20	16

Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

											
10-4	10-5		10-13			10-35		10-98	10-99	12-3	12-4
11-4	11-5	11-6	11-13			11-35		11-98	11-99	13-3	13-4
11-4	11-5			11-19 HD		11-35	11-54	11-98	11-99		13-4
I	I	I	M	N	M	M	II	I	I	II	I
4	5	6	13	19	13	4	6	7	3	4	4
20	20	20	22M	23	22D	22D	20	20	16	16	16

Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

											
12-8	12-22			12-35		12-98		14-4	14-5		
13-8	13-22			13-35		13-98		15-4	15-5		
13-8		13-26	13-32 HD	13-35	13-63	13-98	15-AT	15-4	15-5		
I	M	M	N	M	I	I	I	I	II		
8	22	6 2	32	22	2 2	10	10 3	4	5		
20	22M	22D 12	23	22D	16 12	20	22D 12	12	16		

Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

											
14-15	14-18	14-19		14-35	14-37		14-68	14-97			
15-15	15-18	15-19		15-35	15-37		15-68	15-97			
15-15	15-18	15-19	15-25	15-35		15-55 HD		15-97			
I	I	I	M	M	M	N	I	I			
14 1	18	19	22 3	37	37	55	8	8 4			
20 16	20	20	22D 16	22D	22M	23	16	20 16			

Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

											
				16-6	16-8	16-13					
			17-2	17-6	17-8	17-13					
17-EA	17-EC	17-2		17-6	17-8						
		M		I	II	I					
10 3 2 4	32 9	38 1	6	8	13	2 2					
22D 20 16 12	22D 20	22D 8 Twinax	12	16	16	12 Coax 8 Coax					

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

CONTACT LEGEND

8 10 12 16 20 22 22M 22D 23

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

Insert Arrangements

Front face of pin inserts illustrated

38999

Shell Size &
Insert Arr. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

17-25	16-26	16-35	16-42		16-55	
	17-26	17-35	17-42	17-52	17-55	17-60
M	I	M	M	M	M	I/Coax
22 2	26	55	42	2	55	8 2
22D 8 Coax	20	22D	22	8 Twinax	22M	22D 8 Coax

Shell Size &
Insert Arr. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

17-73 HD	16-99	19-FA	18-11	19-18	18-28
	17-99		19-11	19-18	19-28
N	I	M	II	M	M
73	21 2	6 8 7 2	11	14 4	26 2
23	20 16	22D 20 16 12	16	22D 8 Twinax	20 16

Shell Size &
Insert Arr. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

18-30	18-32	18-35	18-53	18-66
19-30	19-32	19-35	19-53	19-66
	19-31	19-32	19-35	
I	M	1	M	M
29 1	2 1 12	32	53	66
20 16	8 Coax 12 22D	20	22	22M

Shell Size &
Insert Arr. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

19-67	18-68	19-88 HD	18-96	19-AD	19-FA
	19-68				
M	I	N	I	Inst.	M
67	18	88	9	16 1	6 8 7 2
22M	16	23	12	20 8 Twinax	22D 20 16 12



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

CONTACT LEGEND

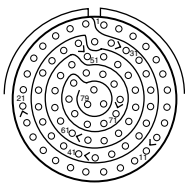
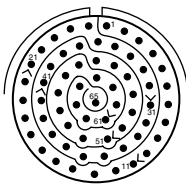
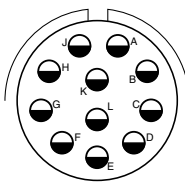
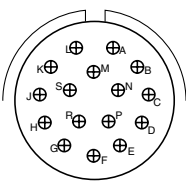
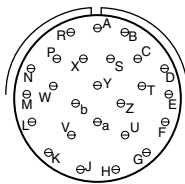
MIL-DTL-38999, Series I LJT, II JT, III TV, HD

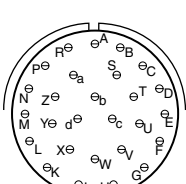
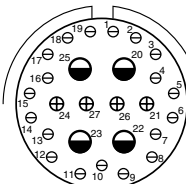
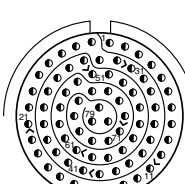
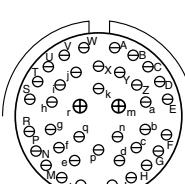
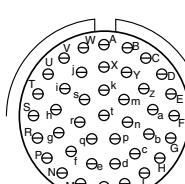
Insert Arrangements

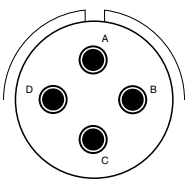
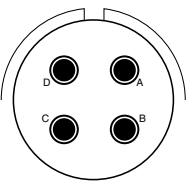
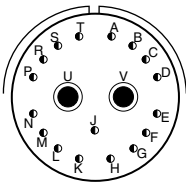
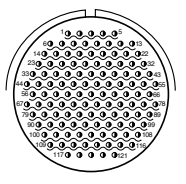
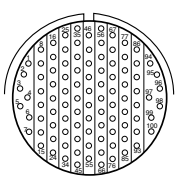
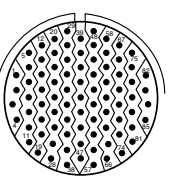
38999

III
II
I
SJT
Access
Aquacon

Front face of pin inserts illustrated

					
Shell Size & Insert Arrg. for:					
Series II JT	20-1	20-2	20-11	20-16	
Series I LJT	21-1	21-2	21-11	21-16	21-25
Series III TV			21-11	21-16	
Service Rating	M	II	I	II	I
Number of Contacts	79	65	11	16	25
Contact Size	22M	22	12	16	20

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

						
Shell Size & Insert Arrg. for:						
Series II JT					22-1	22-2
Series I LJT		21-75	21-79		23-1	23-2
Series III TV	21-48	21-75	21-79	21-121 HD		
Service Rating	M	N	II	N	M	M
Number of Contacts	4	4	17 (See Note)	121	100	85
Contact Size	8 power	(See Note)	22D	23	22M	22

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

								
8	10	12	16	20	22	22M	22D	23

CONTACT LEGEND

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

Insert Arrangements

Front face of pin inserts illustrated

38999

III

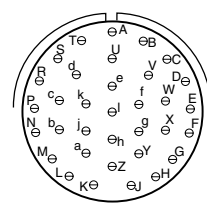
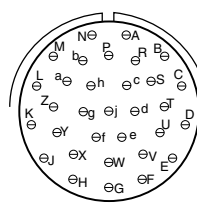
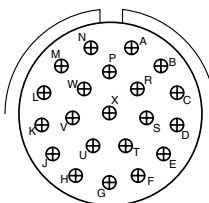
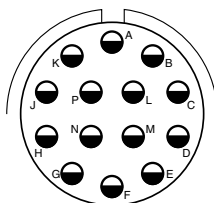
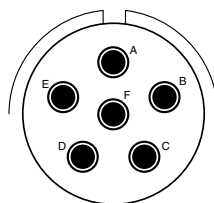
II

I

SJT

Access

Aquacon



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

23-6

23-6

M

6

8 Twinax

22-14

23-14

I

14

12

22-21

23-21

II

21

16

22-32

23-32

I

32

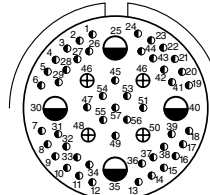
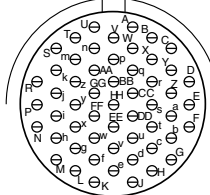
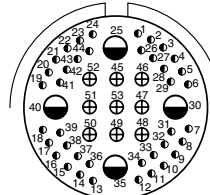
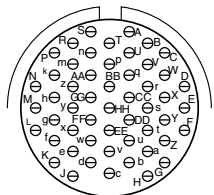
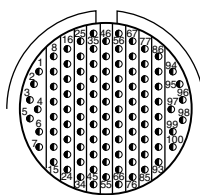
20

23-34

I

34

20



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

22-35

23-35

M

100

22D

22-53

23-53

I

53

20

23-54

M

40

9

4

22D

16

12

22-55

23-55

I

55

20

23-63

M

49

4

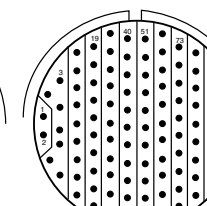
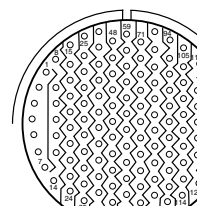
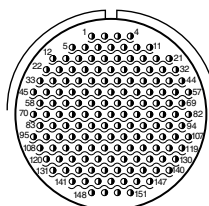
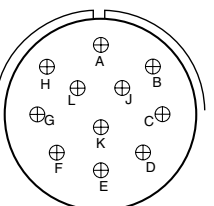
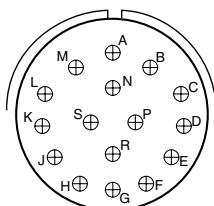
4

22D

16

12

Coax Coax



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size

23-97

23-97

II

16

16

23-99

23-99

II

11

16

23-151 HD

N

151

23

24-1

25-1

M

128

22M

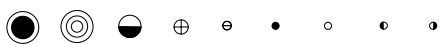
24-2

25-2

M

100

22



CONTACT LEGEND

8

10

12

16

20

22

22M

22D

23

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

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

Insert Arrangements

Front face of pin inserts illustrated

38999

III

II

I

SJT

Access

Aquacon

Series III, II, I

Shell Size &
Insert Arrg. for:

Series II JT

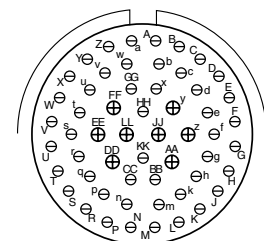
Series I LJT

Series III TV

Service Rating

Number of Contacts

Contact Size



24-4

25-4

25-4

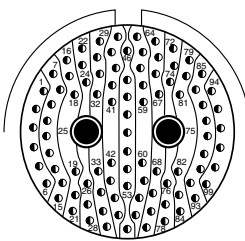
I

48

8

20

16



25-7

25-7

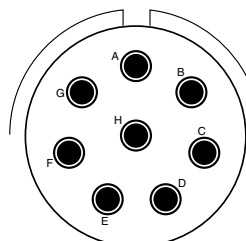
M

97

2

22D

8 Twinax

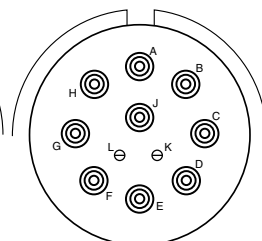


25-8

Twinax

8

8 Twinax



25-11

25-11***

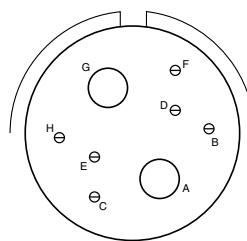
N

2

9

20

10



25-16

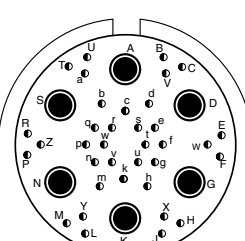
M

6

2

20

4



25-17

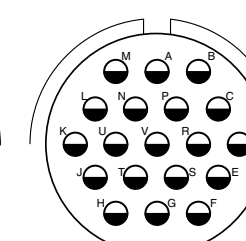
M

36

6

22D

8 Twinax



24-19

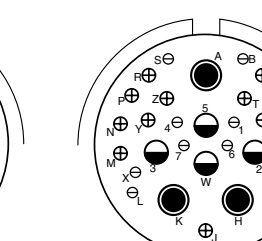
25-19

25-19

I

19

12



25-20

25-20***

N

10

13

3

4

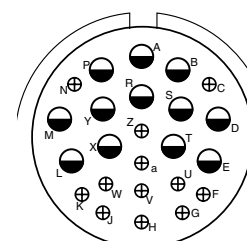
20

16

8 Twinax

12 Coax

(With Matched Impedance)



24-24

25-24

25-24

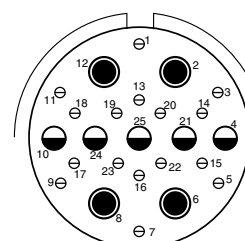
I

12

12

16

12



25-26

25-26

I

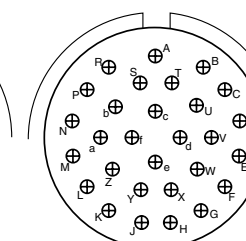
16

5

20

12

8 Coax



24-29

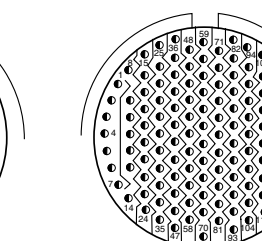
25-29

25-29

I

29

16



24-35

25-35

25-35

M

128

22D

Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

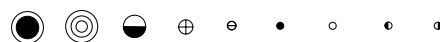
Series III TV

Service Rating

Number of Contacts

Contact Size

*** For use in MIL-STD-1760 applications (see pages 75 and 76).



CONTACT LEGEND

8

10

12

16

20

22

22M

22D

23

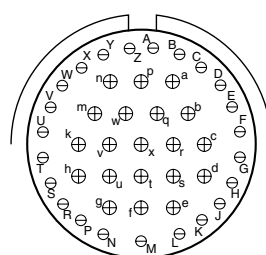
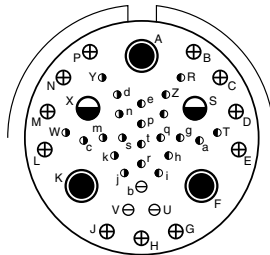
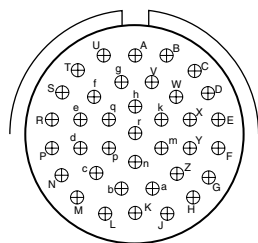
MIL-DTL-38999, Series I LJT, II JT, III TV, HD

Insert Arrangements

Front face of pin inserts illustrated

38999

III
II
I
SJT
Access
Aquacon



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

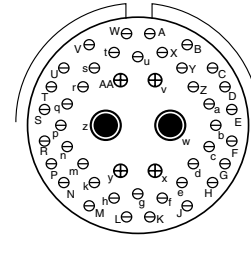
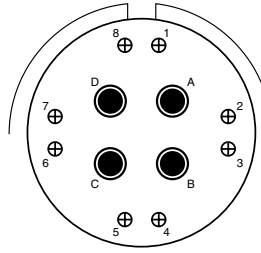
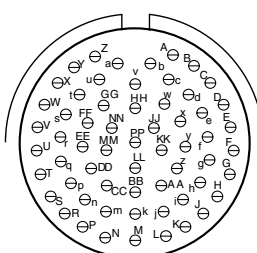
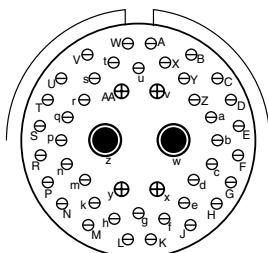
Series III TV

Service Rating

Number of Contacts

Contact Size

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



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

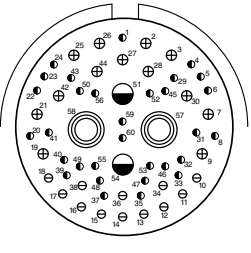
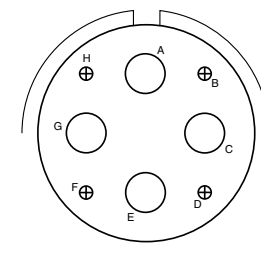
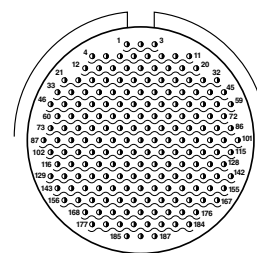
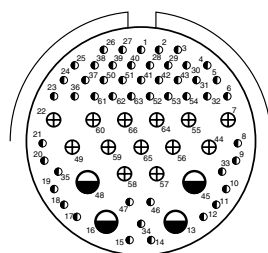
Series III TV

