THE DATASHEET OF

MS27499E14F15P

Amphenol Aerospace

MIL-DTL-38999 Series I LJT

Components

Shell components are impact extruded or machined bar stock aluminum. Standard plating on shell components is cadmium over nickel. Many finishes are optional (see "Specifications" page 19). Hermetic seal receptacles are available in carbon steel or stainless steel shells. Dependable 5 key/keyway polarization with bayonet lock coupling is incorporated to aid and assure positive mating.

Insert material is a rigid dielectric with excellent electrical characteristics, providing durable protection for molded-in solder type contacts. Contrasting letter or number designations are used on insert faces.

A fluorinated silicone interfacial seal wafer is featured on the mating face of "crimp type pin" inserts. This assures complete electrical isolation of pins when connector halves are mated. In addition, a main joint gasket is installed in the receptacle for moisture sealing between connector halves. Both features are also available for hermetic receptacles.

Contacts

Maximum design flexibility is built into the JT/LJT Series, with a minimum of 2 to a maximum of 128 circuits per connector in a wide variety of contact arrangements. Contacts are available in sizes 8, 10, 12, 16, 20, 22, 22D and 22M with standard 50 micro inch minimum gold plating (100 micro inches optional). All socket contacts are probe proof. Crimp type rear removable contacts are featured in JT-R and LJT-R connectors. Solder termination contacts are also available, as well as PCB, wire wrap, thermocouple, fiber optic, coaxial, triaxial and twinax contact options.

Optional Features

High temperature capability of 392°F is available only in JTS or LJTS crimp type connectors. High temperature versions feature gold plated contacts, high temperature shell plating, stainless steel coupling nut spring, and epoxy inserts/fluorinated silicone grommet combination. Standard temperature capability for both solder and crimp is 302°F.

The JTN or LJTN type connectors are available for N_2O_4 resistance provided they are mated, and un-grommeted rear faces are suitably protected.

For complete listing and definition of connector types, shell styles and service classes, see How to Order, pages 62 & 63. For information on Fail-Safe Lanyard Release style plugs, see pages 94–96.

Where proof of high reliability and lot control is required, MS approved equivalents to most proprietary JT and LJT connectors are available.

* MIL-DTL-38999 Series I supersedes MIL-C-38999 Series I.
MIL-DTL-38999 Series II supersedes MIL-C-38999 Series II.

Features & Benefits

Amphenol® LJT and JT Series subminiature cylindrical connectors are qualified to MIL-DTL-38999*, Series I and II respectively. These connectors were developed to meet the needs of the aerospace industry, and provided the impetus for development of the MIL-C-38999 specifications, which has been superseded by MIL-DTL-38999. Meeting or exceeding MIL-DTL-38999 requirements, Amphenol® JT/LJT connectors feature:

- **Lightweight, Space Saving Design**
- **Contact Protection -** 100% scoop-proof LJT design prevents bent pins and short circuits during mating
- **Quick Positive Coupling** - 3 point bayonet lock system
- **Mismating Eliminated** - with 5 key/keyway design
- **Error Proof Alternate Positioning** - insured by different key/keyway locations
- **EMI Shielding** - grounding fingers standard in LJT Series; optional in JT Series
- **Nine Shell Sizes and a Variety of Shell Styles**
- **Contact Options** - size 8, 10, 12, 16, 20, 22M and 22D Crimp, Solder, PCB, Wire wrap, Coax, Twinax, Triax, Thermocouple, Fiber Optic and Filter
- **Fixed Solder Contacts** - Amphenol MIL-DTL-38999 Series I LJT and II JT, are available in solder versions as both Commercial and Military qualified to MIL-DTL-27599
- **Hermetic** - air leakage limited to 1 X 10^{-7} cm^3 per second optional
- **"Breakaway" Lanyard Release Style** - available in LJT plugs. Provides quick disconnect of the connector plug and receptacle with axial pull on the lanyard. See pages 94-96.
- **Inventory Support Commonality** - uses standard MIL-DTL-38999 contacts, insert arrangements and application tools.
- **RoHS Compliant Product Available -** Consult Amphenol Aerospace Operations.

MIL-DTL-38999 Series II JT

How to Order (Commercial)

Easy Steps to build a commercial part number... Series I and II

Commercial

1. Connector Type Series I	Type II	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrangement	5. Contact Type	6. Alternate Position	7. Strain Relief/Finish Variation Suffix	
LJT	JT	00	RT	9-35	P	B	SR	(014)

Step 1. Select a Connector Type

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
JT						

Series I	Series II	Designates
	JT	Standard Junior Tri-Lock
LJT		Long Junior Tri-Lock
LJTS	JTS	High temperature connector
LJTN	JTN	Chemical and fuel resistant
	JTL	Miniature mounting dimensions
	JTLN	Miniature mounting dimensions–Chemical resistant
	JTLS	Miniature mounting dimensions– High temperature
LJTPQ	JTPQ	Back panel mounted wall mounting receptacle
LJTP	JTP	Back panel mounted box mounting receptacle
LJTPN	JTPN	Back panel mounted–Chemical resistant
LJTPS	JTPS	Back panel mounted–High temperature
	JTG	Plug with grounding fingers*
	JTNG	Plug with grounding fingers* –Chemical resistant

*Grounding fingers standard on all LJT plugs

Step 2. Select a Shell Style

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
	00					

JT JTS JTN LJT LJTS LJTN	JTL JTLN JTLS	JTPQ JTP JTPN JTPS LJTPQ LJTP LJTPN LJTPS	JTG JTNG	Designates
00		00		Wall mount receptacle (Hermetic option)
01				Line mount receptacle (Non-hermetic)
02		02		Box mount receptacle (Hermetic Option except for LJT)
06			06	Straight plug (Non-hermetic)
07	07			Jam nut receptacle (Hermetic Option)
08			08	90 degree plug (Non-hermetic)
I				Solder mount receptacle (hermetic)

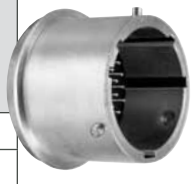
Series I LJT

Wall Mounting Receptacle

Line Receptacle

Jam Nut Receptacle

Straight Plug


Solder Mounting Receptacle

Lanyard Release Plug
(See pages 94-96 for ordering)

Series II JT

Wall Mounting Receptacle

Box Mounting Receptacle

Straight Plug

Jam Nut Receptacle

90° Plug

Solder Mounting Receptacle

Amphenol Aerospace

How to Order (Commercial)

Step 3. Select a Service Class

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
		RX				

JT	JTS	JTN	JTG JTNG	LJTS	LJT	Solder Contacts/Connectors
P		P			P	Potting applications: These connectors are supplied with a potting boot. All shells are designed with integral features to retain potting boots.
A		A	A			General Applications (JT only molded in solder type contacts)
A (SR)						Threaded rear design with strain relief†
C					C	Pressurized applications
C (SR)						Threaded rear design with strain relief.†
H	H				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.
Y	Y			Y	Y	Same as "H" with interfacial seal.
T					T	MIL-DTL-27599 applications-general duty, pressurized (receptacle only) (LJT only molded in solder type contacts)

JT JTN JTG JTNG JTPQ LJT JTPQ LJTPQ	JTS	JTLS	JTL JTLN LJTP	LJTS	JTPS LJTPS	Crimp Contacts/Connectors
RP	RP	RP	RP			Potting crimp applications. Supplied with spacer grommet and potting boot.††
RE	RE	RE	RE	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	RT		RT	RT	RT	Environmental applications. Supplied without rear accessories. Design provides serrations on rear threads of shells.

† Not applicable to box mounting style or LJT Series I.
†† Not applicable to box mounting style.

Step 4. Select a Shell Size & Insert Arrangement see page 6-9

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

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
			22-2			

Step 5. Select a Contact Type

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
				P		

	Designates
P	Pin Contacts
S	Socket Contacts

How to Order (Commercial)

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
					A	

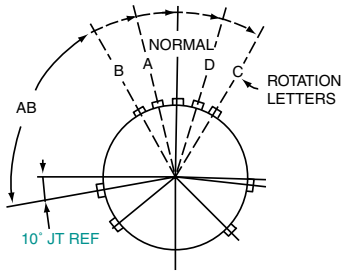
Step 6. Select an Alternate Keying Position

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

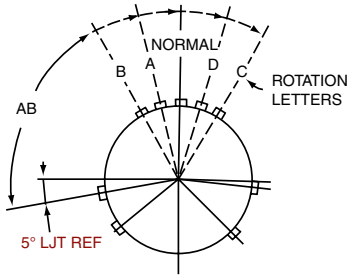
A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The AB angle for a given connector is the same whether it contains pins or sockets. Only the master key/keyway rotates in the shell, and the minor keys are fixed.

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.



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



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

JT Key/Keyway Rotation

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

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°

1. Connector Type	2. Shell Style	3. Service Class	4. Shell Size- Insert Arrg.	5. Contact Type	6. Alternate Position	7. Special Variations
						( )

Step 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 "A", "C" and "RE" (see step 3. Service Class)

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

Finish	Military Finish Data	Finish Suffix	Finish Plus "SR" Suffix
Cadmium plated nickel base 175°C	A		**(SR)**
Olive drab cadmium plate nickel base 175°C	B	**(014)**	**(386)**
Electroless nickel 200°C	F	**(023)**	**(424)**
Electroless nickel, space compatible 200°C		**(453)**	**(467)**
Anodic coating (Alumilite) 200°C	C	**(005)**	**(300)**
Chromate treated (Iridite 14-2) 125°C		**(011)**	**(344)**
Passivated steel 200°C	E	-	-
Nickel-PTFE 175°C		**(038)**	

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How to Order (Military)

Easy Steps to build a Military part number... Series I and II

Military

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Keying Position
MS27473	E	14	A	18	P	A

Step 1. Choose your Military Connector Type

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Position
MS27473						

Series II JT

MIL-DTL-38999	
MS27472	Crimp Wall Mount Receptacle
MS27497	Crimp Wall Mount Receptacle (Back Panel Mounting)
MS27499	Crimp Box Mounting Receptacle
MS27513	Crimp Box Mounting Receptacle with grommet
MS27508	Crimp Box Mounting Receptacle (Back Panel Mounting)
MS27473	Crimp Straight Plug
MS27484	Crimp Straight Plug with Grounding Fingers
MS27474	Crimp Jam Nut Receptacle
MS27500	Crimp 90° plug
MS27475	Hermetic Wall Mounting Receptacle
MS27476	Hermetic Box Mounting Receptacle
MS27477	Hermetic Jam Nut Receptacle
MS27478	Hermetic Solder Mounting Receptacle
MIL-DTL-27599	
MS27334	Solder Wall Mount Receptacle
MS27335	Solder Box Mounting Receptacle
MS27336	Solder Straight Plug
MS27337	Solder Jam Mounting Receptacle

Series I LJT

MIL-DTL-38999	
MS27466	Crimp Wall Mount Receptacle
MS27656	Crimp Wall Mount 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

Step 2. Select a Military Service Class

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Position
	E					

Military	Service Class
E	Environmental crimp applications. Supplied with a grommet and compression nut.† Can be supplied with strain relief integral with compression nut "RE(SR)". (JT Series only). Box Mount versions using spacer grommets are not environmental.
P	Potting crimp applications. Supplied with spacer grommet and potting boot.††
T	Environmental applications. Supplied without rear accessories. Design provides serrations on rear threads of shells. (Not applicable to solder type or hermetics)
Y	Hermetically interfacial seal

† Not applicable to box mounting style or LJT Series I.
†† Not applicable to box mounting style.

How to Order (Military)

Step 3 & 5. Select a Shell Size and Insert Arrangement from Pages 6-9

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

Shell Size & Insert Arrangement are on pages 6-9. First number represents Shell Size, second number is the Insert Arrangement. Place Shell Size in box 3 and Insert Arrangement in box 5.

Step 4. Select a Military Finish

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Position
			A			

Finish	Military Finish Data	Finish Suffix	Finish Plus "SR" Suffix
Cadmium plated nickel base 175°C	**A**		(SR)
Olive drab cadmium plate nickel base 175°C	**B**	(014)	(386)
Electroless nickel 200°C	**F**	(023)	(424)
Electroless nickel, space compatible 200°C		(453)	(467)
Anodic coating (Alumilite) 200°C	**C**	(005)	(300)
Chromate treated (Iridite 14-2) 125°C		(011)	(344)
Passivated steel 200°C	**E**	-	-
Nickel-PTFE 175°C		(038)	

Step 6. Select a Military Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Position
					P	

Step 7. Select an Alternate Keying Position

See page 64 for information, No letter required for normal position

1. MS Number	2. Service Class	3. Shell Size	4. Finish	5. Insert Arrangement	6. Contact Style (P or S)	7. Alternate Position
						A

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

Insert Availability and Identification Chart

Series III JT II	Series II LJT I	Series III TV III	Military III	MIL-DTL-27599 JT/LJT Solder	Crimp	Hermetics Class H	Hermetics Class Y	Hermetics TV*	Service Rating	Total Contacts	Contact Size 23 HD ■	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)
		7-D2							M	2		2									
		7-D3							M	3		3									
		7-D4							M	4		4									
8-2■				P					M	2					2						
8-3■				X	NA	P	P		M	3					3						
	9-3■			X																	
		9-5★■							Grounded	1											1
8-6				X	X	P	P		M	6			6								
	9-6			X	X	P	P														
	9-7■			X					M	7			7								
		9-9■							N	9	9										
	9-22■			X					I	2					2						
8-35					X	P	P		M	6		6									
	9-35	9-35	A35		X	P	P	P													
8-44					X	P	P		M	4				4							
	9-44				X																
		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													
	11-2★	11-2★	B2		X	P**			I	2						2					
10-4					3				I	4					4						
	11-4	11-4		X	S/2																
10-5				X	X	P	P		I	5					5						
	11-5	11-5	B5	X	X			P													
	11-6■			S					I	6					6						
10-13				X	X	P/S	P/S		M	13			13								
	11-13			X	X	P/S	P/S														
		11-19■							N	19	19										
10-35					X	P/S	P/S		M	13		13									
	11-35	11-35	B35		X	P/S	P/S	P													
		11-54■			X ✦				II	4		4									
10-98				X	X	P/S	P/S		I	6					6						
	11-98	11-98	B98	X	X	P/S	P/S	P													
10-99					X	P	P		I	7					7						
	11-99	11-99	B99		P X			P													
12-3				X	X ✦	P	P		II	3						3					
	13-3■				P																
12-4				X	X	P	P		I	4						4					
	13-4★	13-4★	C4	X	X	P	P	P													
12-8				X	X	P	P		I	8					8						
	13-8	13-8	C8	X	X	P	P	P													
		13-13■							I, Fiber Optic	4						2**	2				
12-22					X	P/S	P/S		M	22			22								
	13-22			X	X	P/S	P/S														
		13-26■			2				M	8		2					6				
		13-32■							N	32	32										
12-35					X	P/S	P/S		M	22		22									
	13-35	13-35	C35		X	P/S	P/S	P													
		13-63■			✦				I	4						2	2				
12-98				X	X	P/S	P/S		I	10					10						
	13-98	13-98	C98	X	X	P/S	P/S	P													
14-4■					2				I	4							4				
	15-4■	15-4■			2 ✦																
14-5				X	X	P	P		II	5						5					
	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 43 & 44).
† 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 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

Amphenol Aerospace

Series JT II	Series LJT I	Series TV III	Military III	MIL-DTL-27599 JT/LJT Solder	Crimp	Hermetics Class H	Hermetics Class Y	Hermetics TV*	Service Rating	Total Contacts	Contact Size ■ 23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)
14-15				X	X	P	P		I	15					14	1					
	15-15	15-15	D15	X	X	P/S	P/S	P	I	15					14	1					
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	3																
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
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■				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	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
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														

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

Insert Availability and Identification Chart

Series III JT II	Series I LJT I	Series III TV III	Military III	MIL-DTL-27599 JT/LJT Solder	Crimp	Hermetics H	Hermetics Y	Hermetics TV*	Service Rating	Total Contacts	Contact Size 23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax)
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	P	P		M	79		79									
	21-35	21-35	G35		X	P/S	P/S	P													
20-39				X	X	P	P		I	39					37	2					
	21-39	21-39	G39	X	X	P	P	P													
20-41				X	X	P	P		I	41					41						
	21-41	21-41	G41	X	X	P/S	P/S	P													
	21-75★	21-75★✧	G75		2 X				N M	4										4	(4)
	21-79■	21-79■			2 X				II	19		17								2	(5)
		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★■			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																
	23-34■			X					I	34					34						
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													
	23-97■			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 Twinax	99		97								2	
		25-8★	J8		✦				Twinax	8											8
		25-11***	J11		2 ✦				N	11					2				9		
		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 43 & 44).
† 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.