Service Rating

Number of Contacts

Contact Size

25-46	24-61		
25-46	25-61		
25-46	25-61	25-62	25-90
I	I	I	I
40	61	8	40
20	20	4	4
		16	16
		8	8
		Ground Plane Only	8 Twinax



Shell Size &
Insert Arrg. for:

Series II JT

Series I LJT

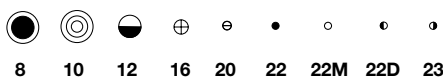
Series III TV

Service Rating

Number of Contacts

Contact Size

25-F4	25-187 HD	25-1A	25-AT
Size 22D=M, Balance =I	N	N	N
49	187	4	2
22D	23	16	10
		4	12
			13
			16
			20
			22D



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

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

MIL-DTL-38999, Series III TV

Special Insert Arrangements

38999

III

II

I

SJT

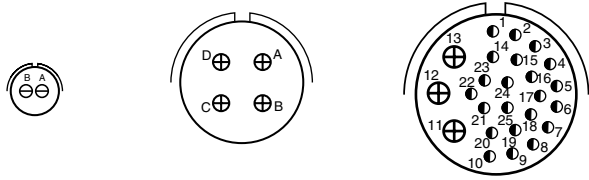
Access

Aquacon

Series III

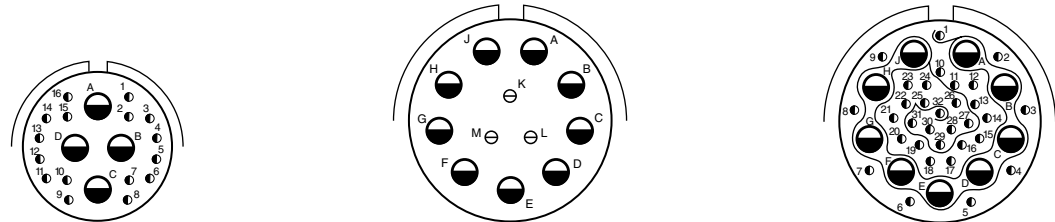
Front face of pin inserts illustrated

Shell Size &
Insert Arrg. for:



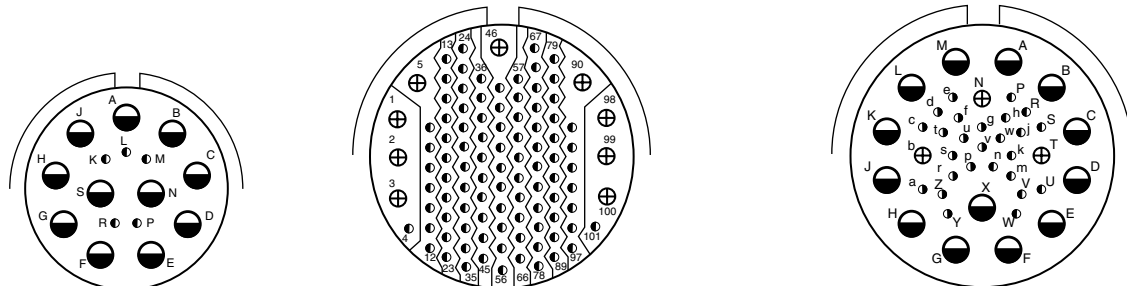
Series III TV	9-2	15-4*	15-25
Service Rating	I	II	M
Number of Contacts	2	4	22 3
Contact Size	20	16	22D 16

Shell Size &
Insert Arrg. for:



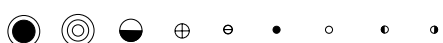
Series III TV	17-20	21-12	21-21
Service Rating	M	I	M/Inst.
Number of Contacts	16 4	3 9	32 9
Contact Size	22D 12	20 12	22D 12

Shell Size &
Insert Arrg. for:



Series III TV	21-99	25-92	25-97
Service Rating	M	M	M
Number of Contacts	5 11	92 9	26 3 13
Contact Size	22D 12	22D 16	22D 16 12

NOTE: Some specials shown here were formerly known as Pyle arrangements.
Consult Amphenol for how to order information for connectors with these inserts.
For further information on special arrangements consult Amphenol Aerospace, Sidney NY.
* Pyle 15-4 does not mate with Amphenol Tri-Start 15-4 insert.



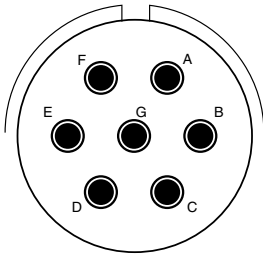
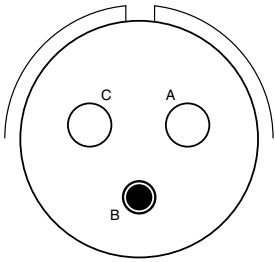
CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23*

MIL-DTL-38999, Series III TV

Special Insert Arrangements

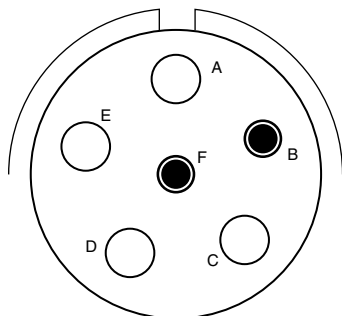
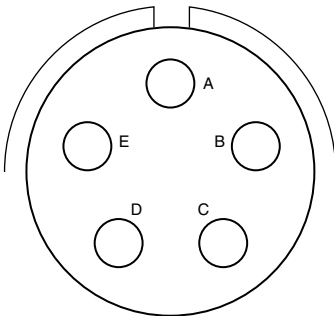
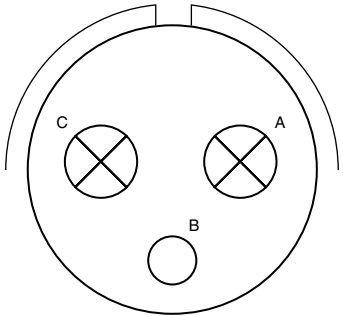
Non-Standard Shells or Large Contacts

Front face of pin inserts illustrated



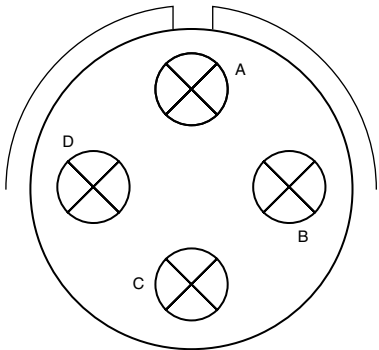
Shell Size &
Insert Arrg. for:

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



Shell Size &
Insert Arrg. for:

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

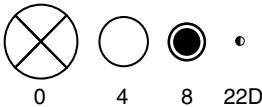


Shell Size &
Insert Arrg. for:

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

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

CONTACT LEGEND



38999

III
II
I
SJT
Access
Aquacon

Series III

A

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

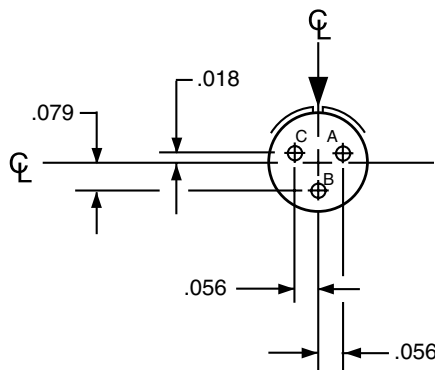
Insert Arrangements

INSERT ARRANGEMENT #8-3 / 9-3

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

Contact Locations

Front face of pin insert
shown



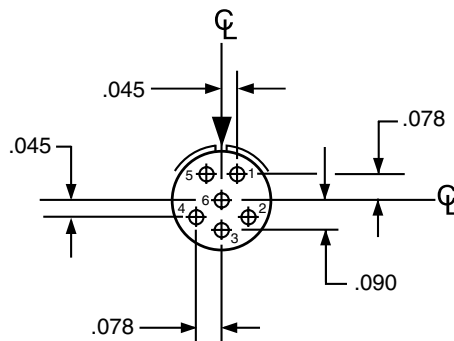
*Service Rating: M for MIL-DTL-38999

INSERT ARRANGEMENT #8-35 / 9-35

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

Contact Locations

Front face of pin insert
shown



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

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

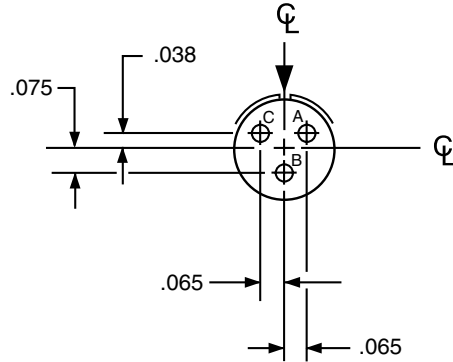
Insert Arrangements

INSERT ARRANGEMENT #8-98 / 9-98

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

Contact Locations

Front face of pin insert shown

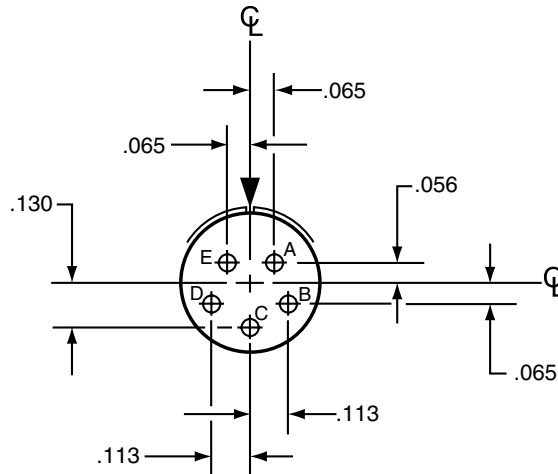


INSERT ARRANGEMENT #10-5 / 11-5

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

Contact Locations

Front face of pin insert shown



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

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

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

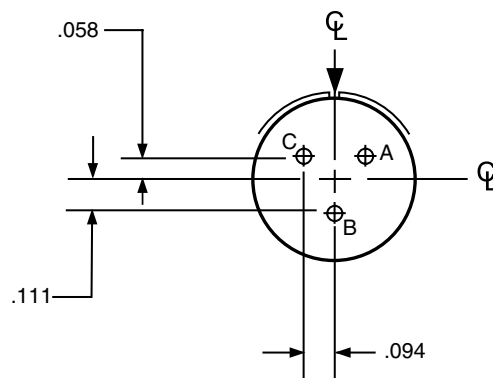
Insert Arrangements

INSERT ARRANGEMENT #12-3 / 13-3

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

Contact Locations

Front face of pin insert shown

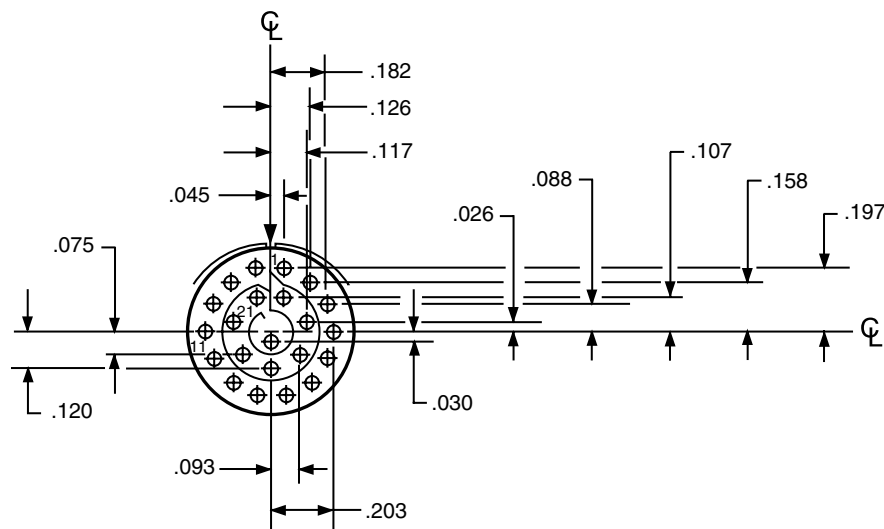


INSERT ARRANGEMENT #12-35 / 13-35

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

Contact Locations

Front face of pin insert shown



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

38999

III

II

I

SJT

Access

Aquacon

Series III, II, I

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

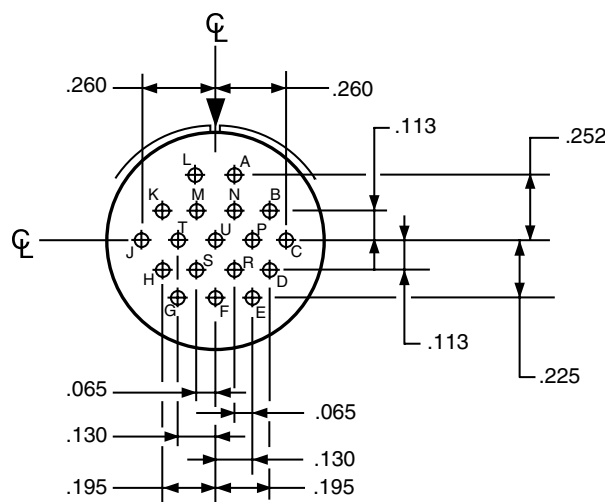
Insert Arrangements

INSERT ARRANGEMENT #14-18 / 15-18

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

Contact Locations

Front face of pin insert shown

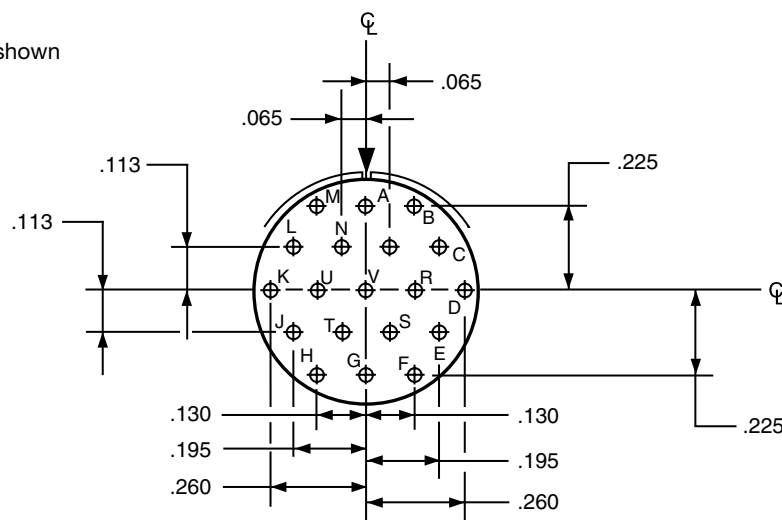


INSERT ARRANGEMENT #14-19 / 15-19

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

Contact Locations

Front face of pin insert shown



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

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

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

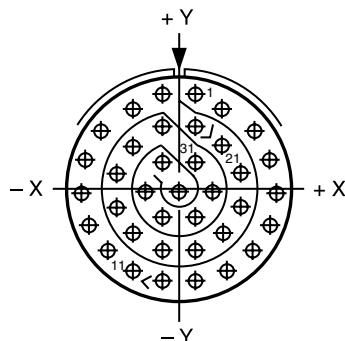
Insert Arrangements

INSERT ARRANGEMENT #14-35 / 15-35

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

Contact Locations

Front face of pin insert shown



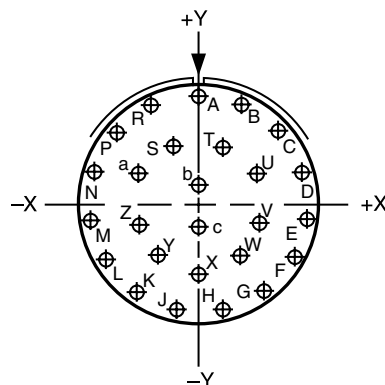
Contact Hole Locations			Contact Hole Locations		
Contact Number	Location		Contact Number	Location	
	X Axis	Y Axis		X Axis	Y Axis
1	+.045	+.262	19	+.045	+.172
2	+.123	+.217	20	+.123	+.119
3	+.211	+.160	21	+.170	+.040
4	+.254	+.080	22	+.170	-.050
5	+.266	-.010	23	+.123	-.127
6	+.247	-.098	24	+.045	-.172
7	+.200	-.175	25	-.045	-.172
8	+.130	-.232	26	-.123	-.127
9	+.045	-.262	27	-.170	-.050
10	-.045	-.262	28	-.170	+.040
11	-.130	-.232	29	-.123	+.119
12	-.200	-.175	30	-.045	+.172
13	-.247	-.098	31	+.045	+.074
14	-.266	-.010	32	+.090	-.004
15	-.254	+.080	33	+.045	-.082
16	-.211	+.160	34	-.045	-.082
17	-.123	+.217	35	-.090	-.004
18	-.045	+.262	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	Number of Contacts	Contact Size	Service Rating
Insert Designation:	NA	17-26	17-26	26	20	I