Amphenol Aerospace

Series	Series	Series	Military	MIL-DTL-27599		Hermetics					Contact Size											
JT II	LJT I	TV III	III	JT/LJT Solder	Crimp	H	Y	TV*	Service Rating	Total Contacts	23 HD	22D	22M	22	20	16	12	12 (Coax)	10 (Power)	8 (Coax)	8†† (Twinax	8 Quadrax
24-24					X	P	P		I	24						12	12					
	25-24★	25-24★	J24		X	P	P															
		25-26■★			✦				I	25					16		5			4		
24-29					X				I	29						29						
	25-29★	25-29★	J29	X	X																	
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																	
24-43■					3				I	43					23	20						
	25-43	25-43	J43	X	2 ✦																	
	25-46	25-46	J46		2 ✦				I	46					40	4				2		
24-61				X	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			✦				I	46					40	4					2	
		25-187■							N	187	187											
		25-F4■			X				M/I	66		49				13	4					

■ **HD** designates High Density 38999 Series III insert patterns which use size 23 contacts only. Not rated over 175°C
X Completely tooled.
✦ Not tooled for 02-R.
P Pin inserts only (contact Amphenol Aerospace for socket availability).
★ Ground plane proprietary option available. Arrg. 9-5, 25-62 is exclusively ground plane type.
■ Not Mil-Qualified.

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

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
25-16	X		M	8		6		2	
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 or larger contacts)

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. 43 & 44).
† For RG 180/U and RG 195/U cables only.
†† Size 8 Coax and Twinax are interchangeable.
Note: 25L-3 and 25L-7 require longer shells.

Front face of pin inserts illustrated

Shell Size & Insert Arrg. for:																
Series II JT				8-2	8-3		8-6				8-35	8-44		8-97	8-98	
Series I LJT					9-3		9-6	9-7		9-22	9-35	9-44			9-98	
Series III TV	7-D2	7-D3	7-D4			9-5			9-9 HD		9-35		9-94		9-98	
Service Rating	M	M	M	M	M	Grounded	M	M	N	I	M	M	M	M	I	
Number of Contacts	2	3	4	2	3	1	6	7	9	2	6	4	2	2	3	
Contact Size	22D	22D	22D	20	20	8 Twinax	22M	22M	23	20	22D	22	20	22M	20	20

Shell Size & Insert Arrg. for:													
Series II JT		10-4	10-5		10-13		10-35		10-98	10-99	12-3		
Series I LJT	11-2	11-4	11-5	11-6	11-13		11-35		11-98	11-99	13-3		
Series III TV	11-2	11-4	11-5			11-19 HD	11-35	11-54	11-98	11-99			
Service Rating	I	I	I	I	M	N	M	II	I	I	II		
Number of Contacts	2	4	5	6	13	19	13	4	6	7	3		
Contact Size	16	20	20	20	22M	23	22D	22D	20	20	16		

Shell Size & Insert Arrg. for:													
Series II JT	12-4	12-8	12-22			12-35			12-98	14-4	14-5		
Series I LJT	13-4	13-8	13-22			13-35			13-98	15-4	15-5		
Series III TV	13-4	13-8		13-26	13-32 HD	13-35	13-63		13-98	15-4	15-5		
Service Rating	I	I	M	M	N	M	I		I	I	II		
Number of Contacts	4	8	22	6 2	32	22	2 2		10	4	5		
Contact Size	16	20	22M	22D 12	23	22D	16 12		20	12	16		

Shell Size & Insert Arrg. for:													
Series II JT	14-15		14-18	14-19	14-35	14-37			14-68	14-97			
Series I LJT	15-15		15-18	15-19	15-35	15-37			15-68	15-97			
Series III TV	15-15		15-18	15-19	15-35		15-55 HD			15-97			
Service Rating	I		I	I	M	M	N		I	I			
Number of Contacts	14	1	18	19	37	37	55		8	8	4		
Contact Size	20	16	20	20	22D	22M	23		16	20	16		

Shell Size & Insert Arrg. for:													
Series II JT			16-6	16-8	16-13								
Series I LJT	17-2		17-6	17-8	17-13	17-22		17-25					
Series III TV	17-2		17-6	17-8		17-22							
Service Rating	M		I	II	I	Coax		M					
Number of Contacts	38	1	6	8	13	2	2	22	2				
Contact Size	22D	8 Twinax	12	16	16	12 Coax	8 Coax	22D	8 Coax				

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

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

Insert Arrangements

Front face of pin inserts illustrated

Shell Size & Insert Arrg. for:							
Series II JT	16-26	16-35	16-42		16-55		
Series I LJT	17-26	17-35	17-42		17-55		
Series III TV	17-26	17-35		17-52		17-60	17-73 HD
Service Rating	I	M	M	M	M	I/Coax	N
Number of Contacts	26	55	42	2	55	8 2	73
Contact Size	20	22D	22	8 Twinax	22M	22D 8 Coax	23

Shell Size & Insert Arrg. for:						
Series II JT	16-99	18-11		18-28		18-30
Series I LJT	17-99	19-11	19-18	19-28		19-30
Series III TV	17-99	19-11	19-18	18-28		
Service Rating	I	II	M	M		I
Number of Contacts	21 2	11	14 4	26 2		29 1
Contact Size	20 16	16	22D 8 Twinax	20 16		20 16

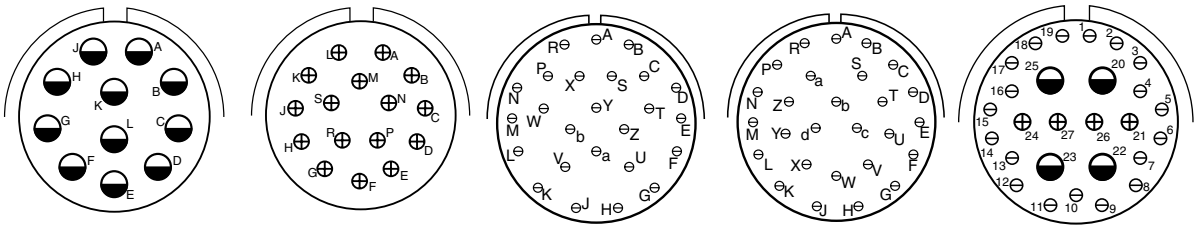
Shell Size & Insert Arrg. for:							
Series II JT		18-32	18-35	18-53	18-66		
Series I LJT		19-32	19-35	19-53	19-66	19-67	
Series III TV	19-31	19-32	19-35				
Service Rating	M	1	M	M	M	M	
Number of Contacts	2 1 12	32	66	53	66	67	
Contact Size	8 Coax 12 22D	20	22D	22	22M	22M	

Shell Size & Insert Arrg. for:							
Series II JT	18-68		18-96			20-1	20-2
Series I LJT	19-68					21-1	21-2
Series III TV		19-88 HD		19-AD			
Service Rating	I	N	I	Inst.		M	II
Number of Contacts	18	88	9	16	1	79	65
Contact Size	16	23	12	20	8 Twinax	22M	22

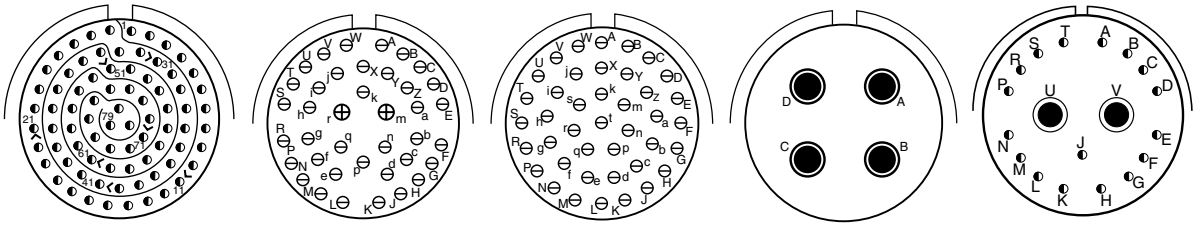
CONTACT LEGEND	8	10	12	16	20	22	22M	22D	23

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

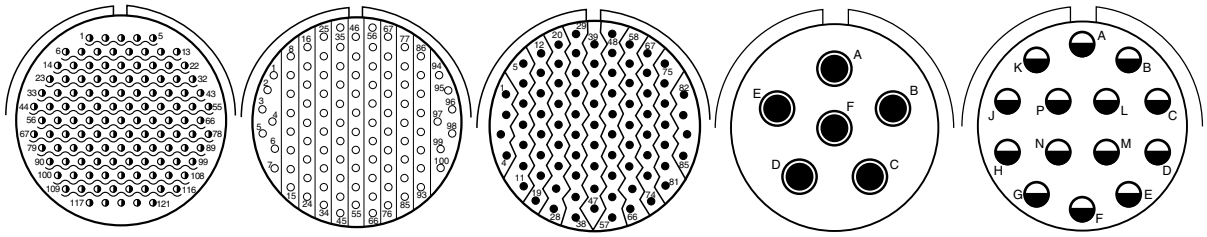
Front face of pin inserts illustrated



Shell Size & Insert Arrg. for:							
Series II JT	20-11	20-16					
Series I LJT	21-11	21-16	21-25	21-27			
Series III TV	21-11	21-16				21-29	
Service Rating	I	II	I	I		I	
Number of Contacts	11	16	25	27	19	4	4
Contact Size	12	16	20	20	20	16	12

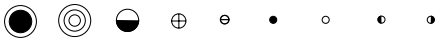


Shell Size & Insert Arrg. for:					
Series II JT	20-35	20-39	20-41		
Series I LJT	21-35	21-39	21-41	21-75	21-79
Series III TV	21-35	21-39	21-41	21-75	21-79
Service Rating	M	1	I	N	II
Number of Contacts	79	37 2	41	4	17 (See Note)
Contact Size	22D	20 16	20	(See Note)	22D



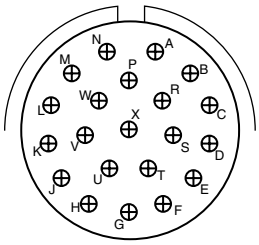
Shell Size & Insert Arrg. for:					
Series II JT		22-1	22-2		22-14
Series I LJT		23-1	23-2	23-6	23-14
Series III TV	21-121 HD			23-6	
Service Rating	N	M	M	M	I
Number of Contacts	121	100	85	6	14
Contact Size	23	22M	22	8 Twinax	12

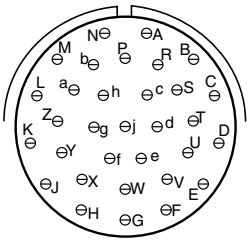
HD: High Density HD38999 (use size 23 contacts only)
Note: MS connector 21-75 is supplied with four size 8 twinax contacts.
Commercial connector 21-75 is supplied with four size 8 coax contacts.
MS connector 21-79 has provision for two size 8 coax contacts.
Coax contacts are not supplied unless specified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

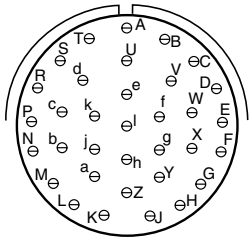


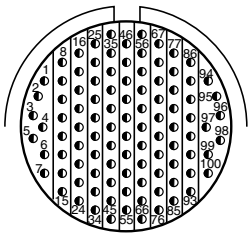
CONTACT LEGEND	8	10	12	16	20	22	22M	22D	23

Front face of pin inserts illustrated

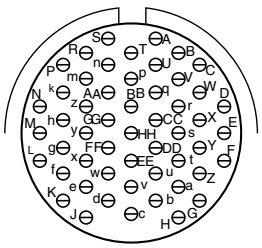


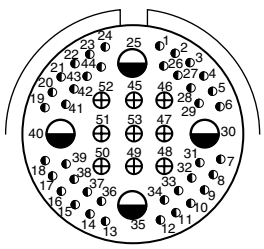


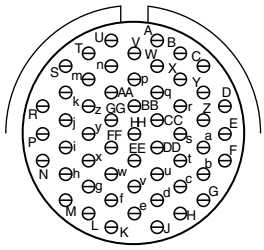


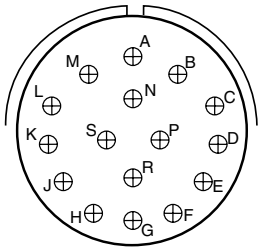


Shell Size & Insert Arrg. for:				
Series II JT	22-21	22-32		22-35
Series I LJT	23-21	23-32	23-34	23-35
Series III TV	23-21			23-35
Service Rating	II	I	I	M
Number of Contacts	21	32	34	100
Contact Size	16	20	20	22D

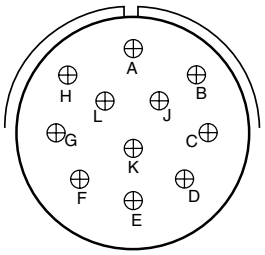


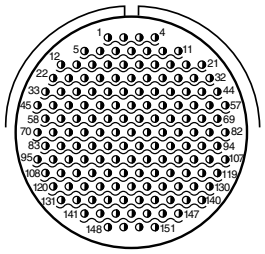


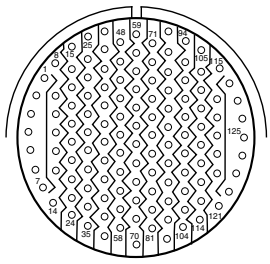


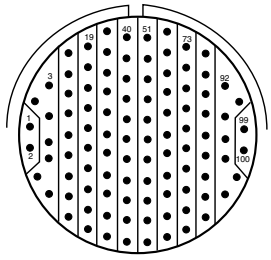


Shell Size & Insert Arrg. for:				
Series II JT	22-53		22-55	
Series I LJT	23-53		23-55	23-97
Series III TV	23-53	23-54	23-55	
Service Rating	I	M	I	II
Number of Contacts	53	40 9 4	55	16
Contact Size	20	22D 16 12	20	16







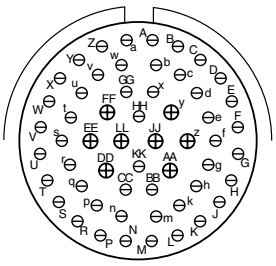


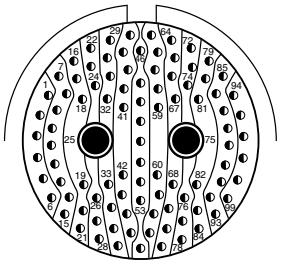
Shell Size & Insert Arrg. for:				
Series II JT			24-1	24-2
Series I LJT	23-99		25-1	25-2
Series III TV		23-151 HD		
Service Rating	II	N	M	M
Number of Contacts	11	151	128	100
Contact Size	16	23	22M	22

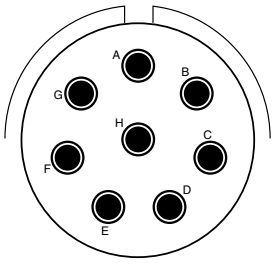
CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23

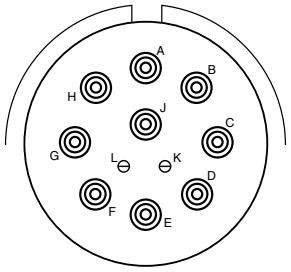
HD: High Density HD38999 (use size 23 contacts only)

Front face of pin inserts illustrated

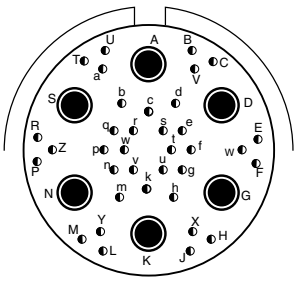


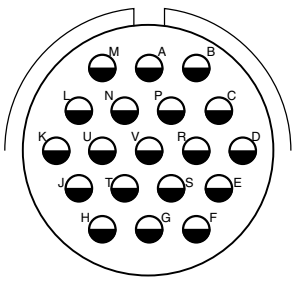


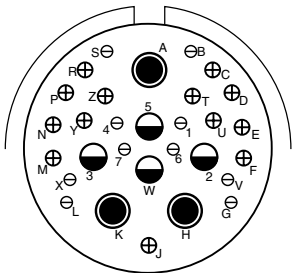


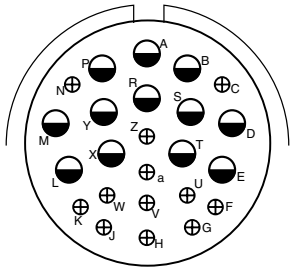


Shell Size & Insert Arrg. for:												
Series II JT	24-4											
Series I LJT	25-4				25-7						25-11	
Series III TV	25-4				25-7				25-8		25-11***	
Service Rating	I				M				Twinax		N	
Number of Contacts	48	8			97	2			8		2	9
Contact Size	20	16			22D	8 Twinax			8 Twinax		20	10



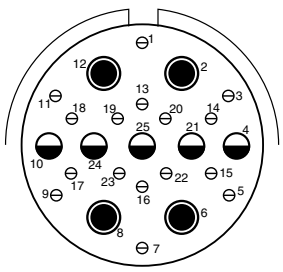


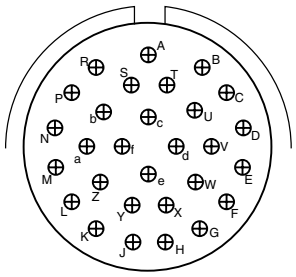


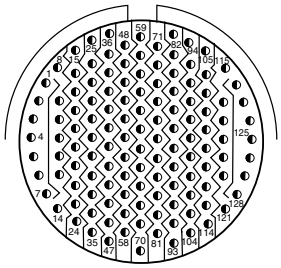


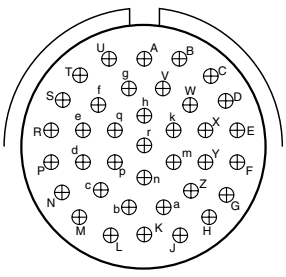
Shell Size & Insert Arrg. for:												
Series II JT					24-19						24-24	
Series I LJT					25-19				25-20		25-24	
Series III TV	25-17				25-19				25-20***		25-24	
Service Rating	M				I				N		I	
Number of Contacts	36	6			19		10	13	3	4	12	12
Contact Size	22D	8 Twinax			12		20	16	8 Twinax	12 Coax	16	12

(With Matched Impedance)







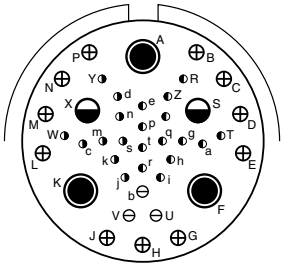


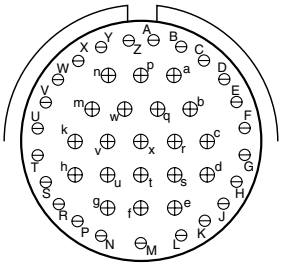
Shell Size & Insert Arrg. for:												
Series II JT					24-29				24-35		24-37	
Series I LJT					25-29				25-35		25-37	
Series III TV	25-26				25-29				25-35		25-37	
Service Rating	I				I				M		I	
Number of Contacts	16	5	4		29				128		37	
Contact Size	20	12	8 Coax		16				22D		16	

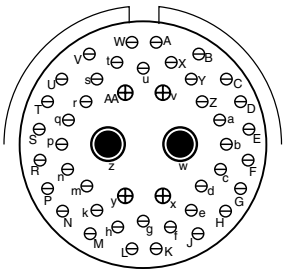
*** For use in MIL-STD-1760 applications (see pages 43 and 44).

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

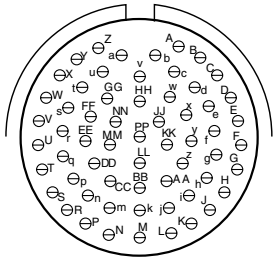
Front face of pin inserts illustrated

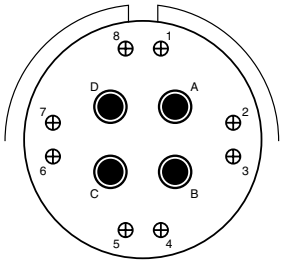


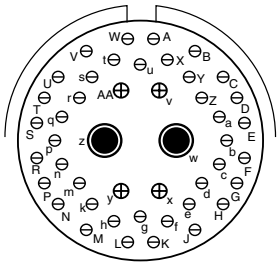




Shell Size & Insert Arrg. for:												
Series II JT						25-43						
Series I LJT						25-43			25-46			
Series III TV			25-41			25-43			25-46			
Service Rating			N/Inst.			I			I			
Number of Contacts	22	3	11	2	3	23	20		40	4	2	
Contact Size	22D	20	16	12 Coax	8 Twinax	20	16		20	16	8 Coax †	

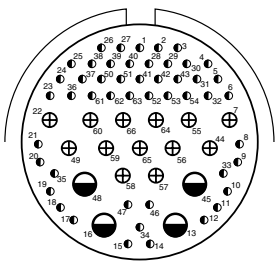


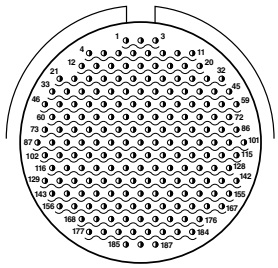




Shell Size & Insert Arrg. for:												
Series II JT			24-61									
Series I LJT			25-61									
Series III TV			25-61			25-62			25-90			
Service Rating			I			I			I			
Number of Contacts			61			8	4		40	4	2	
Contact Size			20			16	8		20	16	8 Twinax	

Ground Plane Only





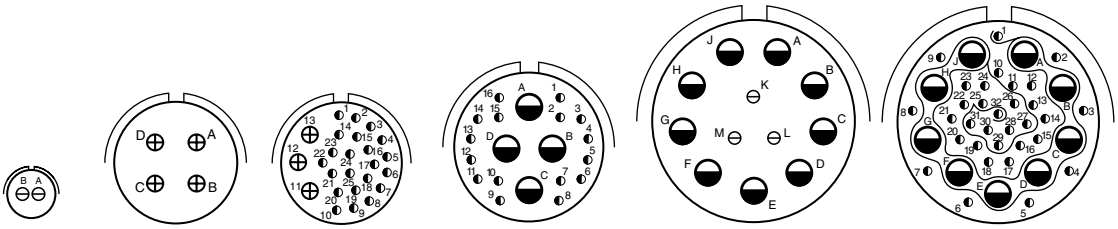
Shell Size & Insert Arrg. for:												
Series II JT												
Series I LJT												
Series III TV			25-F4						25-187 HD			
Service Rating			Size 22D=M, Balance =I						N			
Number of Contacts			49	13	4				187			
Contact Size			22D	16	12				23			

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

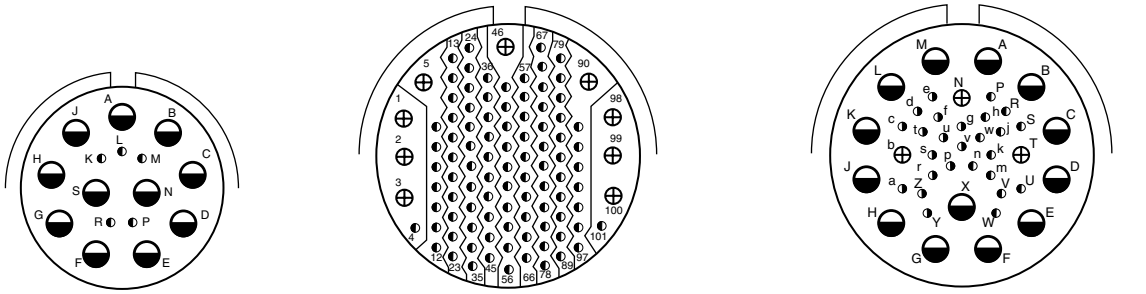
† Coax contacts for RG180/U or RG195/U cable.

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

Front face of pin inserts illustrated



Shell Size & Insert Arrg. for:												
Series III TV	**9-2**	**15-4***	**15-25**		**17-20**		**21-12**		**21-21**	
Service Rating	I	II	M		M		I		M/Inst.	
Number of Contacts	2	4	22	3	16	4	3	9	32	9
Contact Size	20	16	22D	16	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

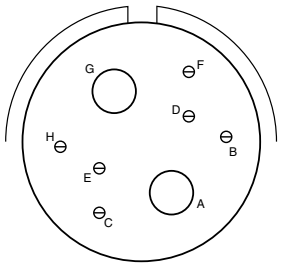
NOTE: Some specials shown here were formerly known as Pyle arrangements. Consult Amphenol for how to order information for connectors with these inserts. For further information on special arrangements consult Amphenol Aerospace, Sidney NY.

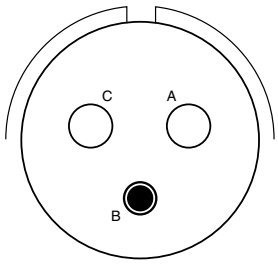
* Pyle 15-4 does not mate with Amphenol Tri-Start 15-4 insert.

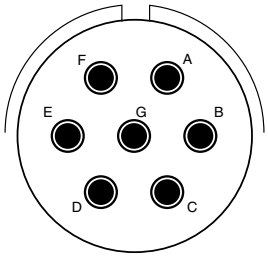
CONTACT LEGEND	8	10	12	16	20	22	22M	22D	23*

Non-Standard Shells or Large Contacts

Front face of pin inserts illustrated

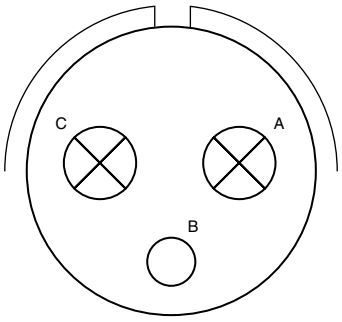


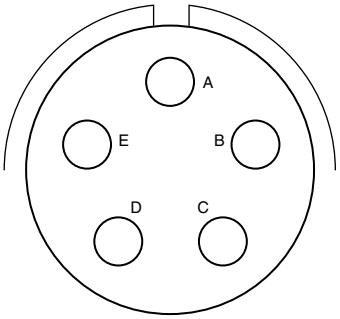


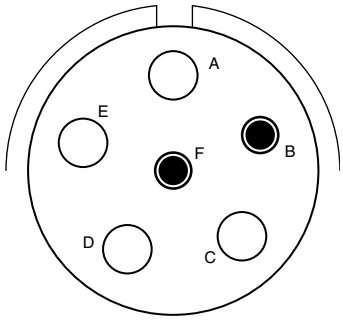


Shell Size & Insert Arrg. for:

Series III TV	25-16		25L-3		25L-7
Service Rating	M		II		II
Number of Contacts	6	2	1	2	7
Contact Size	20	4	8	4	8

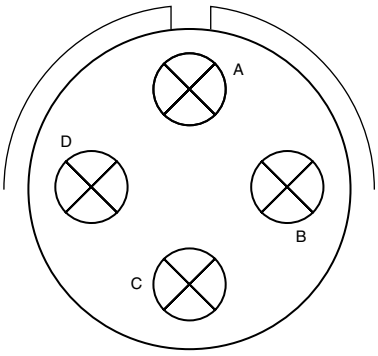






Shell Size & Insert Arrg. for:

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

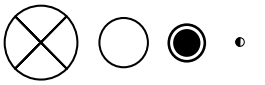


Shell Size & Insert Arrg. for:

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 0 4 8 22D

CONTACT RATING FOR TV III, HD, JT II, LJT I, SJT

Contact Size	Test Current (Amps)		Maximum Millivolt Drop Crimp*	Maximum Millivolt Drop	
	Crimp	Hermetic		Solder*	Hermetic*
23	5	3	73	20	85
22M	3	2	45	20	60
22D	5	3	73		85
22	5	3	73	20	85
20	7.5	5	55	20	60
16	13	10	49	20	85
12	23	17	42	20	85
10 (Power)	33	NA	33	NA	NA
8 (Power)	46	NA	26	NA	NA
4	80	NA	23	NA	NA
0	150	NA	21	NA	NA

*When tested using silver plated wire.

Contact Size	Crimp Well Data		Solder Well Data	
	Well Diameter	Normal Well Depth	Well Diameter	Nominal Well Depth
23	.0345 ± .0010	.141	.0345 ± .0010	.130
22M	.028 ± .001	.141	.029 +.004 – .000	
22D	.0345 ± .0010	.141	.036 +.004 -.000	.094
22	.0365 ± .0010	.141	.036 +.004 -.000	.094
20	.047 ± .001	.209	.044 +.004 -.004	.125
16	.067 ± .001	.209	.078 +.000 -.004	.141
12	.100 ± .002	.209	.116 +.004 -.002	.141
10 (Power)	.137 ± .002	.355	NA	NA
8	.181 ± .002	.490	NA	NA
4	.281 ± .002	.490	NA	NA
0	.453 ± .002	.585	NA	NA

SERVICE RATING**

Service Rating	Suggested Oper. Voltage (Sea Level)		Test Voltage (Sea Level)	Test Voltage 50,000 Ft.	Test Voltage 70,000 Ft	Test Voltage 110,000 Ft.
	AC (RMS)	DC				
M	400	500	1300 VRMS	550 VRMS	350 VRMS	200 VRMS
N	300	450	1000 VRMS	400 VRMS	260 VRMS	200 VRMS
I	600	850	1800 VRMS	600 VRMS	400 VRMS	200 VRMS
II	900	1250	2300 VRMS	800 VRMS	500 VRMS	200 VRMS

**Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he is in the best position to know what peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

MIL-DTL-38999 Series III STANDARD 500 CYCLE CONTACTS FOR TV AND CTV, P & S

Contact Size	TV/CTV Pins		TV/CTV Sockets	
	Military No.	Supersedes	Military No.	Supersedes
8 (Coax)*	M39029/60-367	MS27536	M39029/59-366	MS27535
8 (Power)	Contact Factory	"	"	"
8 (Twinax)	M39029/90-529**	N/A	M39029/91-530	N/A
10 (Power)	M39029/58-528	N/A	M39029/56-527	N/A
12	M39029/58-365	MS27493-12	M39029/56-353	MS27490-12
16	M39029/58-364	MS27493-16	M39029/56-352	MS27490-16
20	M39029/58-363	MS27493-20	M39029/56-351	MS27490-20
22D	M39029/58-360	MS27493-22D	M39029/56-348	MS27490-22D
4	N/A	N/A	N/A	N/A
0	N/A	N/A	N/A	N/A

Above part numbers include standard 500 cycle finish designation - gold plating over suitable underplate in accordance with SAE AS39029. For other finish variations, consult Amphenol Aerospace.
*For use with RG180B/U and RG195A/U cable. For other size 8 coax or optional sizes 12 and 16 coax contacts available for use in Tri-Start connectors, see High Speed Contact section in this catalog or consult Amphenol Aerospace.

MIL-DTL-38999 Series III SEALING PLUGS

Contact Size	Commercial No.	Military No.
8 (Coax)	10-482099-8	N/A
8 (Twinax)	T3-4008-59P	N/A
8 (Power)	10-405996-83	MS27488-8-3
10 (Power)	T3-4010-59P	M85049/81-10
12	10-405996-122	MS27488-12-2
16	10-405996-162	MS27488-16-2
20	10-405996-202	MS27488-20-2
22D	10-405996-222	MS27488-22-2
4	10-405996-43	MS27488-4-3
0	10-405996-03	MS27488-0-3

** For use with M17/M176-00002 cable.
† Optional design - see slash sheet MS39029.
For other contact options available for use in Tri-Start connectors (wire wrap, thermocouple, fiber optic), consult Amphenol.