Contact Locations

Front face of pin insert shown



Contact Hole Locations			Contact Hole Locations		
Contact Number	Location		Contact Number	Location	
	X Axis	Y Axis		X Axis	Y Axis
A	.000	+.321	R	-.131	+.293
B	+.131	+.293	S	-.070	+.177
C	+.239	+.214	T	+.070	+.177
D	+.305	+.099	U	+.175	+.094
E	+.319	-.034	V	+.178	-.036
F	+.278	-.161	W	+.119	-.151
G	+.189	-.260	X	.000	-.203
H	+.067	-.314	Y	-.119	-.151
J	-.067	-.314	Z	-.178	-.036
K	-.189	-.260	a	-.175	+.094
L	-.278	-.161	b	.000	+.065
M	-.319	-.034	c	.000	-.065
N	-.305	+.099			
P	-.239	+.214			

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

Note: Shown in this catalog are the most common insert patterns for PCB applications.

For availability of other arrangements, consult Amphenol Aerospace.

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

Insert Arrangements

38999

III

II

I

SJT

Access

Aquacon

Series III, II, I

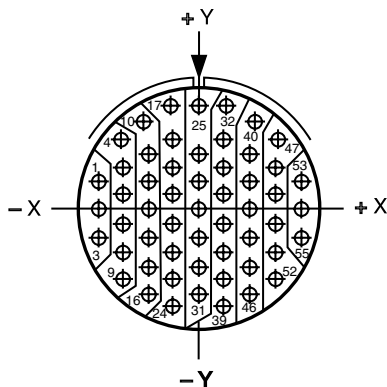
INSERT ARRANGEMENT #16-35 / 17-35

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 Number	Contact Hole Locations	
	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

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

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

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

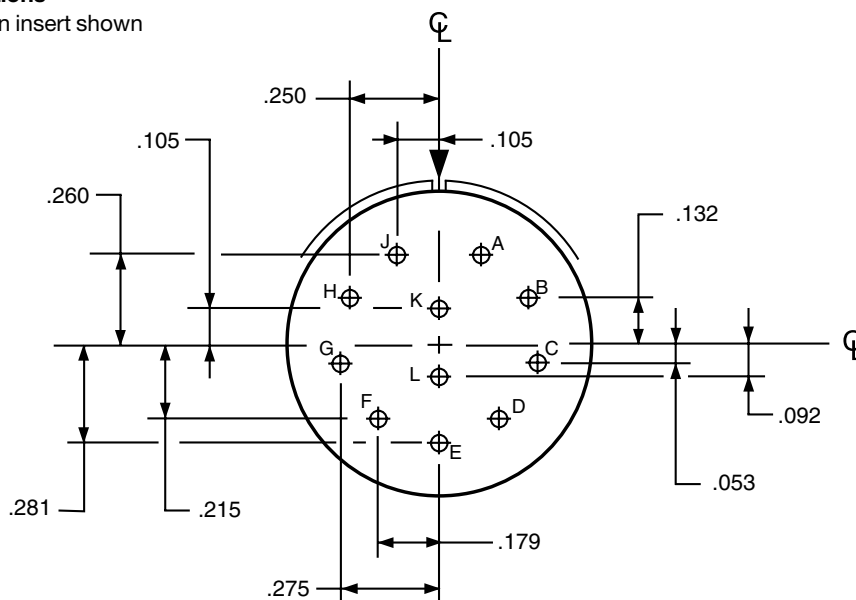
Insert Arrangements

INSERT ARRANGEMENT #18-11 / 19-11

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Number of Contacts	Contact Size	Service Rating
Insert Designation:	18-11	19-11	11	16	II

Contact Locations

Front face of pin insert shown

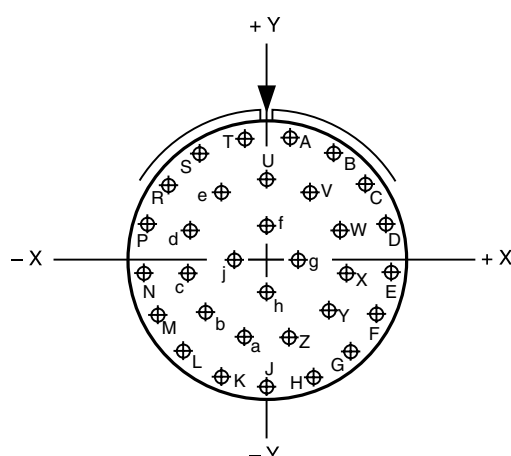


INSERT ARRANGEMENT #18-32 / 19-32

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
Insert Designation:	18-32	19-32	19-32	32	20	I

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Letter	Location	
	X Axis	Y Axis
A	+0.066	+0.353
B	+0.189	+0.305
C	+0.286	+0.217
D	+0.345	+0.098
E	+0.357	-0.033
F	+0.321	-0.160
G	+0.242	-0.265
H	+0.130	-0.335
J	.000	-0.359
K	-0.130	-0.335
L	-0.242	-0.265
M	-0.321	-0.160
N	-0.357	-0.033
P	-0.345	+0.098
R	-0.286	+0.217
S	-0.189	+0.305

Contact Hole Locations		
Contact Letter	Location	
	X Axis	Y Axis
T	-0.066	+0.353
U	.000	+0.230
V	+0.124	+0.193
W	+0.209	+0.095
X	+0.228	-0.033
Y	+0.174	-0.151
Z	+0.065	-0.221
a	-0.065	-0.221
b	-0.174	-0.151
c	-0.228	-0.033
d	-0.209	+0.095
e	-0.124	+0.193
f	.000	+0.096
g	+0.096	.000
h	.000	-0.096
j	-0.096	.000

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

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

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

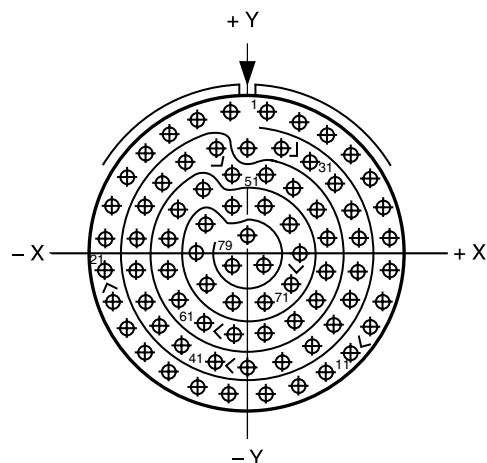
Insert Arrangements

INSERT ARRANGEMENT #20-35 / 21-35

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

Contact Locations

Front face of pin insert shown



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

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
9	+ .406	- .141
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

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
43	- .258	- .220
44	- .311	- .141
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 46 for Series III, page 86 for Series II, and page 114 for Series I.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Amphenol Aerospace.

Contact Amphenol Aerospace for more information at 800-678-0141 • www.amphenol-aerospace.com

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

Insert Arrangements

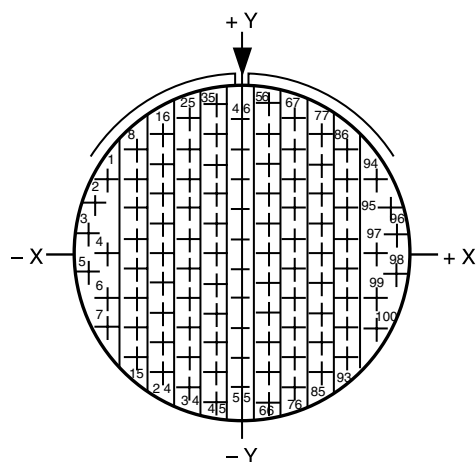
INSERT ARRANGEMENT #22-35 / 23-35

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

Number of Contacts	Contact Size	Service Rating
100	22D	M

Contact Locations

Front face of pin insert shown



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

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

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

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

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

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Series III, II, I

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

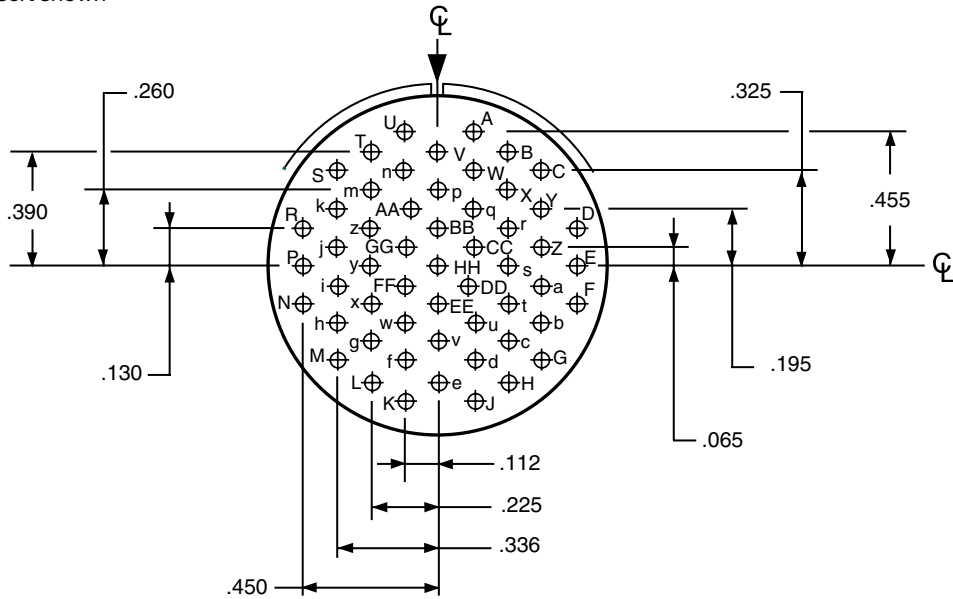
Insert Arrangements

INSERT ARRANGEMENT #22-55 / 23-55

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

Contact Locations

Front face of pin insert shown

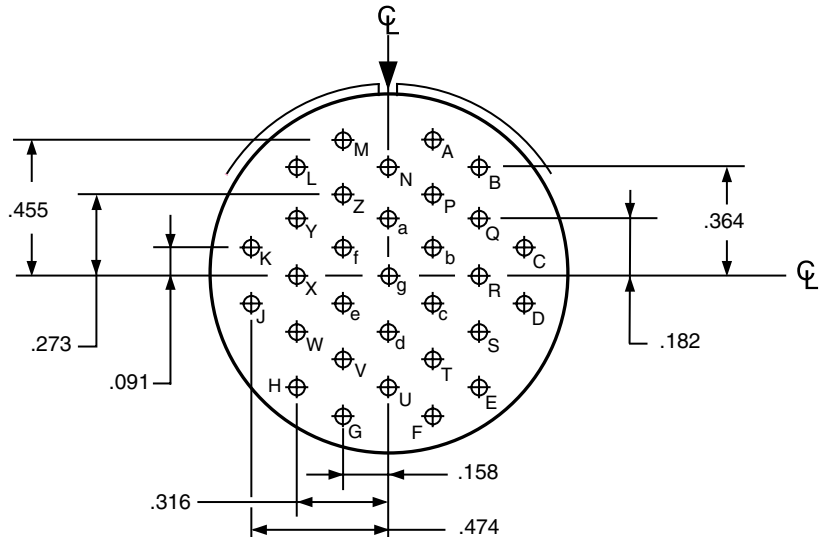


INSERT ARRANGEMENT #24-31 / 25-31

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

Contact Locations

Front face of pin insert shown



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

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

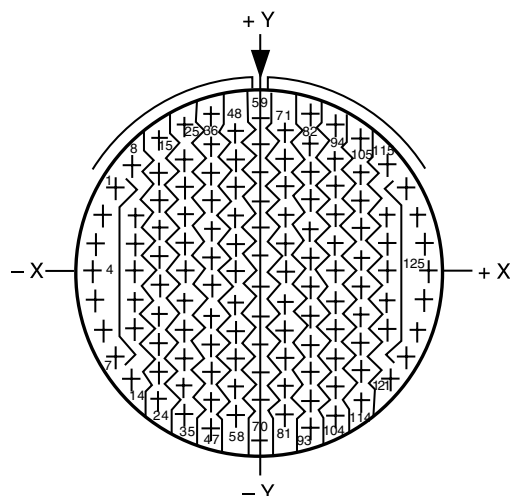
Insert Arrangements

INSERT ARRANGEMENT #24-35 / 25-35

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

Contact Locations

Front face of pin insert shown



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

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

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

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

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

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Series III, II, I

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

Insert Arrangements

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Aquacon

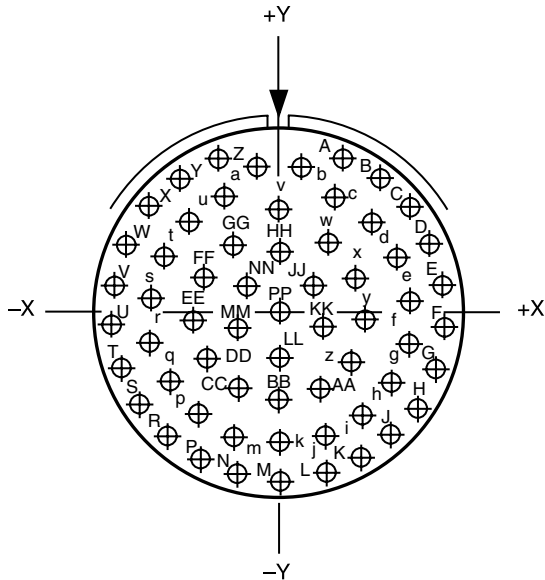
Series III, II, I

INSERT ARRANGEMENT #24-61 / 25-61

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

Contact Locations

Front face of pin insert shown



Contact 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
g	+392	-.088

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

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

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

C



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Military to Commercial Shell Style Conversion Table

How to Order (Military)