MIL-DTL-38999 Series III 1500 CYCLE CONTACTS FOR CTV, CLASSES H & J

Contact Size	CTV Pins			CTV Sockets		
	Commercial No.	Military No.	Supersedes	Commercial No.	Military No.	Supersedes
12	10-597072-2X	M39029/107-623	–	10-597073-2X	M39029/106-617	–
16	10-597068-2X	M39029/107-622	–	10-597069-2X	M39029/106-616	–
20	10-597064-2X	M39029/107-621	–	10-597065-2X	M39029/106-615	–
22D	10-597058-3X	M39029/107-620	–	10-597061-2X	M39029/106-614	–

MIL-DTL-38999 Series II JT/ Series I LJT/SJT Series CRIMP CONTACTS

Contact Size	JT/LJT/SJT Pins MS No.	JT Socket MS No.	LJT/SJT Sockets MS No.
8 (Coax)*	M39029/60-367	NA	M39029/59-366
8 (Twinax)	M39029/90-529**	NA	M39029/91-530
10 (Power)	M39029/58-528	NA	M39029/56-527
12	M39029/58-365	M39029/57-359	M39029/56-353
16	M39029/58-364	M39029/57-358	M39029/56-352
20	M39029/58-363	M39029/57-357	M39029/56-351
22	M39029/58-362	M39029/57-356	M39029/56-350
22M	M39029/58-361	M39029/57-355	M39029/56-349
22D	M39029/58-360	M39029/57-354	M39029/56-348

THERMOCOUPLE CONTACTS Series II JT/ I LJT

Contact Size	Material	JT/LJT Pins	JT Sockets	LJT Sockets
20	Chromel	10-407862-310	10-407863-310	10-407236-310
	Alumel	10-407862-320	10-407863-320	10-407865-320
	Iron	10-407862-335	10-407863-335	10-407865-335
	Constantan	10-407862-342	10-407863-342	10-407865-342

Partial Listing. If you do not see the contact for your application, consult Amphenol Aerospace.

THERMOCOUPLE CONTACTS PYLE VERSION Series II JT/ I LJT

Contact Size	Pins (II JT/I LJT)		Sockets (LJT)		Material
	Spec Number	Pyle Number	Spec Number	Pyle Number	
22D	M39029/87-472	T3-4022-10P	M39029/88-484	T3-4122-10P	CHROMEL
22D	M39029/87-471	T3-4022-10R	M39029/88-483	T3-4122-10R	ALUMEL
20	M39029/87-476	T3-4020-10P	M39029/88-488	TS-4120-10P	CHROMEL
20	M39029/87-475	T3-4020-10R	M39029/88-487	T3-4120-10R	ALUMEL
16	M39029/87-480	T3-4016-10P	M39029/88-492	T3-4116-10P	CHROMEL
16	M39029/87-479	T3-4016-10R	M39029/88-491	T3-4116-10R	ALUMEL

Above part numbers include standard finish designation - gold plating over suitable underplate in accordance with MIL-DTL-39029. For other finishes, consult Amphenol Aerospace. Note: 22M and 22D contacts are interchangeable. *For use with RG180B/U and RG195A/U cable. For other size 8 coax or optional sizes 12 and 18 coax contacts available for use in JT/LJT connectors, see High Speed Contacts section of this catalog.** For use with 17/M176-00002 cable.

SEALING PLUGS Series II JT/ I LJT

Contact Size	Commercial No.	Military No.
8 (Coax)	10-482099-8	MS27488-8
8 (Twinax)	T3-4008-59P	N/A
10 (Power)	10-576225	N/A
12	10-405996-122	MS27488-12-2
16	10-405996-162	MS27488-16-2
20	10-405996-202	MS27488-20-2
22	10-405996-222	MS27488-22-2
22M	10-405996-222	MS27488-22-2
22D	10-405996-222	MS27488-22-2

SEALING PLUGS SJT

Contact Size	Commercial No.
8 (Coax)	10-482099-8
8 (Twinax)	10-482099-8
10 (Power)	NA
12	10-405996-012 Yellow
16	10-405996-016 Blue
20	10-405996-020 Red
22	10-405996-022 Black
22M	10-405996-022 Black
22D	10-405996-022 Black

FINISH DATA MIL-DTL-38999, Tri-Start Series III TV

Aluminum Shell Components Non-Hermetic		
Finish	Service Class	
	Military	Commercial
Anodic Coating (Non-Conductive)	C	RX**
Electroless Nickel	F (Metal)	RF
	M (Composite)	
Olive Drab Cadmium Plate Nickel Base	W (Metal)	RW
	J (Composite)	
Stainless Steel with Nickel Plate (non-firewall)	L	
Stainless Steel with Nickel Plate (firewall)	S	RS
Stainless Steel	K	RK
Durmalon plated	T	DT
Zinc-Nickel Plated	Z	DZ

Hermetic Shell Components		
Material/Finish	Service Class	
	Military	Commercial
Stainless Steel	Y	Y
Stainless Steel with Nickel Plate	N	YN

**Add Suffix (005) to part number.

FINISH DATA MIL-DTL-38999, Series I LJT, II JT

Aluminum Shell Components Non-Hermetic					
Finish	Suffix			Indicated Finish Standard for JT Types Listed Below	Indicated Finish Standard for LJT Types Listed Below
	Military	Commercial	Finish Plus "SR" Suffix		
Cadmium Plated Nickel Base	MS (A)	–	(SR)	JT/JTG/JTL/JTP	LJT/LJTP
Anodic Coating (Alumilite)	MS (C)	(005)	(300)	JTS/JTPS/JTLS	LJTPS/LJTS
Chromate Treated (Iridite 14-2)		(011)	(344)	JTN/JTPN/JTLN	LJTN/LJTPN
Olive Drab Cadmium Plate Nickel Base	MS (B)	(014)	(386)		
Electroless Nickel	MS (F)	(023)	(424)		
Nickel-PTFE Durmalon		(038)			

Hermetic Connectors				
Finish	Suffix		Indicated Finish Standard for JT Types Listed Below	Indicated Finish Standard for LJT Types Listed Below
	Military	Commercial		
Carbon Steel Shell Tin Plated Shell and Contacts			JT( )H / JT( )Y JTL( )H / JTL( )Y	LJT( )Y LJT( )H
Carbon Steel Shell Tin Plated Shell and Gold Plated Contacts	MS (D)			
Stainless Steel Shell Gold Plated Contacts	MS (E)	(162)	JTS( )Y JTLS( )Y	LJTS( )Y

Amphenol
MIL-DTL-38999, Series II, JT

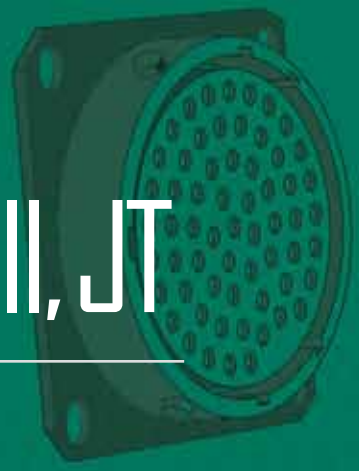


TABLE OF CONTENTS

Combined MIL-DTL-38999 Series I, II, III

- Shell Size & Insert Arrangement Availability 6-9
- Insert Arrangement Drawings 10-15
- Specifications - Contact Ratings, Service Ratings, Finish Data 18, 19

MIL-DTL-38999, Series II JT and Series I LJT

- Features and Benefits 61
- How to Order (Commercial). 62-64
- How to Order (Military). 65, 66

JT Shell Styles:

- Crimp Wall Mounting Receptacle JT00R (MS27472) 68
- Crimp Wall Mounting Receptacle for Back Panel Mounting JTPQ00R (MS27497) 69
- Crimp Line Receptacle JT01R. 70
- Crimp Box Mounting Receptacles JT02RE (MS27499), JT02RE(053) (MS27513) 71
- Crimp Box Mounting Receptacle for Back Panel Mounting JTP02R (MS27508) 72
- Crimp Straight Plug JT06R (MS27473) 73
- Crimp Straight Plug with Grounding Fingers JTG06R (MS27484) 74
- Crimp Jam Nut Receptacle JT07R (MS27474) 75
- Crimp Jam Nut Receptacle (Miniature Jam Nut Mounting Dimensions) JTL07R 76
- Crimp 90° Plug JT08R (MS27500) 77
- Hermetic Wall Mounting Receptacle JT00 (MS27475), Hermetic Box Mounting Receptacle JT02 (MS27476) 78
- Hermetic Jam Nut Receptacle JT07 (MS27477), Hermetic Solder Mounting Receptacle JTI (MS27478) 79
- Solder Wall Mounting Receptacle JT00 (MS27334), Solder Box Mounting Receptacle JT02 (MS27335) 80
- Solder Straight Plug JT06 (MS27336), Solder Straight Plug with Grounding Ring JTG06A 81
- Solder Jam Nut Receptacle JT07 (MS27337), Solder 90° Plug JT08 82
- Accessories, Contacts, and Tools see 38999 Accessories Section . . . 112-114
- Accessories continue on 120-124

MIL-DTL-38999 Series II Typical Markets:

- Military & Commercial Aviation
- Military Vehicles
- Missiles & Ordnance
- C4ISR

Amphenol Aerospace

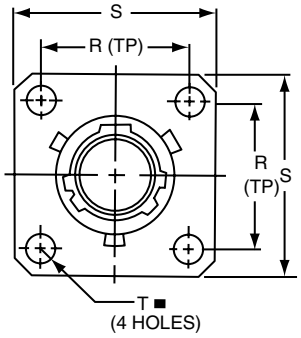
PART # Commercial

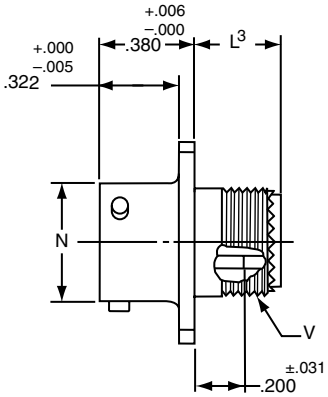
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	**00**	*RT*	*22-2*	*P*	*A*	*(XXX)*

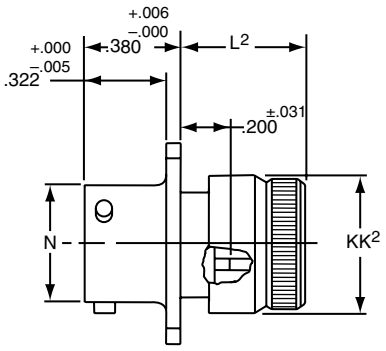
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27472	*E*	*14*	*A*	*18*	*P*	*A*
MS27479	*E*	*14*	*A*	*18*	*P*	*A*

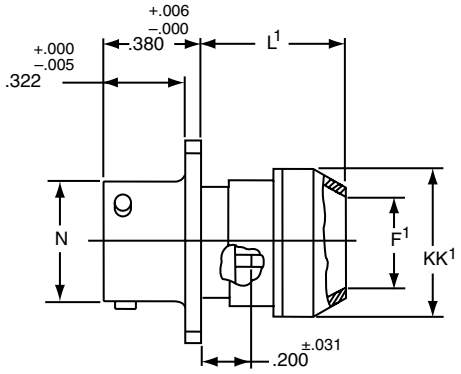




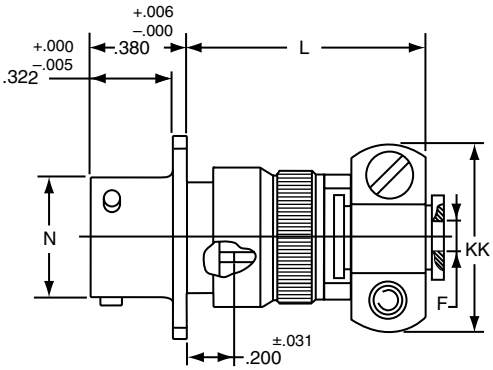
* JT00RT-XX-XXX(MS27472T)
** JTS00RT-XX-XXX(MS27479T)
*** JTN00RT-XX-XXX



* JT00RE-XX-XXX (MS27472E)
** JTS00RE-XX-XXX(MS27479E)
*** JTN00RE-XX-XXX



* JT00RP-XX-XXX(MS27472P)
** JTS00RP-XX-XXX
*** JTN00RP-XX-XXX



* JT00RE-XX-XXX (SR)
** JTS00RE-XX-XXX (SR)
*** JTN00RE-XX-XXX (SR)

■ ⊕ .005 DIA Ⓜ

* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant

Shell Size	F Dia. +.010 −.025	F¹ Dia. ±.010	L Max.	L¹ Max.	L² Max.	L³ Max.	N +.001 −.005	R (TP)	S ±.016	T ±.005	V Thread UNEF Class 2A (Plated)	KK Max.	KK¹ Dia. Max.	KK² Dia. Max.
8	.125	.444	1.094	.609	.547	.500	.473	.594	.812	.120	.4375-28	.812	.625	.578
10	.188	.558	1.094	.609	.547	.500	.590	.719	.938	.120	.5625-24	.875	.750	.703
12	.312	.683	1.094	.609	.547	.500	.750	.812	1.031	.120	.6875-24	1.000	.875	.828
14	.375	.808	1.344	.609	.547	.500	.875	.906	1.125	.120	.8125-20	1.125	1.000	.953
16	.500	.909	1.344	.609	.547	.500	1.000	.969	1.219	.120	.9375-20	1.188	1.125	1.078
18	.625	1.034	1.344	.609	.547	.500	1.125	1.062	1.312	.120	1.0625-18	1.438	1.250	1.203
20	.625	1.159	1.344	.609	.547	.500	1.250	1.156	1.438	.120	1.1875-18	1.438	1.375	1.328
22	.750	1.284	1.469	.609	.547	.500	1.375	1.250	1.562	.120	1.3125-18	1.625	1.500	1.453
24	.800	1.409	1.469	.688	.547	.500	1.500	1.375	1.688	.147	1.4375-18	1.719	1.625	1.578

All dimensions for reference only.

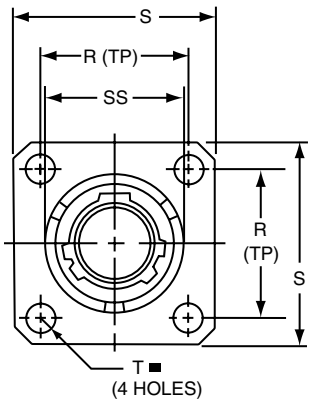
PART

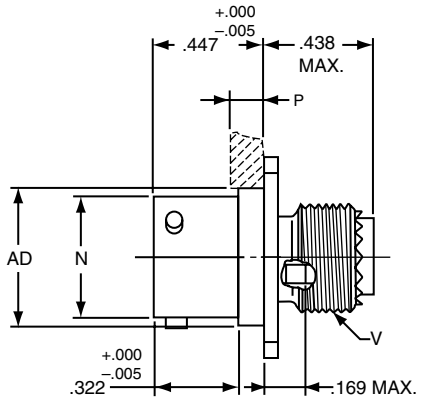
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JTPQ/JTPSQ	**00**	*RT*	*22-2*	*P*	*A*	*(XXX)*

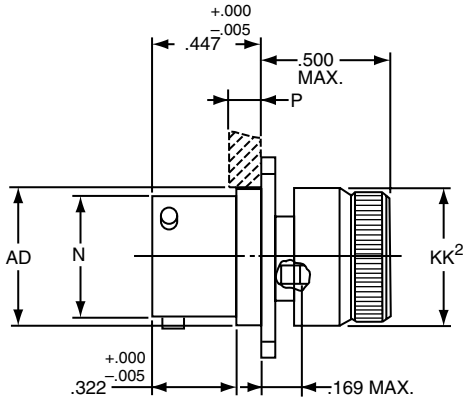
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27497	*E*	*14*	*A*	*18*	*P*	*A*