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MILITARY	DESCRIPTION	COMMERCIAL
MS27466	Crimp Wall Mounting Receptacle	LJT00
MS27656	Crimp Wall Mounting Receptacle (Back Panel)	LJTPQ00
MS27496	Crimp Box Mounting Receptacle	LJT02, LJTP02
MS27505	Crimp Box Mounting Receptacle (Back Panel)	LJTP02
MS27467	Crimp Straight Plug	LJT06
MS27468	Crimp Jam Nut Receptacle	LJT07
MS27469	Hermetic Wall Mounting Receptacle	LJT00, LJTS00
MS27470	Hermetic Jam Nut Receptacle	LJT07, LJTS07
MS27471	Hermetic Solder Mounting Receptacle	LJTIH, LJTIY, LJTSIY
MIL-DTL-27599		
MS20026	Solder Wall Mounting Receptacle	LJT00
MS20027	Solder Line Receptacle	LJT01
MS20028	Solder Straight Plug	LJT06
MS20029	Solder Jam Mounting Receptacle	LJT07

HOW TO ORDER - MILITARY SERIES I

1. MS Number	2. Service Class	3. Shell Size	4. Finishes	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Keying Position
MS27466	E	14	A	18	P	A

1. MS NUMBER SERIES I LJT	
MS27466	Crimp Wall Mounting Receptacle
MS27656	Crimp Wall Mounting Receptacle (Back Panel Mounting)
MS27496	Crimp Box Mounting Receptacle
MS27505	Crimp Box Mounting Receptacle (Back Panel Mounting)
MS27467	Crimp Straight Plug
MS27468	Crimp Jam Nut Receptacle
MS27469	Hermetic Wall Mounting Receptacle
MS27470	Hermetic Jam Nut Receptacle
MS27471	Hermetic Solder Mounting Receptacle
MIL-DTL-27599	
MS20026	Solder Wall Mounting Receptacle
MS20027	Solder Line Receptacle
MS20028	Solder Straight Plug
MS20029	Solder Jam Nut Receptacle
2. HERMETIC SERVICE CLASS	
WALL MOUNT (469)	
JAM NUT (470)	
SOLDER MOUNT (471)	
Y	Hermetically interfacial seal

2. SERVICE CLASS				
CRIMP		SOLDER		
WALL MOUNT (466)	BOX MOUNT (496)	WALL MOUNT (026)	JAM NUT (029)	
WALL MOUNT BPM (656)	BOX MOUNT BPM (505)	LINE (027)		
STRAIGHT PLUG (467)		STRAIGHT PLUG (028)		
JAM NUT (468)				
E	E			Environmental crimp applications. Box Mount versions using spacer grommets are not environmental.
P			P	Potting crimp applications. Supplied with spacer grommet and potting boot.
T		T		Environmental applications. Supplied without rear accessories. Design provides serrations on rear threads of shells.

Series I

C

MIL-DTL-38999/ 27599, Series I LJT

How to Order (Military)

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Series I

1.	2.	3.	4.	5.	6.	7.
MS Number	Service Class	Shell Size	Finishes	Insert Arrangement	Contact Style (P or S)	Alternate Keying Position
MS27466	E	14	A	18	P	A

3. SHELL SIZE

See table on page 2-5

Shell Size & Insert Arrangement are on pages 2-5. First number represents Shell Size, second number is the Insert Arrangement. Place Shell Size in box 3 and Insert Arrangement in box 5.

4. FINISHES

Finish	Military Finish Data
Cadmium plated nickel base 175°C	A
Olive drab cadmium plate nickel base 175°C	B
Electroless nickel 200°C	F
Electroless nickel, space compatible 200°C	
Anodic coating (Alumilite) 200°C	C
Chromate treated (Iridite 14-2) 125°C	
Passivated steel 200°C	E
Nickel-PTFE 175°C	

4. HERMETIC FINISHES

Finish	Military Finish Data
Carbon steel shell tin plated & contacts	D
Stainless steel shell passivated	N
Stainless steel nickel plated	N

5. INSERT ARRANGEMENT

See table on page 2-5

6. CONTACTS

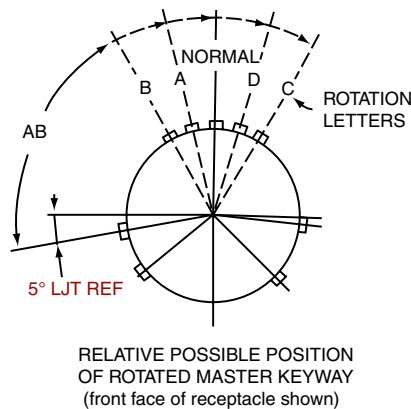
P	Pin Contacts
S	Socket Contacts

7. ALTERNATE KEYING POSITION

"A" designates Alternate keying connector assembly. Other basic alternate keys are "B", "C" and "D". No letter required for normal rotation (no rotation) position.

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The AB angle for a given connector is the same whether it contains pins or sockets. Only the master key/keyway rotates in the shell, and the minor keys are fixed. AB angles shown are viewed from the front face of the connector, a receptacle is shown below. The angles for the plug are exactly the same except the direction of rotation is opposite of that shown for the receptacle.

The "N" designation is not referenced in part number, it is omitted.



LJT 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°

How to Order (Commercial)

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Series I
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1. Table & Style	2. Service Class	3. Shell Size -Insert Arrg.	4. Contact Style (P or S)	5. Alternate Keying Position	6. Strain Relief/Finish Variation Suffix**
LJT00	RT	9-35	P	B	(014)

** If Required

		SERIES I		
		Long Junior Tri-Lock	High Temperature	Chemical and Fuel Resistant
Receptacle Crimp	Wall Mounting Receptacle	LJT00	LJTS00	LJTN00
	Box Mounting Receptacle	LJT02	LJTS02	LJTN02
	Line Receptacle	LJT01	LJTS01	LJTN01
	Jam Nut Receptacle	LJT07	LJTS07	LJTN07
	Wall Mounting Receptacle (Back Panel)	LJTPQ00	LJTPS00	LJTPN00
	Box Mounting Receptacle (Back Panel)	LJTP02	LJTPS02	LJTPN02

Plugs	Straight Plug	LJT06	LJTS06	LJTN06
--------------	---------------	-------	--------	--------

Printed Circuit Board	Wall Mounting Receptacle	See page 130 for part number order guide		
	Wall Mounting Receptacle (Back Panel)	See page 131 for part number order guide		
	Wall Mounting Receptacle (Back Panel) (Clinch Nut)	See page 132 for part number order guide		
	Box Mounting Receptacle (Back Panel)	See page 133 for part number order guide		
	Box Mounting Receptacle (Back Panel) (Clinch Nut)	See page 134 for part number order guide		
	Jam Nut Receptacle	See page 135 for part number order guide		
	Jam Nut Receptacle	See page 136 for part number order guide		
	Jam Nut Receptacle (Hermetic)	See page 137 for part number order guide		
	Solder Mounting Receptacle (Hermetic)	See page 138 for part number order guide		

Hermetic	Wall Mounting Receptacle	LJT00	LJTS00	LJTN00
	Jam Nut Receptacle	LJT07	LJTS07	LJTN07
	Solder Mounting Receptacle	LJTI	LJTISI	LJTNI

CONNECTOR TYPE & STYLE

**Wall
Mounting
Receptacle**

**Line
Receptacle**

**Jam
Nut
Receptacle**

**Straight
Plug**

**Solder
Mounting
Receptacle**

**Lanyard Release
Plug**


MIL-DTL-38999/ 27599, Series I LJT

How to Order (Commercial)

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Series I

2. SERVICE CLASS

CRIMP		
WALL MOUNT	Box Mount	Crimp Contacts/ Connectors
PLUG		
LINE		
JAM NUT		
RP		Potting crimp applications. Supplied with spacer grommet and potting boot.††
RE	RE	Environmental crimp applications. Supplied with a grommet and compression nut. Can be supplied with strain relief integral with compression nut “RE(SR)”.
RT		Environmental applications. Supplied without rear accessories. Design provides serrations on rear threads of shells.
SOLDER		
WALL MOUNT	Solder Contacts/ Connectors	
LINE		
STRAIGHT PLUG		
JAM NUT		
P	Potting applications: These connectors are supplied with a potting boot. All shells are designed with integral features to retain potting boots.	
C	Pressurized applications	
T	MIL-DTL-27599 applications-general duty, pressurized (receptacle only) (LJT only molded in solder type contacts) Not applicable with Box Mount Styles	
HERMETIC		
WALL MOUNT		
JAM NUT		
SOLDER MOUNTING RECEPTACLE		
Y	Same as “H” with interfacial seal.	
H	Hermetic applications- Fused compression glass sealed inserts. Leakage rate less than .01 micron cu. ft./hr. (1 x 10-7 cc/sec.) at 15 psi differential.	

4. SHELL SIZE & INSERT ARRANGEMENT SEE PAGE 2-5

First number represents Shell Size,
second number is the Insert Arrangement.

5. CONTACTS

P	Pin Contacts
S	Socket Contacts

C

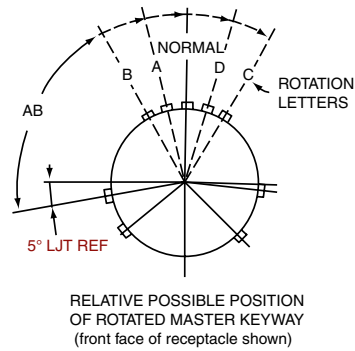
How to Order (Commercial)**6. ALTERNATE KEYING POSITION**

"A" designates Alternate keying connector assembly. Other basic alternate keys are "B", "C" and "D". No letter required for normal rotation (no rotation) position.

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The AB angle for a given connector is the same whether it contains pins or sockets. Only the master key/keyway rotates in the shell, and the minor keys are fixed.

AB angles shown are viewed from the front face of the connector, a receptacle is shown below. The angles for the plug are exactly the same except the direction of rotation is opposite of that shown for the receptacle.

The "N" designation is not referenced in part number, it is omitted.

**LJT 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°

7. SELECT A STRAIN RELIEF OPTION OR FINISH VARIATION SUFFIX

Strain Relief Options: "SR" designates a strain relief clamp. Strain reliefs are available only on Service Class "C" and "RE" (see step 3. Service Class)

Finish Variation Suffix: See finish variations available in table to your right.

7. HERMETIC FINISHES

Finish	Finish Suffix
Carbon steel shell tin plated & contacts	(468)
Stainless steel shell passivated	(162)
Stainless steel nickel plated	0

7. FINISHES

Finish	Finish Suffix	Finish Plus "SR" Suffix
		Class RE and C Only
Cadmium plated nickel base 175°C		(SR)
Olive drab cadmium plate nickel base 175°C	(014)	(386)
Electroless nickel 200°C	(023)	(424)
Electroless nickel, space compatible 200°C	(453)	(467)
Anodic coating (Alumilite) 200°C	(005)	(300)
Chromate treated (Iridite 14-2) 125°C	(011)	(344)
Passivated steel 200°C	-	-
Nickel-PTFE 175°C	(045)	(582)
Zinc-Nickel Plated 175°C	(033)	

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Series I

C

Wall Mounting Receptacle - Crimp

Military (MS27466), Commercial (LJT00R)

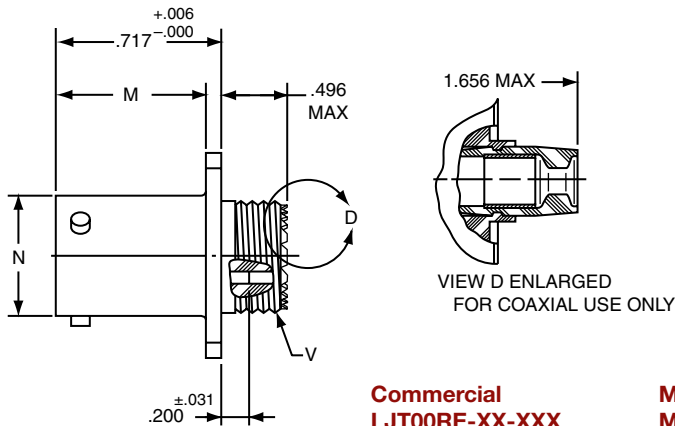
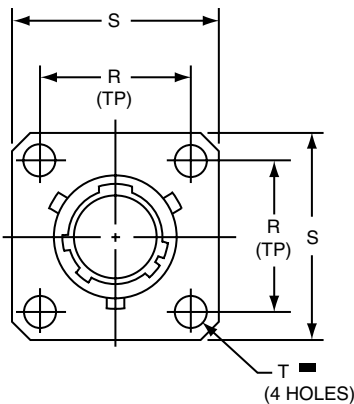
38999

PART NUMBER BUILDER Page 113-117

MILITARY
MS27466E
MS27466P
MS27466T

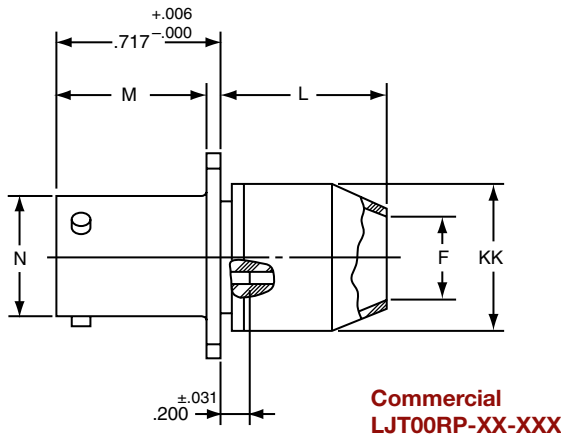
Commercial
LJT00RE
LJT00RP
LJT00RT

Series I



Commercial
LJT00RE-XX-XXX
LJT00RT-XX-XXX

Military
MS27466E
MS27466T



Commercial
LJT00RP-XX-XXX

Military
MS27466P

⊕ .005 DIA ⊖

Shell Size	F Dia. ±.010	L Max.	M +.000 - .005	N +.001 - .005	R (TP)	S ±.016	T Dia. ±.005	V Thread Class 2A (Plated)	KK Dia. Max
9	.444	.813	.632	.572	.719	.938	.128	.4375-28 UNEF	.608
11	.558	.813	.632	.700	.812	1.031	.128	.5625-24 UNEF	.734
13	.683	.813	.632	.850	.906	1.125	.128	.6875-24 UNEF	.858
15	.808	.813	.632	.975	.969	1.219	.128	.8125-20 UNEF	.984
17	.909	.813	.632	1.100	1.062	1.312	.128	.9375-20 UNEF	1.110
19	1.034	.813	.632	1.207	1.156	1.438	.128	1.0625-18 UNEF	1.234
21	1.159	.906	.602	1.332	1.250	1.562	.128	1.1875-18 UNEF	1.360
23	1.284	.906	.602	1.457	1.375	1.688	.147	1.3125-18 UNEF	1.484
25	1.409	.906	.602	1.582	1.500	1.812	.147	1.4375-18 UNEF	1.610

All dimensions for reference only.