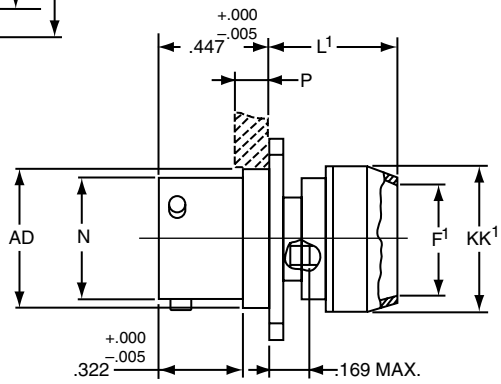




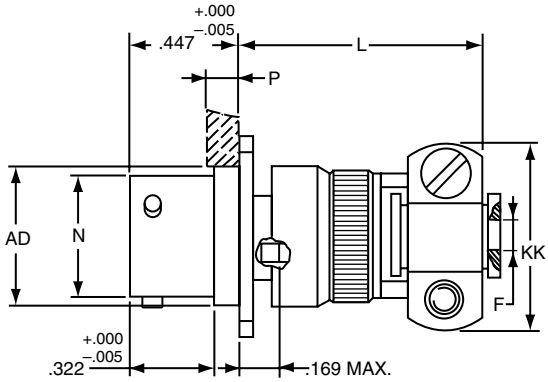
* **JTPQ00RT-XX-XXX(MS27497T)**
** **JTPSQ00RT-XX-XXX**



* **JTPQ00RE-XX-XXX (MS27497E)**



* **JTPQ00RP-XX-XXX(MS27497P)**



*JTPQ00RE-XX-XXX (SR)

■ ⊕ .005 DIA Ⓜ

* Standard Junior Tri-Lock
** High temperature version

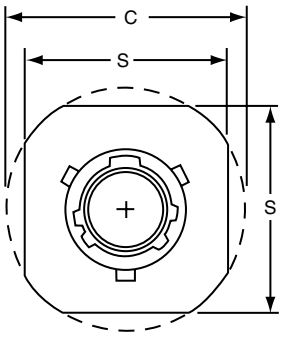
Shell Size	F Dia. +.010 –.025	F¹ Dia. ±.010	L Max.	L¹ Max.	N +.001 –.005	P Max. Panel Thick-ness	R (TP)	S ±.016	T ±.005	V Thread UNEF Class 2A (Plated)	AD Dia. ±.005	KK Max.	KK¹ Dia. Max.	KK² Dia. Max.	SS Dia. +.000 –.016
8	.125	.444	1.140	.468	.473	.142	.594	.812	.120	.4375-28	.516	.781	.625	.578	.563
10	.188	.558	1.140	.468	.590	.142	.719	.938	.120	.5625-24	.633	.844	.750	.703	.680
12	.312	.683	1.140	.468	.750	.142	.812	1.031	.120	.6875-24	.802	.969	.875	.828	.859
14	.375	.808	1.375	.468	.875	.142	.906	1.125	.120	.8125-20	.927	1.094	1.000	.953	.984
16	.500	.909	1.375	.468	1.000	.142	.969	1.219	.120	.9375-20	1.052	1.154	1.125	1.078	1.108
18	.625	1.034	1.375	.468	1.125	.142	1.062	1.312	.120	1.0625-18	1.177	1.406	1.250	1.203	1.233
20	.625	1.159	1.375	.468	1.250	.142	1.156	1.438	.120	1.1875-18	1.302	1.406	1.375	1.328	1.358
22	.750	1.284	1.516	.468	1.375	.142	1.250	1.562	.120	1.3125-18	1.427	1.594	1.500	1.453	1.483
24	.800	1.409	1.500	.540	1.500	.142	1.375	1.688	.147	1.4375-18	1.552	1.688	1.625	1.578	1.610

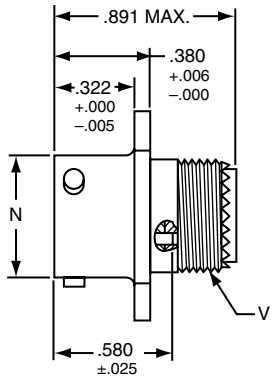
All dimensions for reference only.

PART #
Commercial

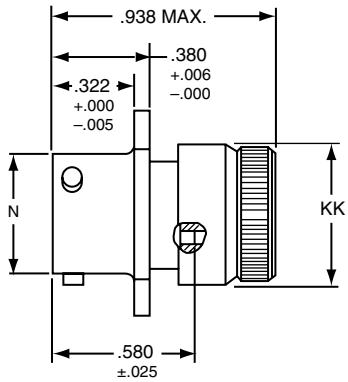
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	01	RT	22-2	P	A	(XXX)

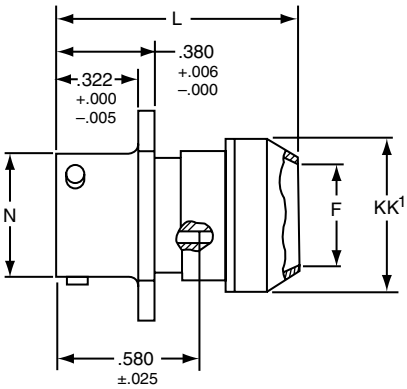




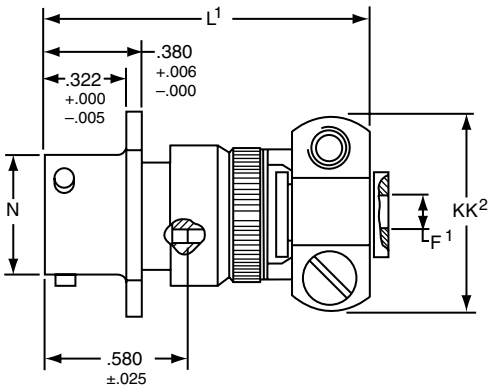
* JT01RT-XX-XXX
** JTS01RT-XX-XXX
*** JTN01RT-XX-XXX



* JT01RE-XX-XXX
** JTS01RE-XX-XXX
*** JTN01RE-XX-XXX



* JT01RP-XX-XXX
** JTS01RP-XX-XXX
*** JTN01RP-XX-XXX



* JT01RE-XX-XXX (SR)
** JTS01RE-XX-XXX (SR)
*** JTN01RE-XX-XXX (SR)

* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant

Shell Size	C Max.	F Dia. +.010	F[1] Dia. +.010 –.025	L Max.	L[1] Max.	N Dia. +.001 –.005	S +.017 –.016	V Thread UNEF Class 2A (Plated)	KK Dia. Max.	KK[1] Dia. Max.	KK[2] Max.
8	.965	.444	.125	1.031	1.562	.473	.812	.4375-28	.578	.625	.812
10	1.089	.558	.188	1.031	1.562	.590	.938	.5625-24	.703	.750	.875
12	1.183	.683	.312	1.031	1.562	.750	1.031	.6875-24	.828	.875	1.000
14	1.277	.808	.375	1.031	1.812	.875	1.125	.8125-20	.953	1.000	1.125
16	1.371	.909	.500	1.031	1.812	1.000	1.219	.9375-20	1.078	1.125	1.188
18	1.465	1.034	.625	1.031	1.812	1.125	1.312	1.0625-18	1.203	1.250	1.438
20	1.589	1.159	.625	1.031	1.812	1.250	1.438	1.1875-18	1.328	1.375	1.438
22	1.715	1.284	.750	1.031	1.938	1.375	1.562	1.3125-18	1.453	1.500	1.625
24	1.838	1.409	.800	1.109	1.938	1.500	1.688	1.4375-18	1.578	1.625	1.719

All dimensions for reference only.

Box Mounting Receptacle

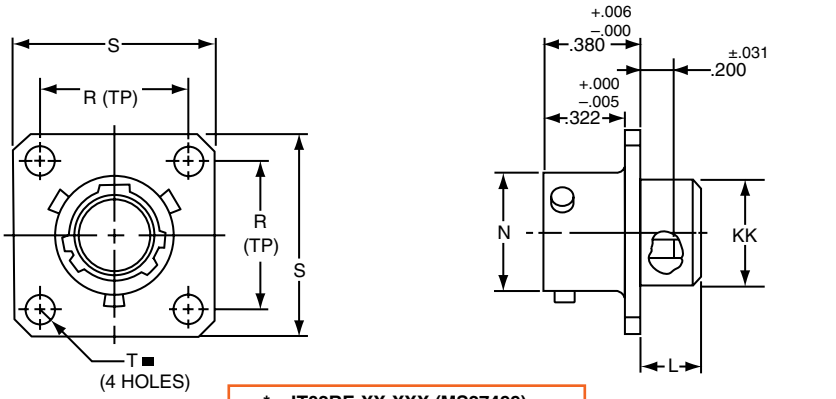
PART # Commercial

Part number reference. To complete, see how to order pages 62-66.

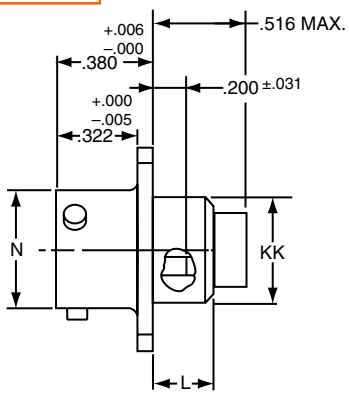
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	02	RE	22-2	P	A	(XXX)

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27499	E	14	A	18	P	A
MS27513	E	14	A	18	P	A



* JT02RE-XX-XXX (MS27499)
** JTS02RE-XX-XXX
*** JTN02RE-XX-XXX



* JT02RE-XX-XXX (053) (MS27513)
** JTS02RE-XX-XXX (053)
*** JTN02RE-XX-XXX (053)

■ ⊕ .005 DIA Ⓜ

* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant

All dimensions for reference only.
NOTE: For applications requiring an environmental seal, please refer to JT00R, page 63.

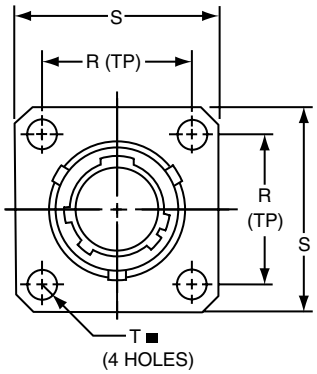
PART #
Commercial

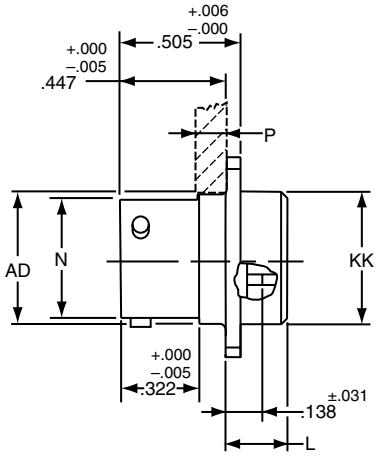
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTPS/JTPN	**02**	*RE*	*22-2*	*P*	*A*	*(XXX)*

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27508	**E**	*14*	*A*	*18*	*P*	*A*





* JTP02RE-XX-XXX (MS27508E)
** JTPS02RE-XX-XXX
***JTPN02RE-XX-XXX

■ ⊕ .005 DIA Ⓜ

* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant

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

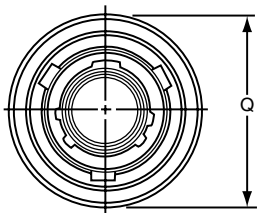
PART #
Commercial

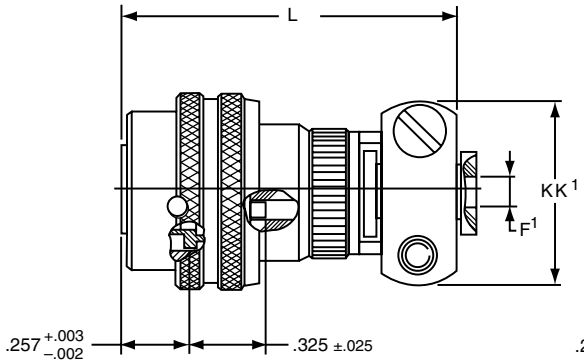
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	06	RE	22-2	P	A	(XXX)

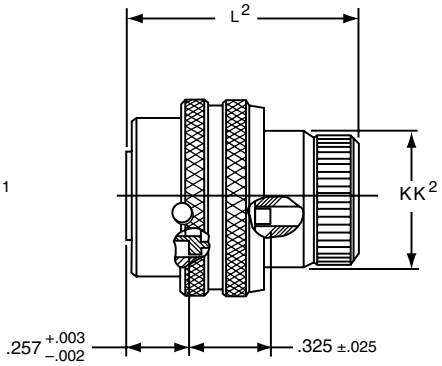
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27473	E	14	A	18	P	A

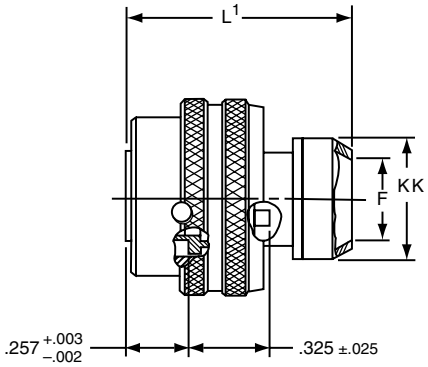




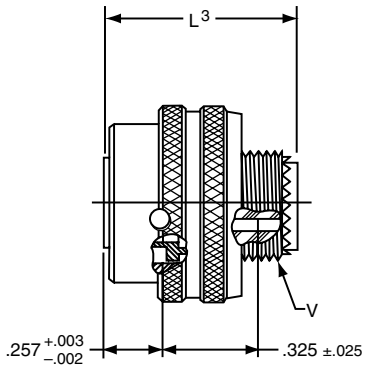
* JT06RE-XX-XXX (SR)
** JTS06RE-XX-XXX (SR)
***JTN06RE-XX-XXX(SR)



* JT06RE-XX-XXX (MS27473E)
** JTS06RE-XX-XXX
***JTN06RE-XX-XXX



* JT06RP-XX-XXX (MS27473P)
** JTS06RP-XX-XXX
***JTN06RP-XX-XXX



* JT06RT-XX-XXX (MS27473T)
** JTS06RT-XX-XXX
***JTN06RT-XX-XXX

* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant

Shell Size	F Dia.	F¹ Dia. +.001 –.025	L Max.	L¹ Max.	L² Max.	L³ Max.	Q Dia Max.	V Thread Modified Class 2A UNEF	V Thread Modified Major Dia.	KK Dia. Max.	KK¹ Max.	KK² Dia. Max.
8	.444	.125	1.562	1.000	.938	.891	.734	.4375-28	.421 – .417	.625	.812	.578
10	.558	.188	1.562	1.000	.938	.891	.844	.5625-24	.542 – .538	.750	.875	.703
12	.683	.312	1.562	1.000	.938	.891	1.016	.6875-24	.667 – .663	.875	1.000	.828
14	.808	.375	1.812	1.000	.938	.891	1.141	.8125-20	.791 – .787	1.000	1.125	.953
16	.909	.500	1.812	1.000	.938	.891	1.265	.9375-20	.916 – .912	1.125	1.188	1.078
18	1.034	.625	1.812	1.000	.938	.891	1.391	1.0625-18	1.034 – 1.030	1.250	1.438	1.203
20	1.159	.625	1.812	1.000	.938	.891	1.500	1.1875-18	1.158 – 1.154	1.375	1.438	1.328
22	1.284	.750	1.938	1.000	.938	.891	1.625	1.3125-18	1.283 – 1.279	1.500	1.625	1.453
24	1.409	.800	1.938	1.062	.938	.891	1.750	1.4375-18	1.408 – 1.404	1.625	1.719	1.578

All dimensions for reference only.

PART

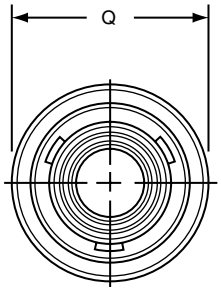
Part number reference. To complete, see how to order pages 62-66.