Wall Mounting Receptacle (Back Panel Mounting)

Military (MS27656), Commercial (LJTPQ00R)

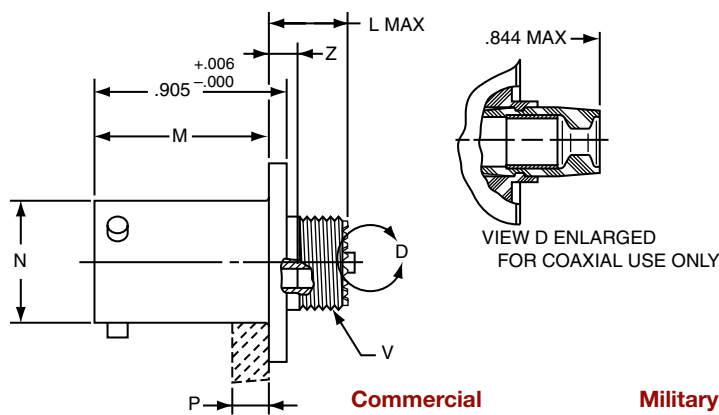
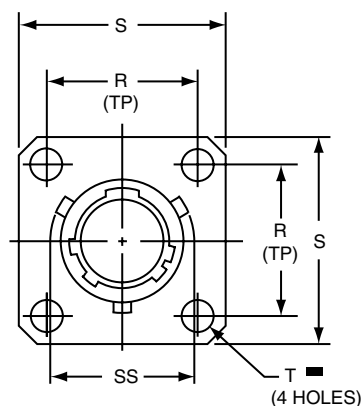
Amphenol
Aerospace

38999

PART NUMBER BUILDER Page 113-117

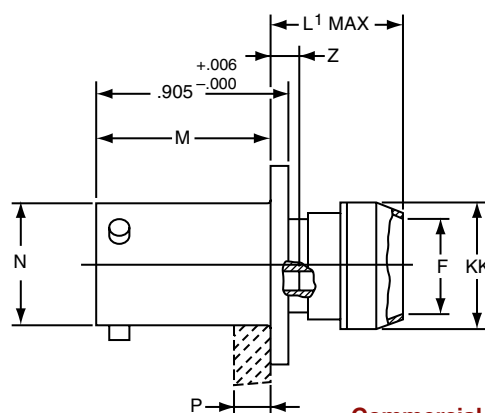
MILITARY
MS27656E
MS27656P
MS27656T

Commercial
LJTPQ00RE
LJTPQ00RP
LJTPQ00RT



Commercial
LJTPQ00RE-XX-XXX
LJTPQ00RT-XX-XXX

Military
MS27656E
MS27656T



Commercial
LJTPQ00RP-XX-XXX

Military
MS27656P

Ⓜ .005 DIA Ⓜ

Shell Size	F Dia. ±.010	L Max.	L' Max.	M +.000 - .005	N Dia.	P Max. Panel Thickness	R (TP)	S ±.011 - .010	T Dia. ±.005	V Thread Class 2A (Plated)	Z Max	KK Dia. Max	SS Dia. +.000 - .016
9	.444	.453	.641	.820	.572	.234	.719	.938	.128	.4375-28 UNEF	.138	.625	.662
11	.558	.453	.641	.820	.700	.234	.812	1.031	.128	.5625-24 UNEF	.138	.750	.810
13	.683	.453	.641	.820	.850	.234	.906	1.125	.128	.6875-24 UNEF	.138	.875	.960
15	.808	.453	.641	.820	.975	.234	.969	1.219	.128	.8125-20 UNEF	.138	1.000	1.085
17	.909	.453	.641	.820	1.100	.234	1.062	1.312	.128	.9375-20 UNEF	.138	1.125	1.210
19	1.034	.453	.641	.820	1.207	.234	1.156	1.438	.128	1.0625-18 UNEF	.138	1.250	1.317
21	1.159	.484	.672	.790	1.332	.204	1.250	1.562	.128	1.1875-18 UNEF	.168	1.375	1.442
23	1.284	.484	.672	.790	1.457	.204	1.375	1.688	.147	1.3125-18 UNEF	.168	1.500	1.567
25	1.409	.484	.672	.790	1.582	.193	1.500	1.812	.147	1.4375-18 UNEF	.168	1.625	1.692

All dimensions for reference only.

Note: MS27656 superseded MS 27515.

Series I

C

Line Receptacle - Crimp

Commercial (LJT01R)

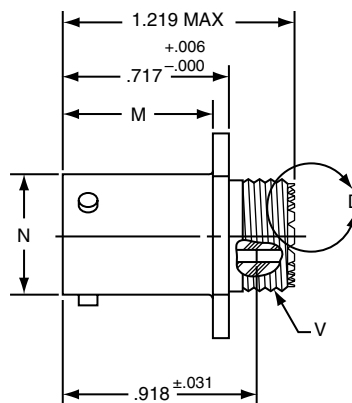
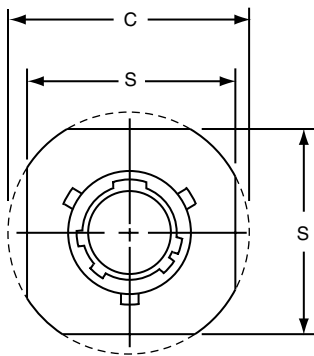
38999

PART NUMBER BUILDER Page 113-117

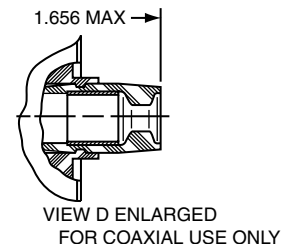
Commercial

LJT01RE
LJT01RT
LJT01RP

Series I



Commercial
LJT01RE-XX-XXX
LJT01RT-XX-XXX
LJT01RP-XX-XXX



Shell Size	C Max.	M +.000 -.005	N +.001 -.005	S ±.016	V Thread Class 2A (Plated)
9	1.094	.632	.572	.938	.4375-28 UNEF
11	1.188	.632	.700	1.031	.5625-24 UNEF
13	1.281	.632	.850	1.125	.6875-24 UNEF
15	1.375	.632	.975	1.219	.8125-20 UNEF
17	1.469	.632	1.100	1.312	.9375-20 UNEF
19	1.594	.632	1.207	1.438	1.0625-18 UNEF
21	1.719	.602	1.332	1.562	1.1875-18 UNEF
23	1.844	.602	1.457	1.688	1.3125-18 UNEF
25	1.969	.602	1.582	1.812	1.4375-18 UNEF

All dimensions for reference only.

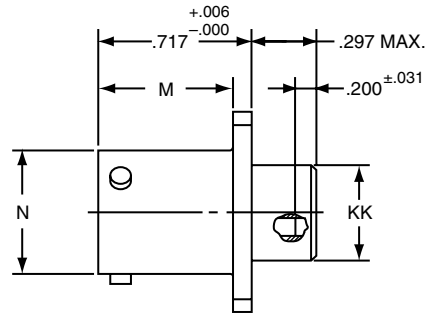
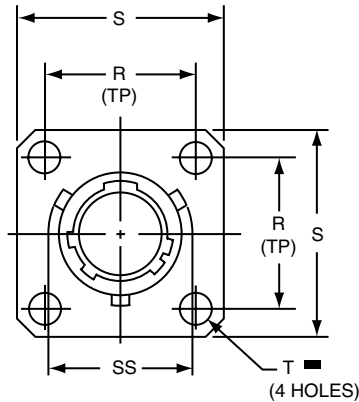
Box Mounting Receptacle (Back Panel Mounting)

Military (MS27496 & MS27505), Commercial (LJT02R & LJTP02R)

MILITARY
MS27496E
MS27505E

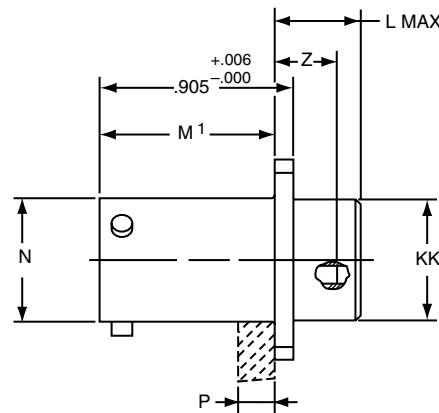
Commercial

LJT02RE
LJTP02RE (Back Panel Mounting)



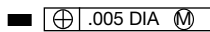
Commercial
LJT02RE-XX-XXX

Military
MS27496E



Commercial
LJTP02RE-XX-XXX

Military
MS27505E



Shell Size	L Max.	M $\pm .000$ -.005	M' $\pm .001$ -.005	N Dia $\pm .001$ -.005	P Max. Panel Thickness	R (TP)	S $\pm .011$ -.010	T Dia. $\pm .005$	Z $\pm .031$	KK Dia. $\pm .006$ -.005	SS Dia. $\pm .000$ -.016
9	.203	.632	.820	.572	.234	.719	.938	.128	.107	.433	.662
11	.203	.632	.820	.700	.234	.812	1.031	.128	.107	.557	.810
13	.203	.632	.820	.850	.234	.906	1.125	.128	.107	.676	.960
15	.203	.632	.820	.975	.234	.969	1.219	.128	.107	.801	1.085
17	.203	.632	.820	1.100	.234	1.062	1.312	.128	.107	.926	1.210
19	.203	.632	.820	1.207	.234	1.156	1.438	.128	.107	1.032	1.317
21	.234	.602	.790	1.332	.204	1.250	1.562	.128	.137	1.157	1.442
23	.234	.602	.790	1.457	.204	1.375	1.688	.147	.137	1.282	1.567
25	.234	.602	.790	1.582	.193	1.500	1.812	.147	.137	1.407	1.692

All dimensions for reference only.

Jam Nut Receptacle - Crimp

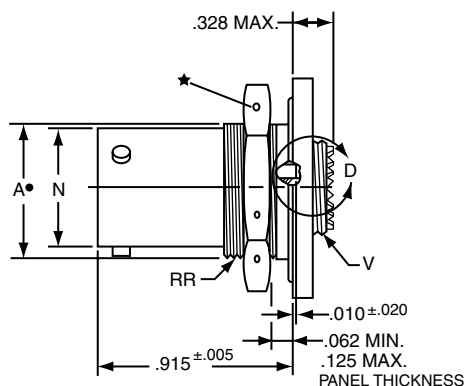
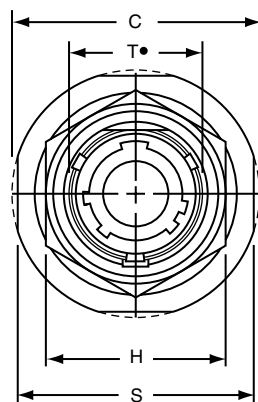
Military (MS27468), Commercial (LJT07R)

38999

PART NUMBER BUILDER Page 113-117

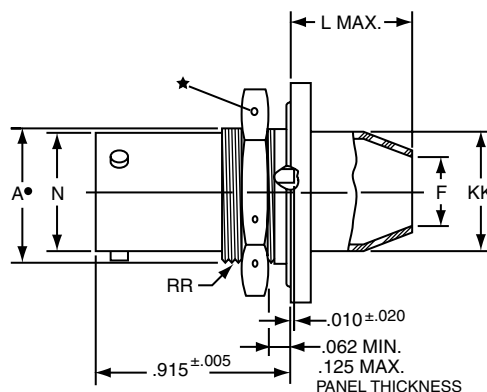
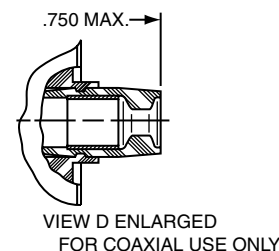
MILITARY
MS27468E
MS27468P
MS27468T

Commercial
LJT07RE, LJT07RP, LJT07RT



Commercial
LJT07RE-XX-XXX
LJT07RT-XX-XXX

Military
MS27468E
MS27468T



Commercial
LJT07RP-XX-XXX

Military
MS27468P

- ★ .059 Dia. Min. 3 lockwire holes.
Formed lockwire hole design (6 holes) is optional.
- + "D" shaped mounting hole dimensions.

Shell Size	A+ +.000 -.010	C Max.	F Dia. ±.010	H Hex +.017 -.016	L Max.	N +.001 -.005	S ±.016	T+ +.010 -.000	V Thread Class 2A (Plated)	KK Dia. Max.	RR Thread Class 2A (Plated)
9	.669	1.199	.444	.875	.625	.572	1.062	.697	.4375-28 UNEF	.608	.6875-24 UNEF
11	.769	1.386	.558	1.000	.625	.700	1.250	.822	.5625-24 UNEF	.734	.8125-20 UNEF
13	.955	1.511	.683	1.188	.625	.850	1.375	1.007	.6875-24 UNEF	.858	1.0000-20 UNEF
15	1.084	1.636	.808	1.312	.625	.975	1.500	1.134	.8125-20 UNEF	.984	1.1250-18 UNEF
17	1.208	1.761	.909	1.438	.625	1.100	1.625	1.259	.9375-20 UNEF	1.110	1.2500-18 UNEF
19	1.333	1.949	1.034	1.562	.656	1.207	1.812	1.384	1.0625-18 UNEF	1.234	1.3750-18 UNEF
21	1.459	2.073	1.159	1.688	.750	1.332	1.938	1.507	1.1875-18 UNEF	1.360	1.5000-18 UNEF
23	1.580	2.199	1.284	1.812	.750	1.457	2.062	1.634	1.3125-18 UNEF	1.484	1.6250-18 UNEF
25	1.709	2.323	1.409	2.000	.750	1.582	2.188	1.759	1.4375-18 UNEF	1.610	1.7500-18 UNS

All dimensions for reference only.

Straight Plug - Crimp

Military (MS27467), Commercial (LJT06R)

38999

III
Dualok
II
I
SJT
Access
Aquacon

Series I

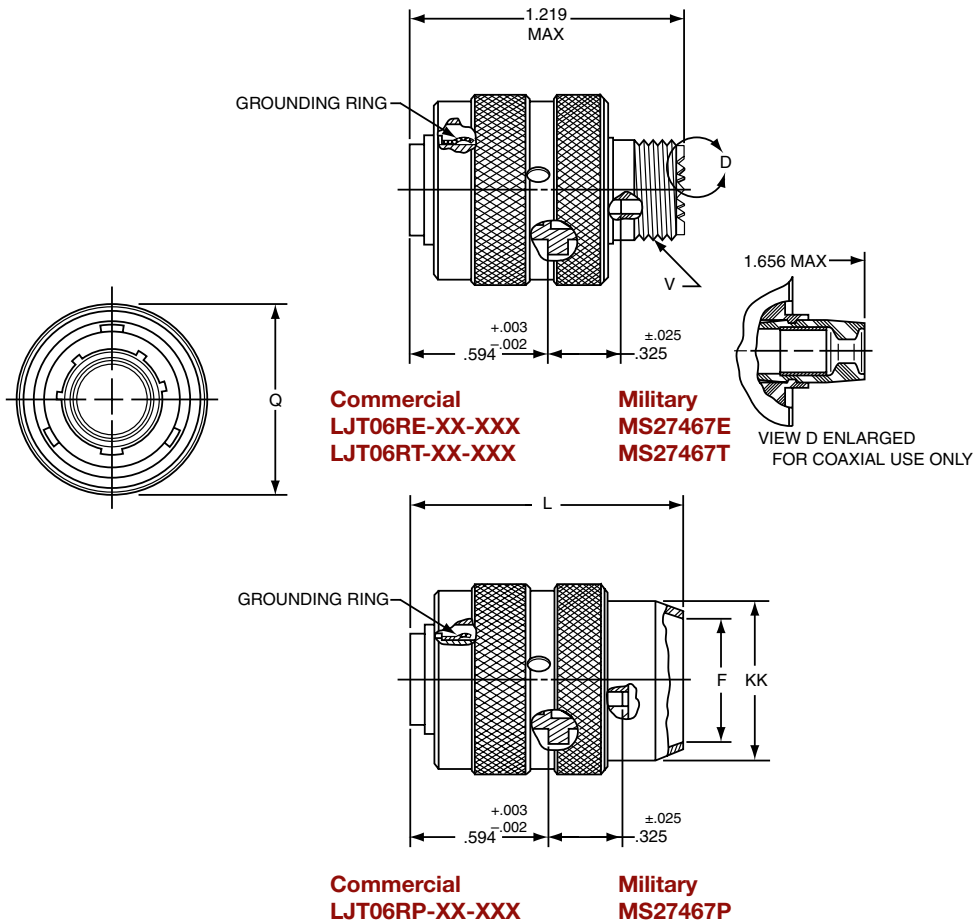
C

PART NUMBER BUILDER Page 113-117

MILITARY
MS27467E
MS27467P
MS27467T

Commercial

LJT06RE, LJT02RP, LJT02RT



Shell Size	F Dia. ±.010	L Max.	Q Max.	V Thread Class 2A (Plated)	KK Dia. Max.
9	.444	1.531	.844	.4375-28 UNEF	.608
11	.528	1.531	.969	.5625-24 UNEF	.734
13	.683	1.531	1.141	.6875-24 UNEF	.858
15	.808	1.531	1.266	.8125-20 UNEF	.984
17	.909	1.531	1.391	.9375-20 UNEF	1.110
19	1.034	1.531	1.500	1.0625-18 UNEF	1.234
21	1.159	1.625	1.625	1.1875-18 UNEF	1.360
23	1.284	1.625	1.750	1.3125-18 UNEF	1.484
25	1.409	1.625	1.875	1.4375-18 UNEF	1.610

All dimensions for reference only.

Wall Mounting Receptacle - Hermetic

Military (MS27469), Commercial (LJT00)

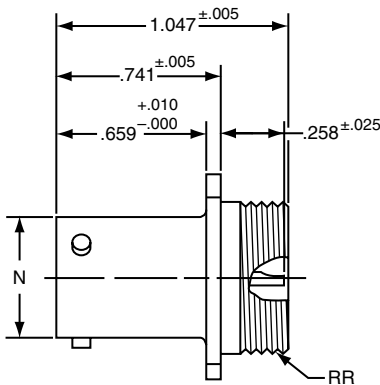
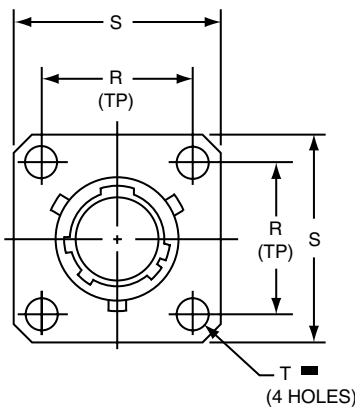
38999

PART NUMBER BUILDER Page 113-117

MILITARY
MS27469Y

Commercial
LJT00H, LJT00Y
LJTS00Y

Series I



Commercial

* LJT00H-XX-XXX
** LJT00Y-XX-XXX
*** LJTS00Y-XX-XXX

Military

MS27469YXXD
MS27469YXXE

⊕ .005 DIA M

- * Long Junior Tri-Lock
- ** Interfacial seal wafer
- *** High temperature version, interfacial seal wafer with stainless steel shell

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

All dimensions for reference only.

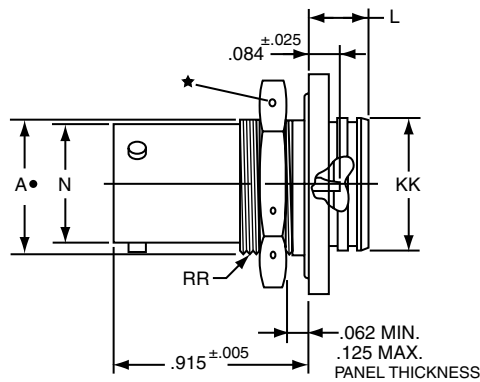
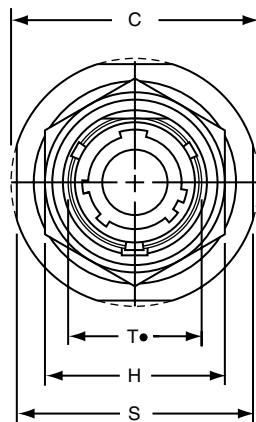
Jam Nut Receptacle - Hermetic

Military (MS27470) Commercial (LJT07 & LJTS07)

MILITARY
MS27470Y

Commercial

LJT07H, LJT07Y
LJTS07Y



Commercial
* LJT07H-XX-XXX
** LJT07Y-XX-XXX
*** LJTS07Y-XX-XXX

Military
MS27470YXXD
MS27470YXXE

- ★ .059 Dia. Min. 3 lockwire holes.
Formed lockwire hole design
(6 holes) is optional.
- + "D" shaped mounting hole dimensions.
- * *Long Junior Tri-Lock
- ** Interfacial seal wafer
- *** High temperature version, interfacial seal wafer with stainless steel shell

Shell Size	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	.669	1.199	.875	.297	.572	1.062	.697	.642	.6875-24 UNEF
11	.769	1.386	1.000	.297	.700	1.250	.822	.766	.8125-20 UNEF
13	.955	1.511	1.188	.297	.850	1.375	1.007	.892	1.0000-20 UNEF
15	1.084	1.636	1.312	.297	.975	1.500	1.134	1.018	1.1250-18 UNEF
17	1.208	1.761	1.438	.297	1.100	1.625	1.259	1.142	1.2500-18 UNEF
19	1.333	1.949	1.562	.328	1.207	1.812	1.384	1.268	1.3750-18 UNEF
21	1.459	2.073	1.688	.328	1.332	1.938	1.507	1.392	1.5000-18 UNEF
23	1.580	2.199	1.812	.328	1.457	2.062	1.634	1.518	1.6250-18 UNEF
25	1.709	2.328	2.000	.328	1.582	2.188	1.759	1.642	1.7500-18 UNS

All dimensions for reference only.

Solder Mounting Receptacle - Hermetic

Military (MS27471), Commercial (LJTI & LJTSI)

38999

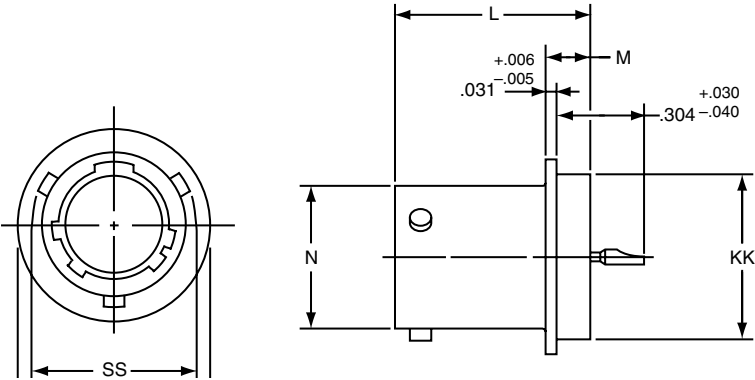
III
Dualok
II
I
SJT
Access
Aquacon

PART NUMBER BUILDER Page 113-117

MILITARY
MS27471Y

LJTIH, LJTIY
LJTSIY

Commercial



Commercial

* LJTIH-XX-XXX
** LJTIY-XX-XXX
*** LJTSIY-XX-XXX

Military

MS27471YXXD
MS27471YXXE

- * Long Junior Tri-Lock
- ** Interfacial seal wafer
- *** High temperature version, interfacial seal wafer with stainless steel shell

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

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

Series I

C

Wall Mounting Receptacle - Solder

Military (MS20026), Commercial (LJT00)

PART NUMBER BUILDER Page 113-117

Military qualified to MIL-DTL-27599

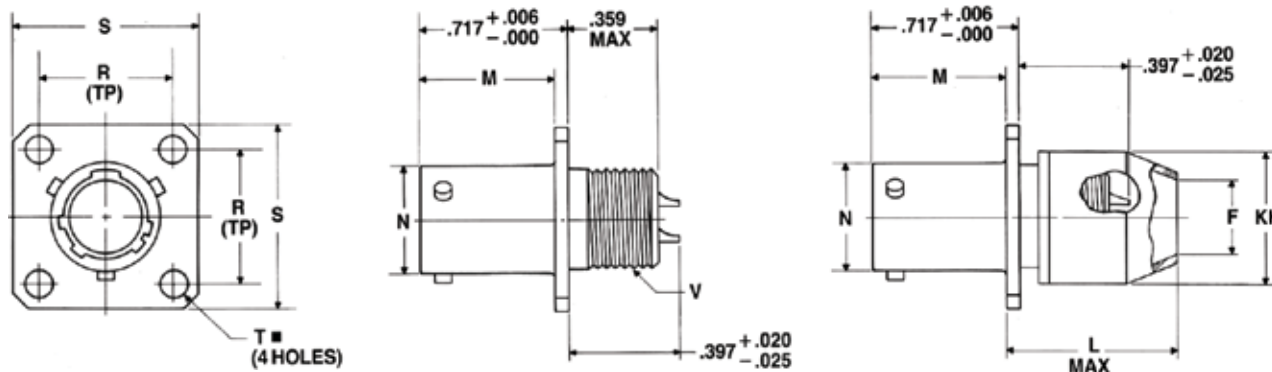
MILITARY
MS20020T

Commercial
LJT00T, LJT00C, LJT00P

38999

III
Dualok
II
I
SJT
Access
Aquacon

Series I



Commercial
LJT00T-XX-XXX
LJT00C-XX-XXX

Military
MS20026T

Commercial
LJT00P-XX-XXX

■ $\oplus$.005 DIA (M)

NOTE: For availability of back panel mounting types, check with nearest sales office or call Amphenol Aerospace.

Shell Size	F Dia.	L Max.	M +.000 -.005	N +.001 -.005	R (TP)	S ±.016	T Dia. ±.005	V Thread Class 2A UNEF (Plated)	KK Dia. Max.
9	.327	.625	.632	.572	.719	.938	.128	.4375-28	.608
11	.444	.625	.632	.700	.812	1.031	.128	.5625-24	.734
13	.558	.625	.632	.850	.906	1.125	.128	.6875-24	.858
15	.683	.625	.632	.975	.969	1.219	.128	.8125-20	.984
17	.808	.625	.632	1.100	1.062	1.312	.128	.9375-20	1.110
19	.909	.625	.632	1.207	1.156	1.438	.128	1.0625-18	1.234
21	1.034	.703	.602	1.332	1.250	1.562	.128	1.1875-18	1.360
23	1.159	.703	.602	1.457	1.375	1.688	.147	1.3125-18	1.484
25	1.284	.703	.602	1.582	1.500	1.812	.147	1.4375-18	1.610

Line Receptacle - Solder

Military (MS20027), Commercial (LJT01)

38999

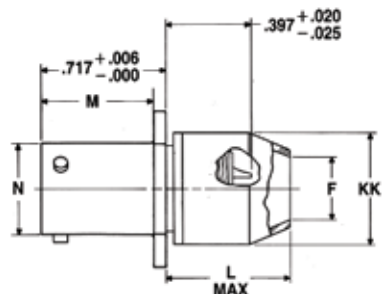
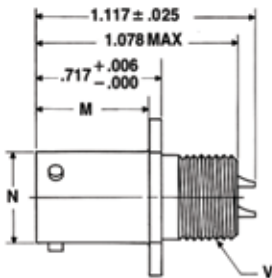
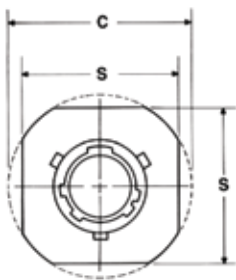
III
Dualok
II
I
SJT
Access
Aquacon

PART NUMBER BUILDER Page 113-117

Military qualified to MIL-DTL-27599

MILITARY
MS20027T

Commercial
LJT01T, LJT01C, LJT01P



Commercial
LJT01T-XX-XXX
LJT01C-XX-XXX

Military
MS20027T

Commercial
LJT01P-XX-XXX

Shell Size	C Max.	F Dia.	L Max.	M +.000 - .005	N +.001 - .005	S ±.016	V Thread Class 2A UNEF (Plated)	KK Dia. Max.
9	1.094	.327	.625	.632	.572	.938	.4375-28	.608
11	1.188	.444	.625	.632	.700	1.031	.5625-24	.734
13	1.281	.558	.625	.632	.850	1.125	.6875-24	.858
15	1.375	.683	.625	.632	.975	1.219	.8125-20	.984
17	1.469	.808	.625	.632	1.100	1.312	.9375-20	1.110
19	1.594	.909	.625	.632	1.207	1.438	1.0625-18	1.234
21	1.719	1.034	.703	.602	1.332	1.562	1.1875-18	1.360
23	1.844	1.159	.703	.602	1.457	1.688	1.3125-18	1.484
25	1.969	1.284	.703	.602	1.582	1.812	1.4375-18	1.610

Series I

C

Straight Plug -Solder

Military (MS20028), Commercial (LJT06)

PART NUMBER BUILDER Page 113-117

MILITARY

MS20028T

LJT06T, LJT06C, LJT06P,

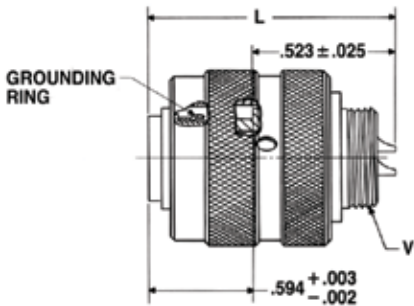
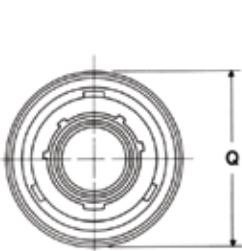
Commercial

Military qualified to MIL-DTL-27599

38999

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

Series I



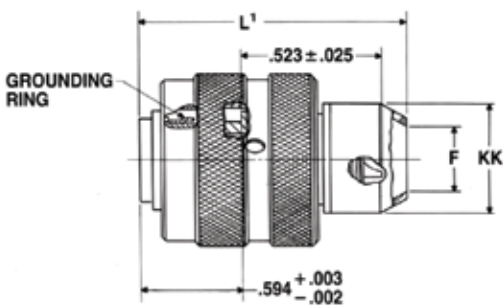
Commercial

LJT06T-XX-XXX

LJT06C-XX-XXX

Military

MS20028T



Commercial

LJT06P-XX-XXX

Shell Size	F Dia.	L Max.	L' Max.	Q Max.	V Thread Class 2A UNEF (Plated)	KK Dia. Max.
9	.327	1.128	1.488	.844	.4375-28	.608
11	.444	1.128	1.488	.969	.5625-24	.734
13	.558	1.128	1.488	1.141	.6875-24	.858
15	.683	1.128	1.488	1.266	.8125-20	.984
17	.808	1.128	1.488	1.391	.9375-20	1.110
19	.909	1.128	1.488	1.500	1.0625-18	1.234
21	1.034	1.128	1.566	1.625	1.1875-18	1.360
23	1.159	1.128	1.566	1.750	1.3125-18	1.484
25	1.284	1.191	1.644	1.875	1.4375-18	1.610

Jam Nut Receptacle - Solder

Military (MS20029), Commercial (LJT07)

38999

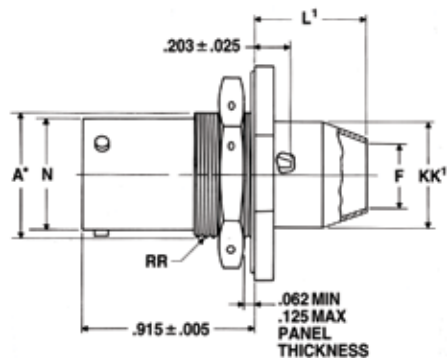
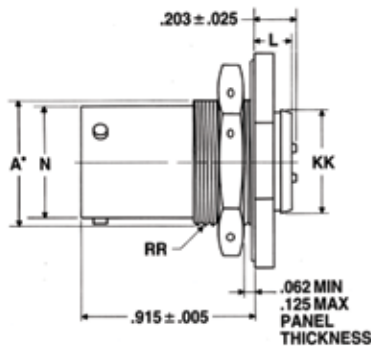
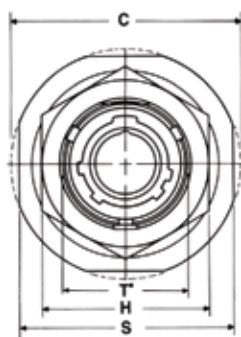
PART NUMBER BUILDER Page 113-117

Military qualified to MIL-DTL-27599

MILITARY
MS20029P

Commercial
LJT07P, LJT07T

Series I



Commercial
LJT07T-XX-XXX

Commercial Military
LJT07P-XX-XXX MS20029P

+ "D" shaped mounting hole dimensions

Shell Size	A+ +.000 -.010	C Max.	F Dia.	H Hex +.017 -.016	L Max.	L' Max.	N +.001 -.005	S ±.016	T+ +.010 -.000	KK +.011 -.000	KK Dia. Max.	RR Thread Class 2A (Plated)
9	.669	1.199	.327	.875	.234	.625	.572	1.062	.697	.516	.608	.6875-24UNEF
11	.769	1.386	.444	1.000	.234	.625	.700	1.250	.822	.642	.734	.8125-20UNEF
13	.955	1.511	.558	1.188	.234	.625	.850	1.375	1.007	.766	.858	1.0000-20UNEF
15	1.084	1.636	.683	1.312	.234	.625	.975	1.500	1.134	.892	.984	1.1250-18UNEF
17	1.208	1.761	.808	1.438	.234	.625	1.100	1.625	1.259	1.018	1.110	1.2500-18UNEF
19	1.333	1.949	.909	1.562	.266	.625	1.207	1.812	1.384	1.142	1.234	1.3750-18UNEF
21	1.459	2.073	1.034	1.688	.266	.656	1.332	1.938	1.507	1.268	1.360	1.5000-18UNEF
23	1.580	2.199	1.159	1.812	.266	.750	1.457	2.062	1.634	1.392	1.484	1.6250-18UNEF
25	1.709	2.323	1.284	2.000	.266	.750	1.582	2.188	1.759	1.518	1.610	1.7500-18UNS

All dimensions for reference only.