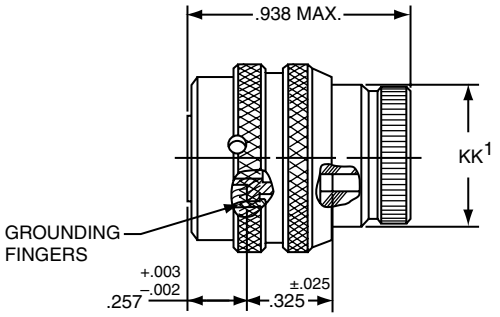
Commercial

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JTG/JTNG	06	RE	22-2	P	A	(XXX)

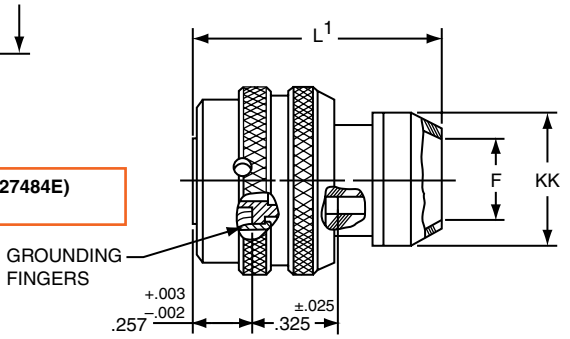
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27484	E	14	A	18	P	A

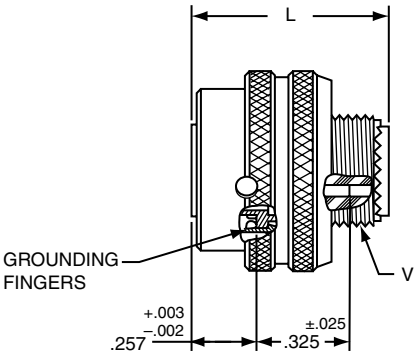




* JTG06RE-XX-XXX (MS27484E)
** JTNG06RE-XX-XXX



* JTG06RP-XX-XXX (MS27484P)
** JTNG06RP-XX-XXX



* JTG06RT-XX-XXX (MS27484T)
** JTNG06RT-XX-XXX

* Plug with grounding fingers
** Clear iridite finish (gold color), N_2O_4 resistant

Shell Size	F Dia.	L Max.	L¹ Max.	Q Dia Max.	V Thread Modified		KK Dia. Max.	KK¹ Dia. Max.
					Class 2A UNEF	Modified Major Dia.		
8	.444	.891	1.000	.734	.4375-28	.421 – .417	.625	.578
10	.558	.891	1.000	.844	.5625-24	.542 – .538	.750	.703
12	.683	.891	1.000	1.016	.6875-24	.667 – .663	.875	.828
14	.808	.891	1.000	1.141	.8125-20	.791 – .787	1.000	.953
16	.909	.891	1.000	1.265	.9375-20	.916 – .912	1.125	1.078
18	1.034	.891	1.000	1.391	1.0625-18	1.034 – 1.030	1.250	1.203
20	1.159	.891	1.000	1.500	1.1875-18	1.158 – 1.154	1.375	1.328
22	1.284	.891	1.000	1.625	1.3125-18	1.283 – 1.279	1.500	1.453
24	1.409	.891	1.062	1.750	1.4375-18	1.408 – 1.404	1.625	1.578

All dimensions for reference only.

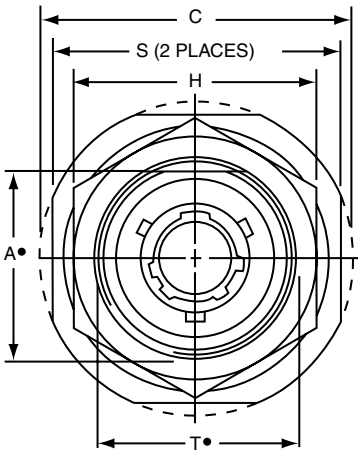
PART #
Commercial

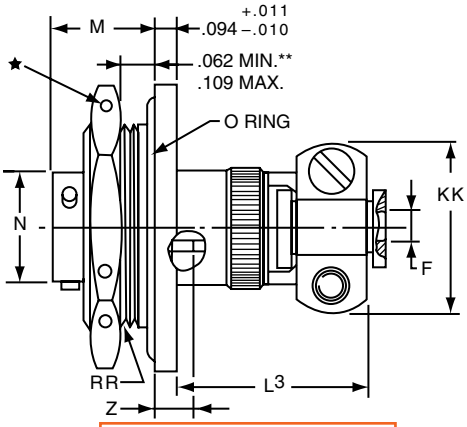
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	07	RE	22-2	P	A	(XXX)

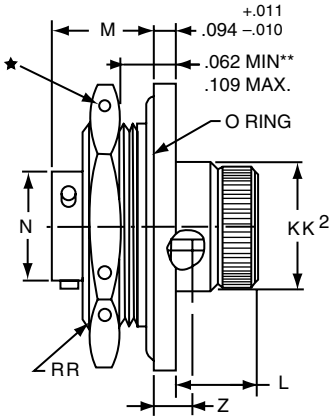
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27474	E	14	A	18	P	A

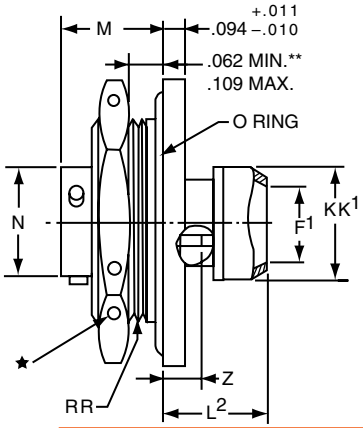




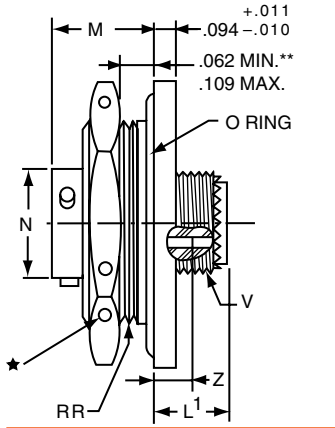
* JT07RE-XX-XXX (SR)
*** JTS07RE-XX-XXX (SR)
**** JTN07RE-XX-XXX (SR)



* JT07RE-XX-XXX (MS27474E)
*** JTS07RE-XX-XXX
**** JTN07RE-XX-XXX



* JT07RP-XX-XXX (MS27474P)
*** JTS07RP-XX-XXX
**** JTN07RP-XX-XXX



* JT07RT-XX-XXX (MS27474T)
*** JTS07RT-XX-XXX
**** JTN07RT-XX-XXX

★ .059 Dia. Min. 3 lockwire holes.
Formed lockwire hole design (6 holes) is optional.
• "D" shaped mounting hole dimensions.
* Standard Junior Tri-Lock
** Panel Thickness
*** High temperature version
****Clear iridite finish (gold color), N_2O_4 resistant

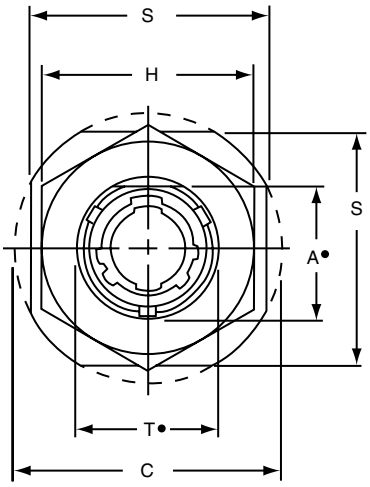
Shell Size	A• +.000 –.010	C Max.	F Dia. +.010 –.025	F¹ Dia.	H Hex +.017 –.016	L Max.	L¹ Max.	L² Max.	L³ Max.	M ±.005	N Dia. +.001 –.005	S ±.016	T• +.010 –.000	V Thread UNEF Class 2A	Z ±.031	KK Max.	KK¹ Dia. Max.	KK² Max.	RR Thread (Plated) Class 2A
8	.830	1.390	.125	.444	1.062	.484	.453	.563	1.047	.438	.473	1.250	.884	.4375-28	.144	.812	.625	.578	.8750-20UNEF
10	.955	1.515	.188	.558	1.188	.484	.453	.563	1.047	.438	.590	1.375	1.007	.5625-24	.144	.875	.750	.703	1.0000-20UNEF
12	1.084	1.640	.312	.683	1.312	.484	.453	.563	1.047	.438	.750	1.500	1.134	.6875-24	.144	1.000	.875	.828	1.1250-18UNEF
14	1.208	1.765	.375	.808	1.438	.484	.453	.563	1.297	.438	.875	1.625	1.259	.8125-20	.144	1.125	1.000	.953	1.2500-18UNEF
16	1.333	1.953	.500	.909	1.562	.484	.453	.563	1.297	.438	1.000	1.781	1.384	.9375-20	.144	1.188	1.125	1.078	1.3750-18UNEF
18	1.459	2.031	.625	1.034	1.688	.484	.453	.563	1.297	.438	1.125	1.890	1.507	1.0625-18	.144	1.438	1.250	1.203	1.5000-18UNEF
20	1.576	2.156	.625	1.159	1.812	.453	.422	.531	1.266	.464	1.250	2.016	1.634	1.1875-18	.188	1.438	1.375	1.328	1.6250-18UNEF
22	1.701	2.280	.750	1.284	2.000	.453	.422	.531	1.391	.464	1.375	2.140	1.759	1.3125-18	.188	1.625	1.500	1.453	1.7500-18UNS
24	1.826	2.405	.800	1.409	2.125	.375	.422	.609	1.391	.464	1.500	2.265	1.884	1.4375-18	.188	1.719	1.625	1.578	1.8750-16UN

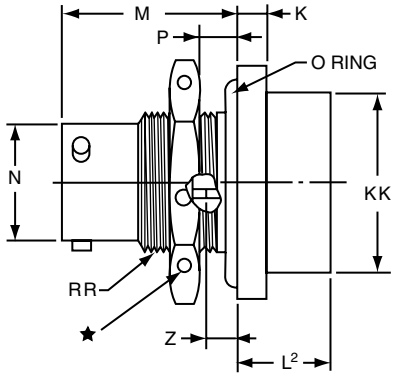
All dimensions for reference only.

PART #
Commercial

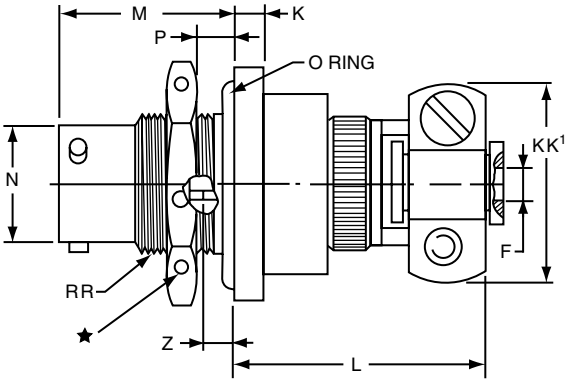
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JTL/JTLS/JTLN	07	RP	22-2	P	A	(XXX)

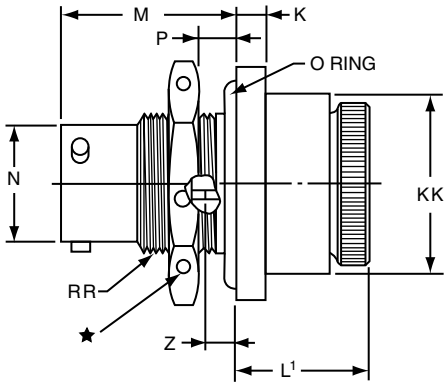




* JTL07RP-XX-XXX
*** JTLS07RP-XX-XXX
**** JTLN07RP-XX-XXX



* JTL07RE-XX-XXX (SR)
*** JTLS07RE-XX-XXX (SR)
**** JTLN07RE-XX-XXX (SR)



* JTL07RE-XX-XXX
*** JTLS07RE-XX-XXX
**** JTLN07RE-XX-XXX

★ .059 Dia. Min. 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.
• "D" shaped mounting hole dimensions.
* Miniature mounting dimensions
*** High temperature version
****Clear iridite finish (gold color), N_2O_4 resistant

Shell Size	A• +.000 –.010	C Max.	F Dia. +.010 –.025	H Hex +.017 –.016	K +.011 –.010	L Max.	L¹ Max.	L² Max.	M ±.005	N Dia. +.001 –.005	P Panel Thickness Min.	P Panel Thickness Max.	S ±.016	T• +.010 –.000	Z ±.026	KK Dia. Max.	KK¹ Max.	RR Thread Class 2A
8	.542	1.077	.125	.750	.125	1.062	.641	.375	.630	.473	.062	.125	.938	.572	.047	.688	.812	.5625-24UNEF
10	.669	1.203	.188	.875	.125	1.062	.641	.375	.630	.590	.062	.125	1.062	.697	.047	.812	.875	.6875-24UNEF
12	.830	1.390	.312	1.062	.125	1.062	.641	.375	.630	.750	.062	.125	1.250	.844	.047	.938	1.000	.8750-20UNEF
14	.955	1.515	.375	1.188	.125	1.062	.641	.375	.630	.875	.062	.125	1.375	1.007	.047	1.062	1.125	1.0000-20UNEF
16	1.084	1.640	.500	1.312	.125	1.062	.641	.375	.630	1.000	.062	.125	1.500	1.134	.047	1.188	1.188	1.1250-18UNEF
18	1.208	1.765	.625	1.438	.125	1.062	.641	.375	.630	1.125	.062	.125	1.625	1.259	.047	1.312	1.438	1.2500-18UNEF
20	1.333	1.953	.625	1.562	.156	1.062	.703	.328	.755	1.250	.062	.250	1.812	1.384	.172	1.469	1.438	1.3750-18UNEF
22	1.459	2.075	.750	1.688	.156	1.062	.703	.328	.755	1.375	.062	.250	1.938	1.507	.172	1.594	1.625	1.5000-18UNEF
24	1.575	2.203	.800	1.812	.156	1.062	.703	.328	.755	1.500	.062	.250	2.062	1.634	.172	1.719	1.719	1.6250-18UNEF

All dimensions for reference only.

PART #
Commercial

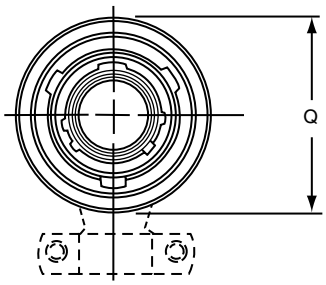
Part number reference. To complete, see how to order pages 62-66.

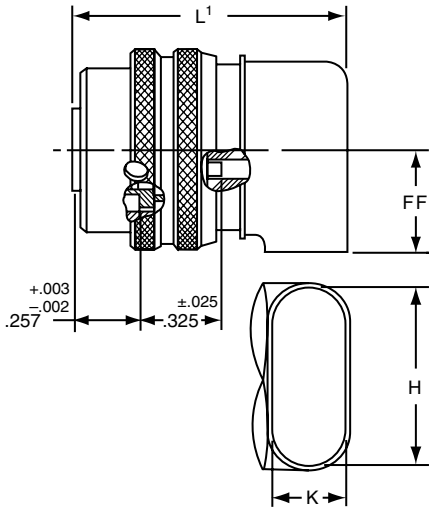
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS/JTN	**08**	*RP*	*22-2*	*P*	*A*	*(XXX)*

Military

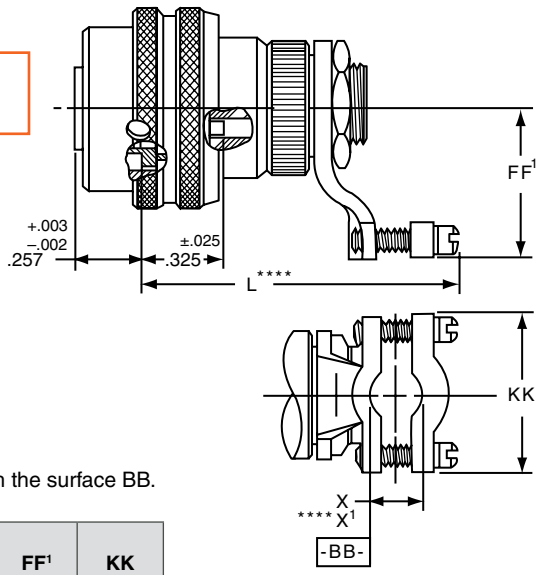
MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27500	**E**	*14*	*A*	*18*	*P*	*A*

* **JT08RP-XX-XXX**
** **JTS08RP-XX-XXX**
*** **JTN08RP-XX-XXX**





* **JT08RE-XX-XXX (MS27500E)**
** **JTS08RE-XX-XXX**
*** **JTN08RE-XX-XXX**



* Standard Junior Tri-Lock
** High temperature version
*** Clear iridite finish (gold color), N_2O_4 resistant
****Dimensions L and X¹ are applicable when the end of the screw is flush with the surface BB.