C

PCB Wall Mounting Receptacle (Back Panel Mounting)

Commercial (LJTPQ00)

38999

III

Dualok

II

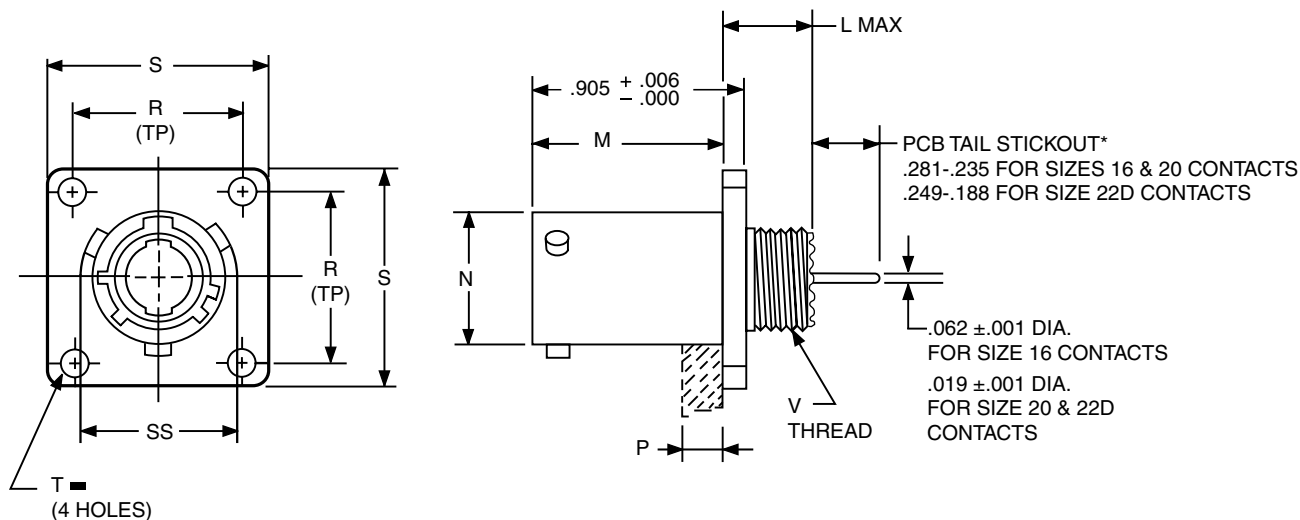
I

SJT

Access

Aquacon

Series I



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying
See chart below	88/91	569	701	-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 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
------------	--------------------------------------

5. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 for alternate rotation letters to use.

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

■ (+) .005 DIA (M)

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.

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

Commercial (LJTPQ00)

38999

III

Dualok

II

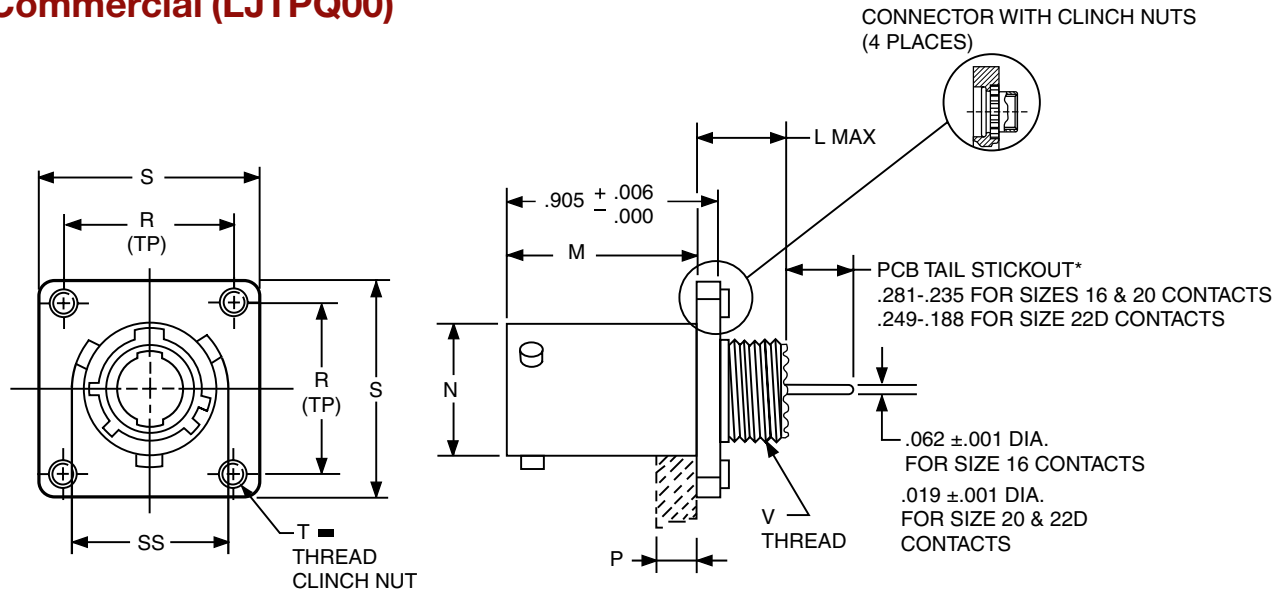
I

SJT

Access

Aquacon

Series I



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying
See chart below	88/91	628	701	-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 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 for alternate rotation letters to use.

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

■ (+) .005 DIA (M)

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.

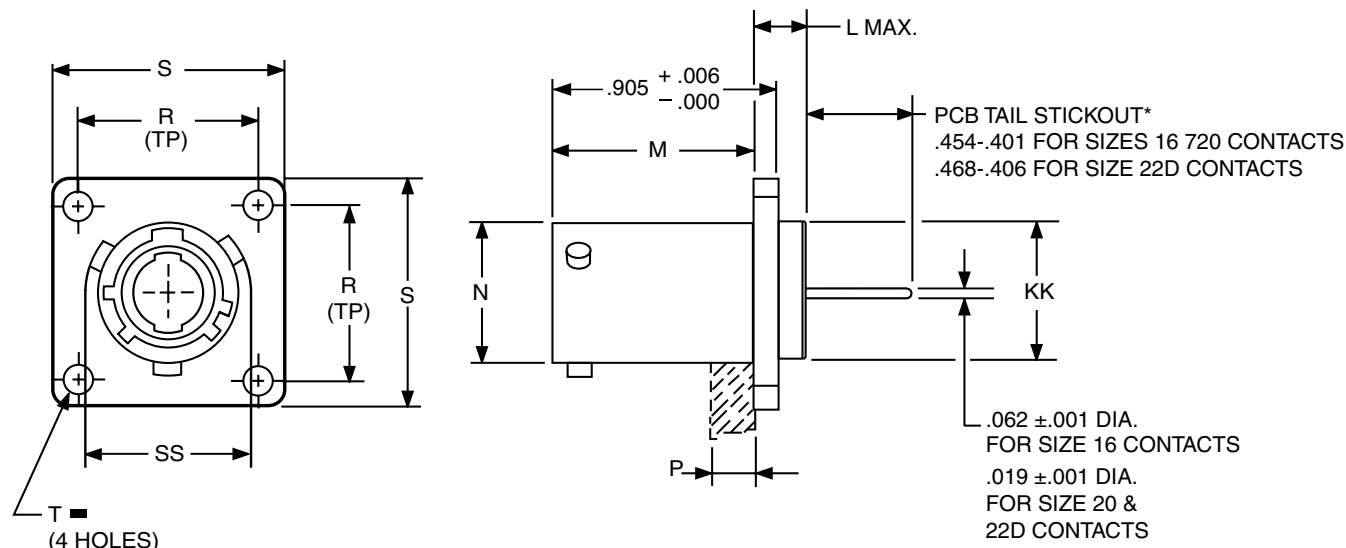
*Consult Amphenol for more information on ordering connectors with clinch nuts. There is also a 3mm clinch nut available (part number 88/91-628401/409)

Most common options are shown; other options are available.

PCB Box Mounting Receptacle (Back Panel Mounting)

Commercial (LJTP02)

38999



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying
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 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
------------	--------------------------------------

5. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 for alternate rotation letters to use.

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

■ (+) .005 DIA (M)

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.

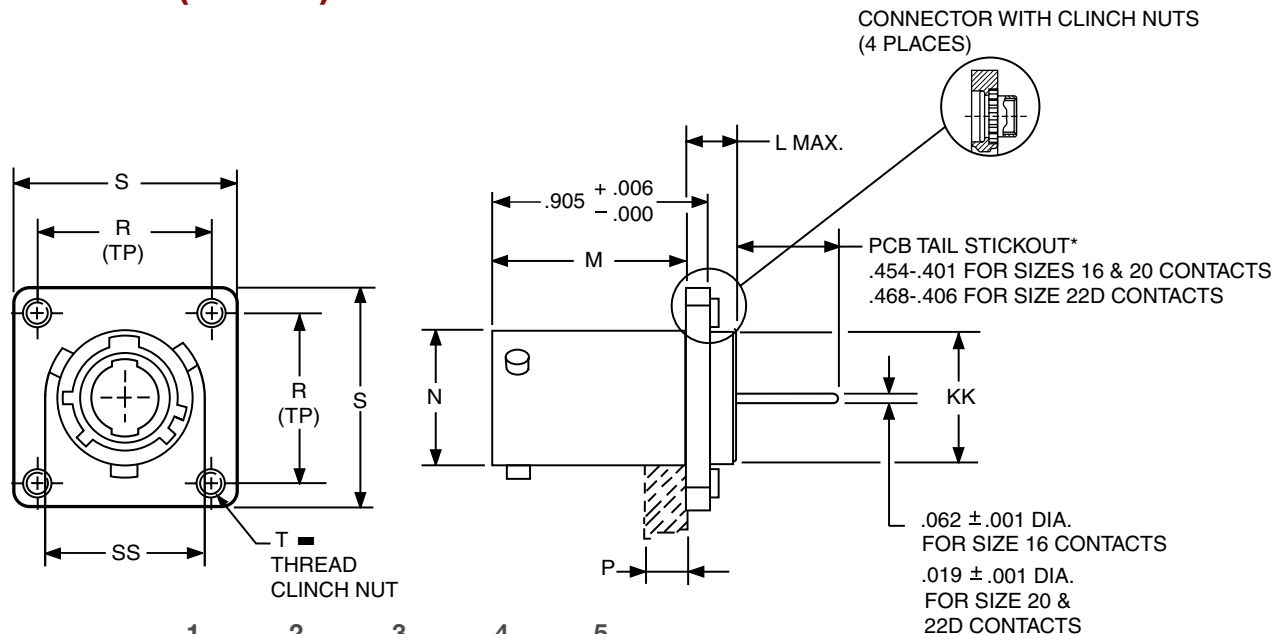
III
Dualok
II
I
SJT
Access
Aquacon

Series I

C

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

Commercial (LJTP02)



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying
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 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
------------	--------------------------------------

5. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 for alternate rotation letters to use.

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

■ (+) .005 DIA (M)

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.

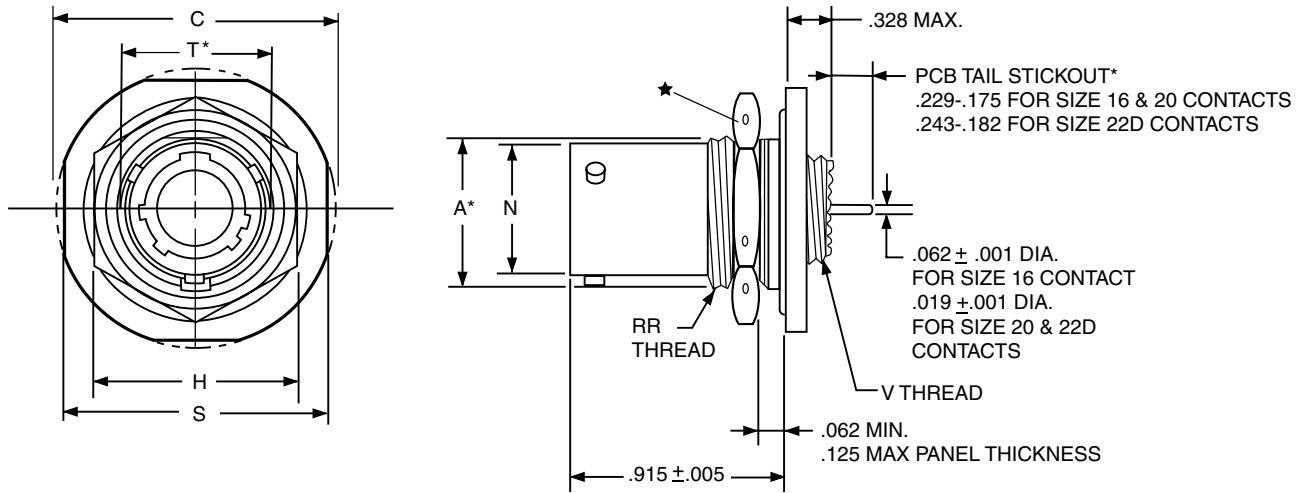
PCB Jam Nut Receptacle

Commercial (LJT07)

38999

III
Dualok
II
I
SJT
Access
Aquacon

Series I



	1.	2.	3.	4.	5.
PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying
See chart below	88/91	569	721	-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 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. CONTACT TYPE/ KEYING POSITIONS:

Refer to page 117 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

PCB Hermetic Wall Mounting Receptacle

Commercial (LJT00)