Shell Size	H ±.010	K ±.010	L Max.	L¹ Max.	Q Dia. Max.	X Min. Cable	X¹ Max. Cable	FF Max.	FF¹ Max.	KK Max.
8	.547	.156	1.578	1.125	.734	.082	.234	.438	.984	.755
10	.709	.188	1.578	1.156	.844	.082	.234	.516	1.016	.755
12	.829	.281	1.656	1.250	1.016	.114	.328	.594	1.078	.817
14	1.000	.438	1.844	1.406	1.141	.176	.457	.656	1.203	.943
16	1.021	.500	2.000	1.469	1.265	.238	.634	.719	1.265	1.067
18	1.145	.562	2.046	1.531	1.391	.208	.614	.781	1.328	1.149
20	1.270	.625	2.125	1.594	1.500	.302	.608	.844	1.359	1.399
22	1.395	.688	2.250	1.656	1.625	.302	.823	.906	1.421	1.399
24	1.520	.750	2.422	1.797	1.750	.332	.853	.969	1.703	1.587

All dimensions for reference only.

JT00 (MS27475) Series II – Hermetic
Wall Mounting Receptacle

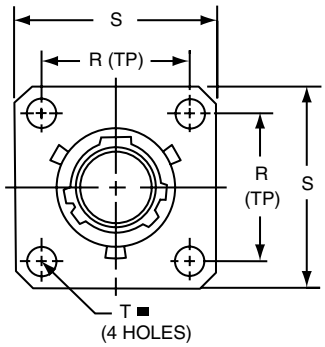
PART #
Commercial

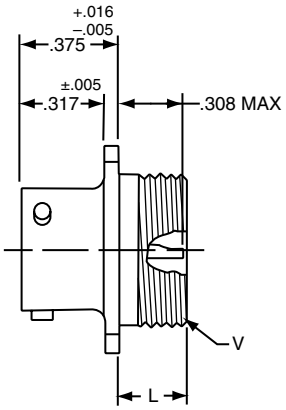
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS	00	H	22-2	P	A	(XXX)

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27475	Y	14	A	18	P	A
MS27482	Y	14	A	18	P	A
MS27476	Y	14	A	18	P	A





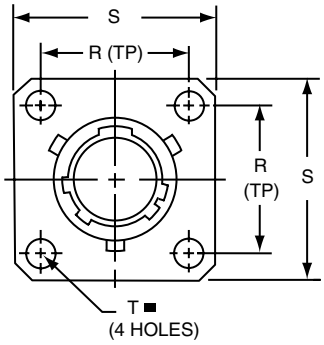
Shell Size	L Max.	N +.001 –.005	R (TP)	S ±.016	T ±.005	V Thread Class 2A
8	.234	.473	.594	.812	.120	.5625-24UNEF
10	.234	.590	.719	.938	.120	.6875-24UNEF
12	.234	.750	.812	1.031	.120	.8125-20UNEF
14	.234	.875	.906	1.125	.120	.9375-20UNEF
16	.234	1.000	.969	1.219	.120	1.0625-18UNEF
18	.234	1.125	1.062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

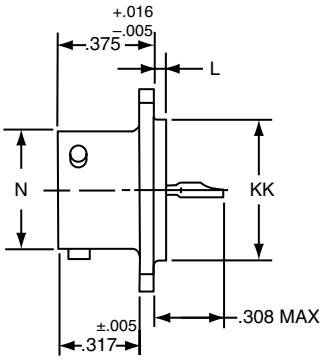
■ ⊕ .005 DIA Ⓜ

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

* **JT00H-XX-XXX**
** **JT00Y-XX-XXX (MS27475YXXDXXX)**
*** **JTS00Y-XX-XXX (MS27482YXXEXXX)**

JT02 (MS27476) Series II – Hermetic
Box Mounting Receptacle





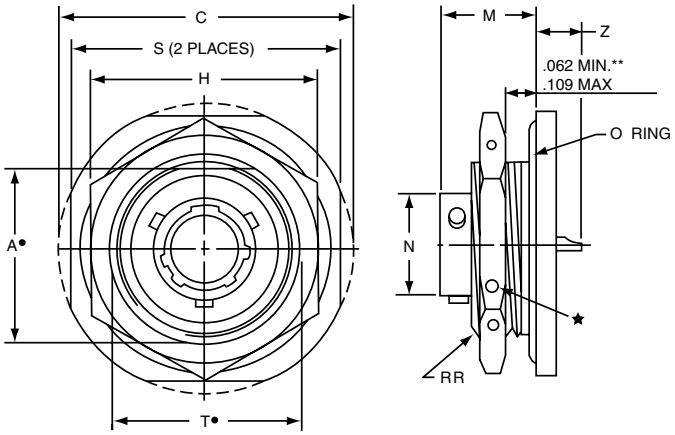
■ ⊕ .005 DIA Ⓜ

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

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

All dimensions for reference only.

* **JT02H-XX-XXX**
** **JT02Y-XX-XXX (MS27476YXXDXXX)**
*** **JTS02Y-XX-XXX (MS27476YXXEXXX)**



PART #
Commercial

Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTS	07	H	22-2	P	A	(XXX)

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27477	Y	14	A	18	P	A
MS27483	Y	14	A	18	P	A
MS27478	Y	14	A	18	P	A
MS27503	Y	14	A	18	P	A

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

* **JT07H-XX-XXX**
*** **JT07Y-XX-XX (MS27477YXXDXXX)**
**** **JTS07Y-XX-XXX (MS27483YXXEXXX)**

Shell Size	A• +.000 –.010	C Max.	H +.017 –.016	M ±.005	N +.001 –.005	S ±.016	T• +.010 –.000	Z Max.	RR Thread Class 2A
8	.830	1.390	1.062	.438	.473	1.250	.884	.244	.8750-20UNEF
10	.955	1.515	1.188	.438	.590	1.375	1.007	.244	1.0000-20UNEF
12	1.084	1.640	1.312	.438	.750	1.500	1.134	.244	1.1250-18UNEF
14	1.208	1.765	1.438	.438	.875	1.625	1.259	.244	1.2500-18UNEF
16	1.333	1.953	1.562	.438	1.000	1.781	1.384	.244	1.3750-18UNEF
18	1.459	2.031	1.688	.438	1.125	1.890	1.507	.244	1.5000-18UNEF
20	1.576	2.156	1.812	.464	1.250	2.016	1.634	.218	1.6250-18UNEF
22	1.701	2.280	2.000	.464	1.375	2.140	1.759	.218	1.7500-18UNS
24	1.826	2.405	2.125	.464	1.500	2.265	1.884	.218	1.8750-16UN

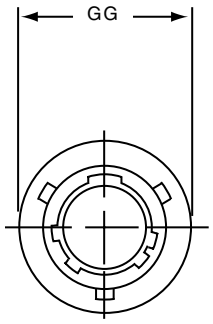
JTI (MS27478) Series II – Hermetic
Solder Mounting Receptacle

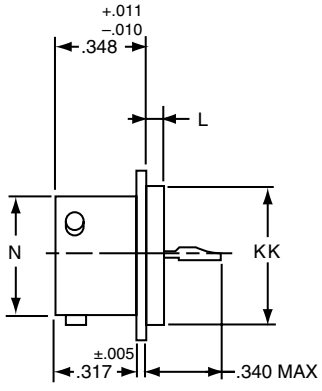
* Standard Junior Tri-Lock
** Interfacial seal wafer
*** High temperature version, interfacial seal wafer with stainless steel shell

* **JTIH-XX-XXX**
** **JTIY-XX-XX (MS27478YXXDXXX)**
*** **JTSIY-XX-XXX (MS27503YXXEXXX)**

Shell Size	L +.011 –.010	N +.001 –.005	GG +.011 –.010	KK +.001 –.005
8	.078	.473	.687	.562
10	.078	.590	.797	.672
12	.078	.750	.906	.781
14	.078	.875	1.031	.906
16	.078	1.000	1.156	1.031
18	.078	1.125	1.281	1.156
20	.078	1.250	1.375	1.250
22	.107	1.375	1.500	1.375
24	.107	1.500	1.625	1.500

All dimensions for reference only.





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

JT00 (MS27334) Series II – Solder
Wall Mounting Receptacle

Military qualified to MIL-DTL-27599

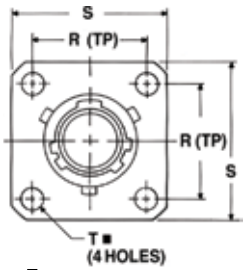
PART #
Commercial

Part number reference. To complete, see how to order pages 62-66.

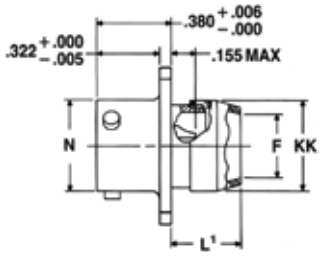
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTN	00	P	22-2	P	A	(XXX)

Military

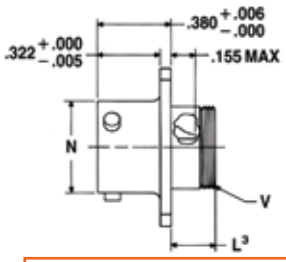
MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27334	P	14	A	18	P	A
MS27335	T	14	A	18	P	A



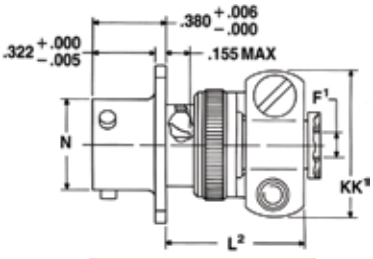
⊕ .005 DIA Ⓜ



*JT00P-XX-XXX (MS27334P)
*JTN00P-XX-XXX



*JT00A-XX-XXX
*JT00C-XX-XXX (MS27334T)
*JTN00A-XX-XXX
*JTN00C-XX-XXX



*JT00A-XX-XXX(SR)
*JTN00A-XX-XXX(SR)
*JTN00C-XX-XXX(SR)

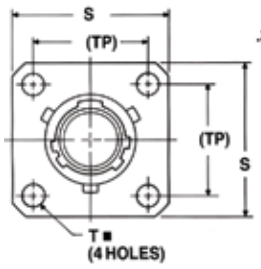
* Standard Junior Tri-Lock
NOTE: For availability of back panel mounting types, consult Amphenol Aerospace.

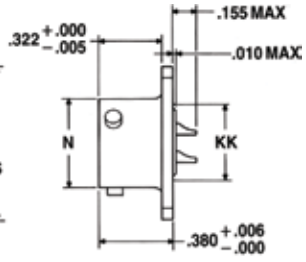
Shell Size	F Dia. Min.	F¹ +.010 −.025	L¹ Max.	L² Max.	L³ Max.	N +.001 −.005	R (TP)	S ±.016	T ±.005	V Thread Modified		KK Dia. Max.	KK¹ Max.
										Size Class 2A	Modified Major Dia.		
8	.312	.125	.422	.734	.234	.473	.594	.812	.120	.4375-28UNEF	.421 - .417	.500	.812
10	.429	.188	.422	.734	.234	.590	.719	.938	.120	.5625-24UNEF	.542 - .538	.625	.875
12	.543	.312	.422	.734	.234	.750	.812	1.031	.120	.6875-24UNEF	.667 - .663	.750	1.000
14	.668	.375	.422	.797	.234	.875	.906	1.125	.120	.8125-20UNEF	.791 - .787	.875	1.125
16	.793	.500	.422	.797	.234	1.000	.969	1.219	.120	.9375-20UNEF	.916 - .912	1.000	1.188
18	.894	.625	.422	.797	.234	1.125	1.062	1.312	.120	1.0625-18UNEF	1.034 - 1.030	1.109	1.438
20	1.019	.625	.422	.859	.234	1.250	1.156	1.438	.120	1.1875-18UNEF	1.158 - 1.154	1.234	1.438
22	1.144	.750	.422	.859	.234	1.375	1.250	1.562	.120	1.3125-18UNEF	1.283 - 1.279	1.359	1.625
24	1.269	.800	.422	.922	.313	1.500	1.375	1.688	.147	1.4375-18UNEF	1.408 - 1.404	1.484	1.719

JT02 (MS27335) Series II – Solder

Military qualified to MIL-DTL-27599

Box Mounting Receptacle





*JT02P-XX-XXX
*JT02A-XX-XXX
*JT02C-XX-XXX (MS27335T)
*JTN02P-XX-XXX
*JTN02A-XX-XXX
*JTN02C-XX-XXX

⊕ .005 DIA Ⓜ

* Standard Junior Tri-Lock
NOTE: For availability of back panel mounting types, consult Amphenol Aerospace.

Shell Size	N +.001 −.005	R (TP)	S ± .016	T ± .005	KK Max.
8	.473	.594	.812	.120	.391
10	.590	.719	.938	.120	.508
12	.750	.812	1.031	.120	.622
14	.875	.906	1.125	.120	.749
16	1.000	.969	1.219	.120	.872
18	1.125	1.062	1.312	.120	.976
20	1.250	1.156	1.438	.120	1.101
22	1.375	1.250	1.562	.120	1.226
24	1.500	1.375	1.688	.147	1.351

All dimensions for reference only.

Military qualified to MIL-DTL-27599

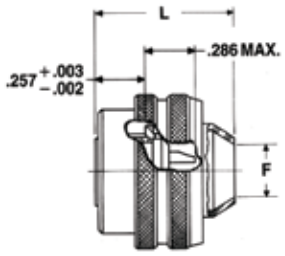
PART
Commercial

Part number reference. To complete, see how to order pages 62-66.

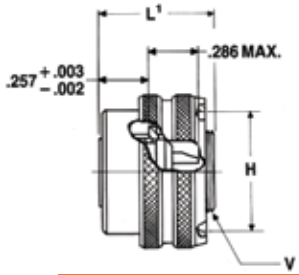
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTN/JTG/JTNG	06	A	22-2	P	A	(XXX)

Military

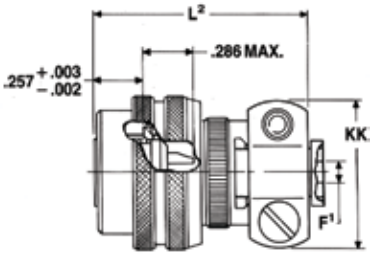
MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27336	P	14	A	18	P	A



*JT06P-XX-XXX (MS27336P)
*JTN06P-XX-XXX



*JT06A-XX-XXX (MS27336T)
*JTN06A-XX-XXX



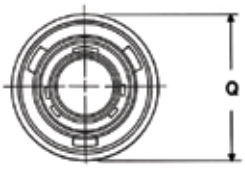
*JT06A-XX-XXX(SR)
*JTN06A-XX-XXX(SR)

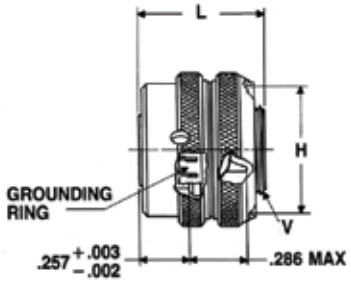
*Standard Junior Tri-Lock

Shell Size	F Min.	F¹ +.010 −.025	H +.010 −.001	L Max.	L¹ Max.	L² Max.	Q Max.	V Thread Modified		KK Max.
								Size Class 2A	Modified Major Dia.	
8	.312	.125	.635	.812	.625	1.109	.734	.4375-28UNEF	.421 - .417	.812
10	.429	.188	.734	.812	.625	1.109	.844	.5625-24UNEF	.542 - .538	.875
12	.543	.312	.870	.812	.625	1.109	1.016	.6875-24UNEF	.667 - .663	1.000
14	.668	.375	.996	.812	.625	1.172	1.141	.8125-20UNEF	.791 - .787	1.125
16	.793	.500	1.122	.828	.625	1.172	1.265	.9375-20UNEF	.916 - .912	1.188
18	.894	.625	1.246	.828	.625	1.172	1.391	1.0625-18UNEF	1.034 - 1.030	1.438
20	1.019	.625	1.372	.828	.625	1.234	1.500	1.1875-18UNEF	1.158 - 1.154	1.438
22	1.144	.750	1.496	.828	.625	1.234	1.625	1.3125-18UNEF	1.283 - 1.279	1.625
24	1.269	.800	1.622	.906	.688	1.297	1.750	1.4375-18UNEF	1.408 - 1.404	1.719

Military qualified to MIL-DTL-27599

JTG06A Series II – Solder
Straight Plug (With Grounding Ring)





*JTG06A-XX-XXX
**JTNG06A-XX-XXX

* Plug with grounding fingers
** Coupling nut is clear iridite finish (gold color), shell and grounding fingers are gold plated N_2O_4 resistant.