38999

III

Dualok

II

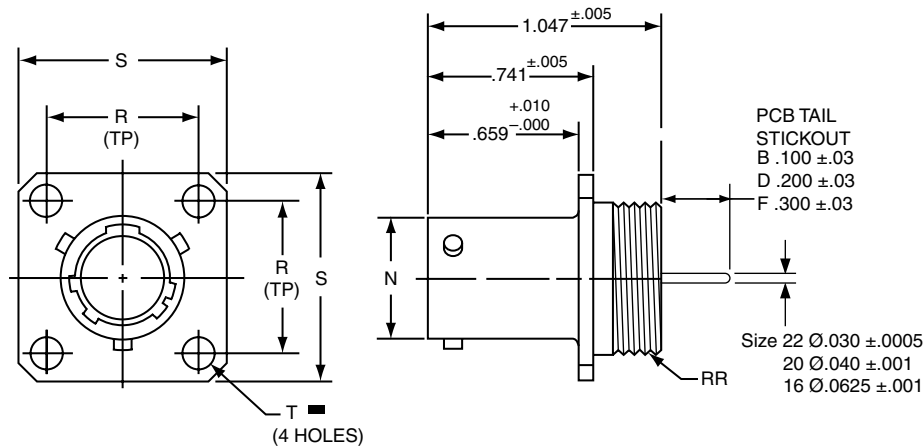
I

SJT

Access

Aquacon

Series I



	1.	2.	3.	4.	5.	6.
PART #	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying Position	Shell Finish	Tail Length
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. SELECT AN INSERT ARRANGEMENT:

Refer to insert availability chart on page 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

4. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 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:

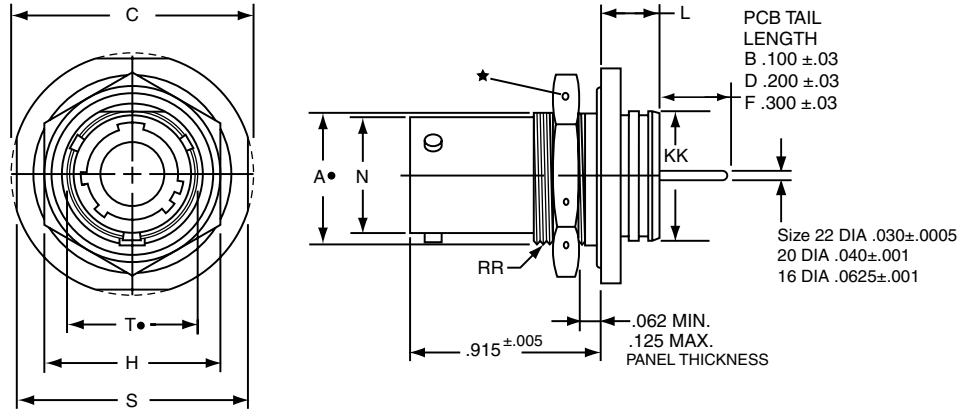
B	.100±.03
D	.200±.03
F	.300±.03

⊕ .005 DIA (M)

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.

C



	1.	2.	3.	4.	5.	6.
PART # See chart below	Base Number 10-626	Coded Shell Size 411	Insert Arrg. -35	Contact Type/ Alt. Keying Position P	Shell Finish 1	Tail Length 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 **411-419**, designates size 9-25 shell size. Example: **411** = Size 9 Shell

3. SELECT AN INSERT ARRANGEMENT:

Refer to insert availability chart on page 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
------------	--------------------------------------

4. CONTACT TYPE/ KEYING POSITIONS:

Refer to page 117 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

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

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	10-626411 -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.

PCB Hermetic Solder Mounting Receptacle

Commercial (LJTI)

38999

III

Dualok

II

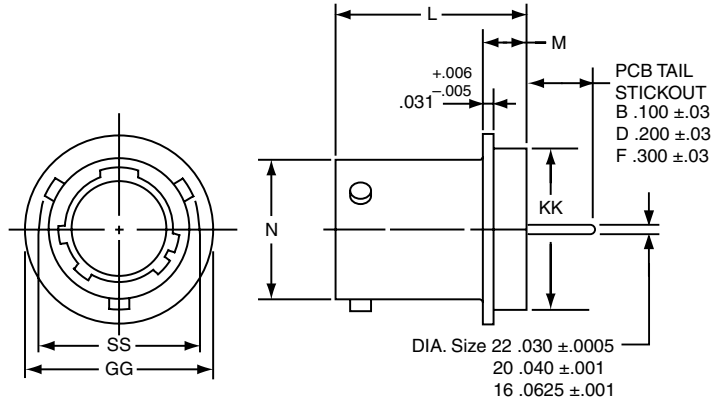
I

SJT

Access

Aquacon

Series I



	1.	2.	3.	4.	5.	6.
PART #	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying Position	Shell Finish	Tail Length
See chart below	10-626	421	-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 **421-429**, designates size 9-25 shell size. Example: **421** = Size 9 Shell

3. SELECT AN INSERT ARRANGEMENT:

Refer to insert availability chart on page 2-5 and pin-out illustrations on pages 14-28.

-35	Designates Insert Arrangement Number
------------	--------------------------------------

4. CONTACT TYPE/ALTERNATE KEYING POSITIONS:

Refer to page 117 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

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

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

Series I, LJT Breakaway Fail Safe

Lanyard Release Plug How to Order, cont.

HOW TO ORDER-MILITARY FAIL SAFE MS27661

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrg.	6. Contact Style	7. Alternate Position
MS27661	T	17	B	35	P	A

1. MS27661 NUMBER

MS Number designates MIL-DTL-38999, Series I
LJT Lanyard Release Plug

2. SELECT A SERVICE CLASS

E	For environmental crimp applications (inactive for new design)
T	For environmental crimp applications with serrations on rear threads of shell

3. SELECT A SHELL SIZE

MIL-DTL-38999, sizes 11 through 25, see chart on page 140.

4. SELECT A FINISH

B	Designates corrosion resistant olive drab cadmium plated aluminum, 500 hour extended salt spray, EMI shielding effectiveness -50dB @ 10 GHz specification min., 175°C
F	Designates electroless nickel plated aluminum, 48 hour salt spray, EMI shielding effectiveness -65dB @10 GHz500 specification min., 200°C

These are standard finishes. Consult Amphenol
Aerospace for variations.

5. SELECT AN INSERT ARRANGEMENT

MIL-DTL-38999, see insert identification chart on page 140.

6. SELECT A CONTACT STYLE

P	Designates Lanyard Release plug with pin contacts
S	Designates Lanyard Release plug with socket contacts

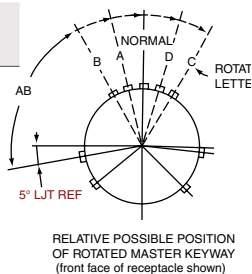
7. ALTERNATE KEYING POSITION

For alternate position of
connector (to prevent cross-mating)
see LJT key/keyway rotation below.
(No letter is required for normal)

LJT 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°



HOW TO ORDER-COMMERCIAL FAIL SAFE 88-5388 OR 91-5388

1. Finish	2. Connector Type Identification	3. Shell Size & Insert Arrangement	4. Lanyard Length Code	5. Contact Type Alternate Rotation of Insert
88	5388	29	40	P

1. SELECT A FINISH

88	Designates corrosion resistant olive drab cadmium plate over nickel, 500 hour extended salt spray, EMI -50dB @ 10 GHz specification min., 175°C
91	Designates electroless nickel plated aluminum, optimum EMI shielding effectiveness -65dB @ 10 GHz specifi- cation min., 48 hour salt spray, 200°C

These are standard finishes. Consult Amphenol Aerospace,
Sidney, NY for variations.

2. CONNECTOR TYPE IDENTIFICATION

5388	Designates MIL-DTL-38999, Series I LJT Lanyard Release Plug
-------------	--

3. SELECT A SHELL SIZE & INSERT ARRANGEMENT

Shell sizes are MIL-DTL-38999, Series III from sizes 11 thru 25. The basic
part number selected specifies the insert arrangement. See Table I (page
140) for coded part number that correlates to insert arrangement.

4. SELECT A LANYARD LENGTH CODE

See Table II (page 140) for lanyard length code number.

5. SELECT A CONTACT TYPE/ALTERNATE ROTATION OF INSERT

P	Designates Lanyard Release plug with pin contacts
S	Designates Lanyard Release plug with socket contacts

When an alternate position of the connector is required to prevent cross-
mating, a different letter (other than P or S) is used. See
alternate positioning for LJT (to your left), then convert to Amphenol com-
mercial coding by the following chart below.

Pin Contacts		Socket Contacts	
MS Letter	Amphenol Letter	MS Letter	Amphenol Letter
P	P (normal)	S	S (normal)
PA	E	SA	F
PB	R	SB	T
PC	W	SC	X
PD	Y	SD	Z

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III

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Series I

C

Series I, LJT Breakaway Fail Safe

Lanyard Release Plug Insert Availability

38999

INSERT AVAILABILITY

Shell Size / Insert Arrangement	Service Rating	Total Contacts	Contact Size						
			22D	20	16	12	12 Coax	8 Coax*	8 Twinax
11-2	I	2			2				
11-35	M	13	13						
11-98	I	6		6					
13-4	I	4			4				
13-8	I	8		8					
13-35	M	22	22						
13-98	I	10		10					
15-5	II	5			5				
15-15	I	15		14	1				
15-18	I	18		18					
15-19	I	19		19					
15-35	M	37	37						
15-97	I	12		8	4				
17-6	I	6				6			
17-8	II	8			8				
17-26	I	26		26					
17-35	M	55	55						
17-99	I	23		21	2				
19-11	II	11			11				
19-32	I	32		32					
19-35	M	66	66						
21-11	I	11				11			
21-16	II	16			16				
21-35	M	79	79						
21-39	I	39		37	2				
21-41	I	41		41					
23-21	II	21			21				
23-35	M	100	100						
23-53	I	53		53					
23-54	M	53	40		9	4			
23-55	I	55		55					
25-4	I	56		48	8				
25-19	I	19				19			
25-20	N	30		10	13		4		3
25-24	I	24			12	12			
25-29	I	29			29				
25-35	M	128	128						
25-43	I	43		23	20				
25-46	I	46		40	4			2*	
25-61	I	61		61					

LJT Lanyard Separation Forces

Shell Size	Straight Plug (lbs. max.)	15 Degree Pull (lbs. Max.)
11 13 15	45	55
17 19 21 23 25	90	100

* For RG 180/U and RG 195/U cables only. (Check Amphenol Aerospace, Sidney, NY for other cable applications). For availability of other insert arrangements and accessories consult Amphenol Aerospace.

TABLE I

INSERT ARRANGEMENT CODE

Basic Part Number	MIL-DTL-38999 Insert Arrangement
88/91-538808	11-99
06	11-35
07	11-98
10	13-4
11	13-8
13	13-98
14	13-35
18	15-5
22	15-18
19	15-19
20	15-35
27	17-6
28	17-8
29	17-26
30	17-35
31	17-99
37	19-11
39	19-32
40	19-35
47	21-11
48	21-16
49	21-35
50	21-41
51	21-39
57	23-21
58	23-35
59	23-53
60	23-55
66	25-19
74	25-4
67	25-29
68	25-35
69	25-43
70	25-61
71	25-46
72	25-2

TABLE II

LANYARD LENGTH CODES

Lanyard Length (in.) ±.250	MS	Commercial Code
4.000		40
4.250		41
4.500		42
4.750		43
5.000		50
5.250		51
5.500		52
5.750		53
6.000	No	60
6.250	Code	61
6.500		62
6.750	Std.	63
7.000	Length	70
7.250	6.250	71
7.500		72
7.750		73
8.000		80
8.250		81
8.500		82
8.750		83
9.000		90
9.250		91
9.500		92
9.750		93

Series I, LJT Breakaway Fail Safe

Quick-Disconnect with Axial Pull of Lanyard

Amphenol LJT Breakaway Fail Safe Connectors provide unequalled performance in environments requiring instant disengagement.

Designed to provide quick disconnect of a connector plug and receptacle with an axial pull on the lanyard, the “Breakaway” Fail Safe connector family offers a wide range of electrical and mechanical features:

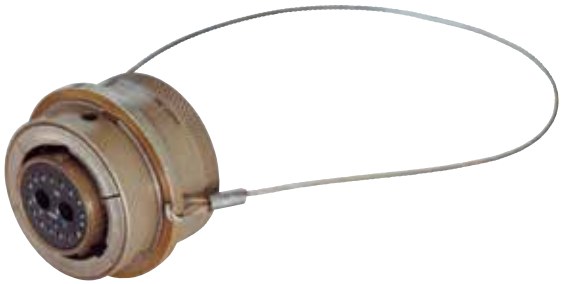
- Instant decoupling and damage free separation
- Completely intermateable with standard LJT receptacles
- Inventory support commonality through the use of standard insert arrangements and contacts

Breakaway un-mating is initiated by applying a pull force to the lanyard which causes the operating sleeve on the plug to move away from the receptacle. Coupling segments on the plug then move away from the mating receptacle while expanding, thus releasing the receptacle. After completion of the un-mating sequence, spring compression returns the sleeve and segments to their original positions. Un-mating of the plug may also be accomplished by normal rotation of the coupling ring without affecting the breakaway capability.

The LJT Breakaway Fail Safe connector features which provide EMI EMP shielding in excess of MIL-DTL-38999 Series I requirements:

- Solid metal-to-metal coupling
- EMI grounding fingers
- Conductive finishes

Contact Amphenol Aerospace for more information on breakaway, quick-disconnect connectors. Other Amphenol cylindrical families (MIL-DTL-38999 Series III, MIL-DTL-26482, MIL-DTL-83723) also offer breakaway quick-disconnect connectors.



LJT Breakaway Fail Safe

In addition to standard Breakaway connectors, Amphenol also manufactures custom breakaway connectors including those with:

- Increased pull-force capability
- Custom lanyard lengths and backshells
- Low force separation capabilities
- Low insertion/separation force contacts
- Non-cadmium finishes

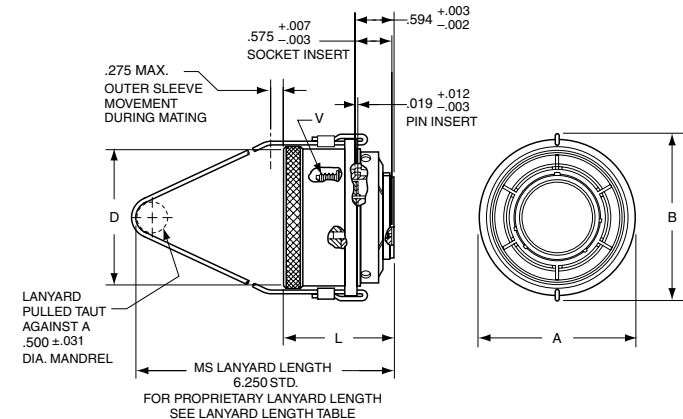
Custom JT Series Breakaway designs have been developed for special applications; however the LJT Series is recommended over the JT Series for the quick-disconnect breakaway style.

Lanyard Release Plug - Fail Safe

Military (MS27661)

Commercial (LJT 88-5388/91-5388)

To complete order number see page 140.



Shell Size	A Dia. Max.	B Max.	D Max. Accessory Dia.	L Max.	V Thread UNEF Class 2A (Plated)
11	1.393	1.797	.740	1.703	.5625-24
13	1.558	1.969	.926	1.703	.6875-24
15	1.669	2.078	1.051	1.703	.8125-20
17	1.797	2.203	1.176	1.703	.9375-20
19	1.926	2.323	1.300	1.703	1.0625-18
21	2.054	2.469	1.426	1.703	1.1875-18
23	2.183	2.594	1.551	1.703	1.3125-18
25	2.293	2.703	1.676	1.766	1.4375-18

All dimensions for reference only.