Shell Size	H Dia. +.010 −.001	L Max.	Q Dia. Max.	V Thread Modified	
				Size Class 2A	Modified Major Dia.
8	.635	.625	.734	.4375-28UNEF	.421 - .417
10	.734	.625	.844	.5625-24UNEF	.542 - .538
12	.870	.625	1.016	.6875-24UNEF	.667 - .663
14	.996	.625	1.141	.8125-20UNEF	.791 - .787
16	1.122	.625	1.265	.9375-20UNEF	.916 - .912
18	1.246	.625	1.391	1.0625-18UNEF	1.034 - 1.030
20	1.372	.625	1.500	1.1875-18UNEF	1.158 - 1.154
22	1.496	.625	1.625	1.3125-18UNEF	1.283 - 1.279
24	1.622	.688	1.750	1.4375-18UNEF	1.408 - 1.404

All dimensions for reference only.

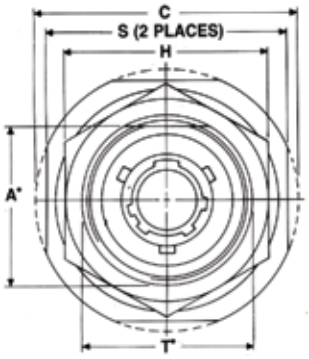
JT07 (MS27337) Series II – Solder
Jam Mounting Receptacle

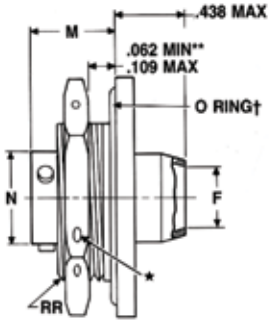
Military qualified to MIL-DTL-27599

PART # Commercial

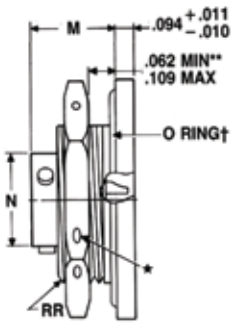
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
JT/JTN	07	A	22-2	P	A	(XXX)

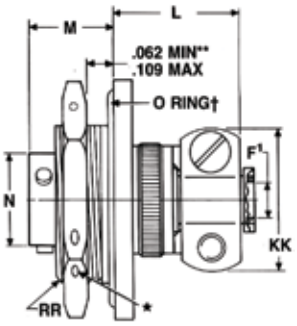




*JT07P-XX-XXX (MS27337P)
*JTN07P-XX-XXX



*JT07A-XX-XXX
*JT07C-XX-XXX
*JTN07A-XX-XXX
*JTN07C-XX-XXX



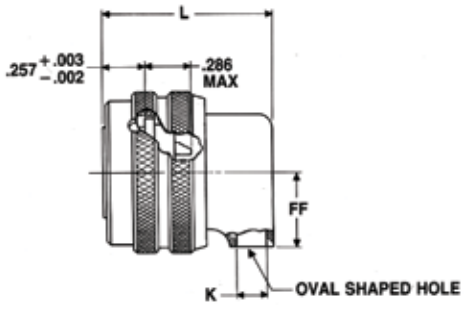
*JT07A-XX-XXX(SR)
*JTN07A-XX-XXX(SR)
*JTN07C-XX-XXX(SR)

★ .059 dia. min. 3 lockwire holes
• "D" shaped mounting hole dimensions.
* Standard Junior Tri-Lock
** Panel thickness
† O Ring not furnished with MS27337

Shell Size	A• +.000 −.010	C Max.	F Min.	F¹ +.010 −.025	H +.017 −.016	L Max.	M ±.005	N +.001 −.005	S ±.016	T• +.010 −.000	KK Max.	RR Thread Class 2A
8	.830	1.390	.312	.125	1.062	.666	.438	.473	1.250	.884	.812	.8750-20UNEF
10	.955	1.515	.429	.188	1.188	.666	.438	.590	1.375	1.007	.875	1.0000-20UNEF
12	1.084	1.640	.543	.312	1.312	.666	.438	.750	1.500	1.134	1.000	1.1250-18UNEF
14	1.208	1.765	.668	.375	1.438	.729	.438	.875	1.625	1.259	1.125	1.2500-18UNEF
16	1.333	1.953	.793	.500	1.562	.729	.438	1.000	1.781	1.384	1.188	1.3750-18UNEF
18	1.459	2.031	.894	.625	1.688	.729	.438	1.125	1.890	1.507	1.438	1.5000-18UNEF
20	1.576	2.156	1.019	.625	1.812	.765	.464	1.250	2.016	1.634	1.438	1.6250-18UNEF
22	1.701	2.280	1.144	.750	2.000	.765	.464	1.375	2.140	1.759	1.625	1.7500-18UNS
24	1.826	2.405	1.269	.800	2.125	.828	.464	1.500	2.265	1.884	1.719	1.8750-16UN

JT08 Series II – Solder
90° Plug

Military qualified to MIL-DTL-27599



*JT08P-XX-XXX
*JTN08P-XX-XXX

* To complete order number see page 62.

Shell Size	H Min.	K Min.	L Max.	Q Max.	FF Max.
8	.396	.126	.891	.734	.391
10	.532	.141	.906	.844	.438
12	.694	.173	.938	1.016	.516
14	.814	.266	1.031	1.141	.594
16	.985	.423	1.188	1.265	.656
18	1.006	.485	1.250	1.391	.719
20	1.130	.547	1.312	1.500	.781
22	1.255	.610	1.375	1.625	.844
24	1.380	.673	1.516	1.750	.906

All dimensions for reference only.

Amphenol
MIL-DTL-38999, Series I, LJT

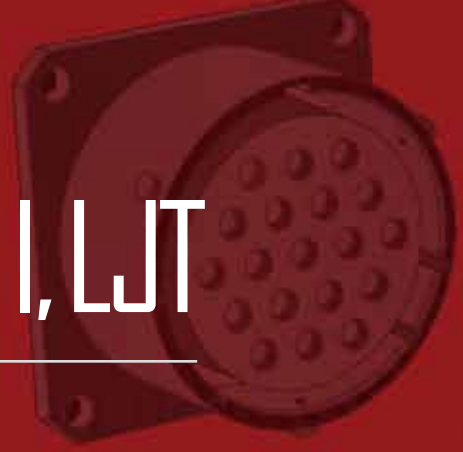


TABLE OF CONTENTS

Combined MIL-DTL-38999 Series I, II, III

- Shell Size & Insert Arrangement Availability 6-9
- Insert Arrangement Drawings 10-17
- Specifications - Contact Ratings, Service Ratings, Finish Data 18, 19

MIL-DTL-38999, Series II JT and Series I LJT

- Features and Benefits 61
- How to Order (Commercial). 62-64
- How to Order (Military). 65, 66

LJT Shell Styles:

- Crimp Wall Mounting Receptacle LJT00R (MS27466) 84
- Crimp Wall Mount Recept. for Back Panel Mounting LJTPQ00R (MS27656). . . . 85
- Crimp Line Receptacle LJT01R 86
- Crimp Box Mounting Receptacle LJT02R (MS27496), Crimp Box Mounting Receptacle for Back Panel Mounting LJTP02R (MS27505) 87
- Crimp Straight Plug LJT06R (MS27467). 88
- Crimp Jam Nut Receptacle LJT07R (MS27468). 89
- Hermetic Wall Mounting Receptacle LJT00 (MS27469) 90
- Hermetic Jam Nut Receptacle LJT07 (MS27470), Hermetic Solder Mounting Receptacle LJTL (MS27471) 91
- Solder Wall Mounting Receptacle LJT00 (MS20026), Solder Line Receptacle LJT01 (MS20027) 92
- Solder Straight Plug LJT06 (MS20028), Solder Jam Nut Receptacle LJT07 (MS20029) 93
- Breakaway Fail-Safe Insert Availability Chart 94
- Breakaway Fail-Safe How to Order (Military /Commercial) 95
- Breakaway Fail-Safe Overview/Information. 96
- Accessories, Contacts, and Tools see Accessories Section 114-117
- Accessories continue 120-124

MIL-DTL-38999 Series I Typical Markets:

- Military & Commercial Aviation
- Military Vehicles
- Missiles & Ordnance
- C4ISR

Amphenol Aerospace

PART #

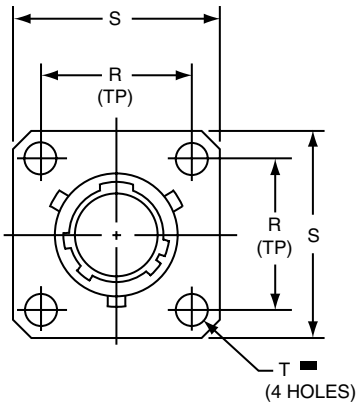
Part number reference. To complete, see how to order pages 62-66.

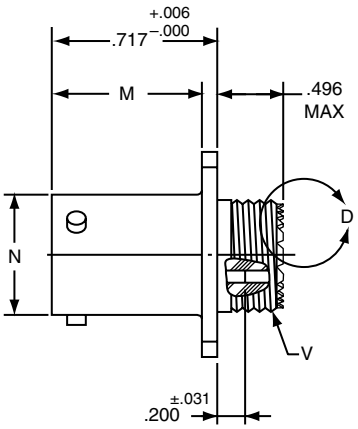
Commercial

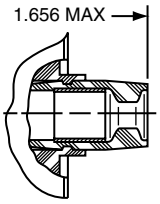
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	**00**	*RE*	*22-2*	*P*	*A*	*(XXX)*

Military

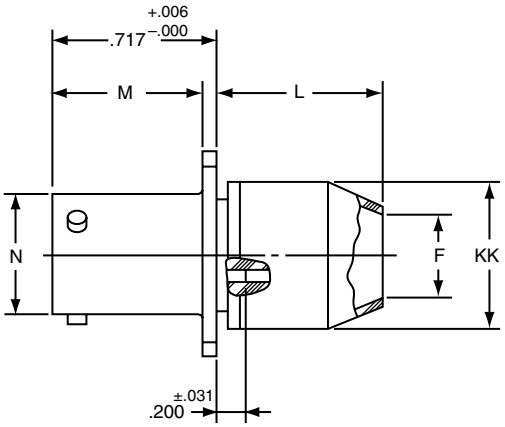
MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27466	*E*	*14*	*A*	*18*	*P*	*A*







LJT00RE-XX-XXX (MS27466E)
LJT00RT-XX-XXX (MS27466T)



LJT00RP-XX-XXX (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.

(Back Panel Mounting)

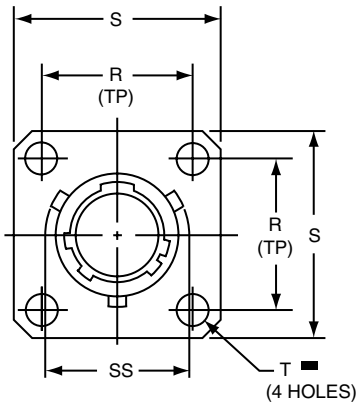
PART #
Commercial

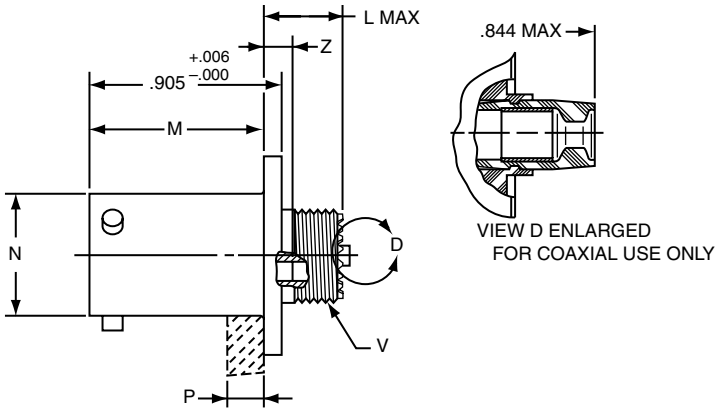
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJTPQ	**00**	*RE*	*22-2*	*P*	*A*	*(XXX)*

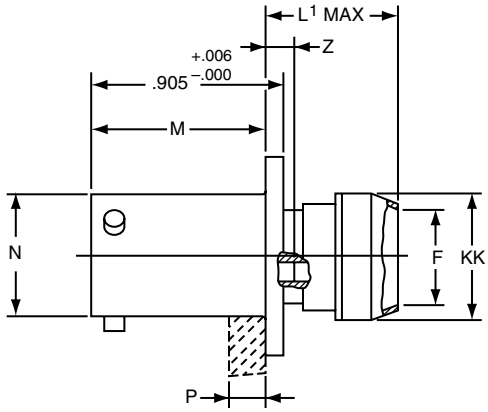
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27656	*E*	*14*	*A*	*18*	*P*	*A*





LJTPQ00RE-XX-XXX (MS27656E)
LJTPQ00RT-XX-XXX (MS27656T)



LJTPQ00RP-XX-XXX (MS27656P)

■ ⊕ .005 DIA Ⓜ

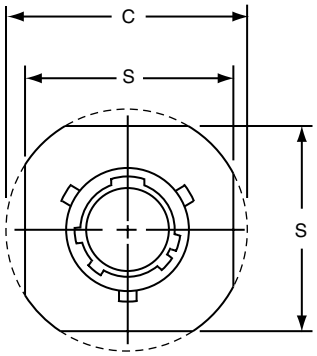
Shell Size	F Dia. ±.010	L Max.	L¹ Max.	M +.000 −.005	N Dia.	P Max. Panel Thickness	R (TP)	S +.011 −.010	T Dia. ±.005	V Thread Class 2A (Plated)	Z Max	KK Dia. Max	SS Dia. +.000 −.016
9	.444	.453	.641	.820	.572	.234	.719	.938	.128	.4375-28 UNEF	.138	.625	.662
11	.558	.453	.641	.820	.700	.234	.812	1.031	.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

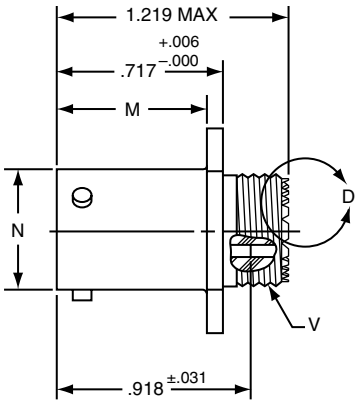
All dimensions for reference only.
Note: MS27656 superseded MS 27515.

PART #
Commercial

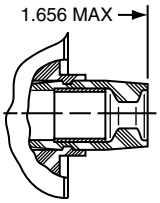
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	**01**	*RE*	*22-2*	*P*	*A*	*(XXX)*





LJT01RE-XX-XXX
LJT01RT-XX-XXX



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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.

Amphenol Aerospace

Box Mounting Receptacle (Back Panel Mounting)

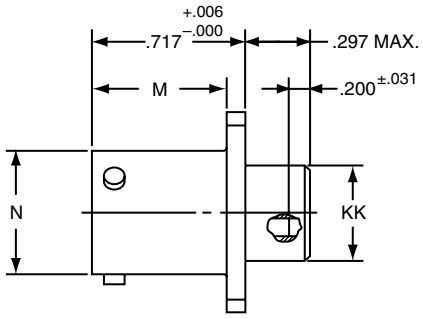
PART #
Commercial

Part number reference. To complete, see how to order pages 62-66.

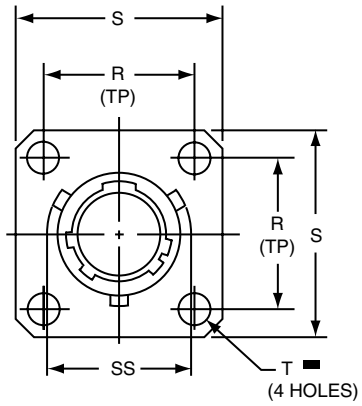
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT/LJTP	02	RE	*22-2*	*P*	*A*	*(XXX)*

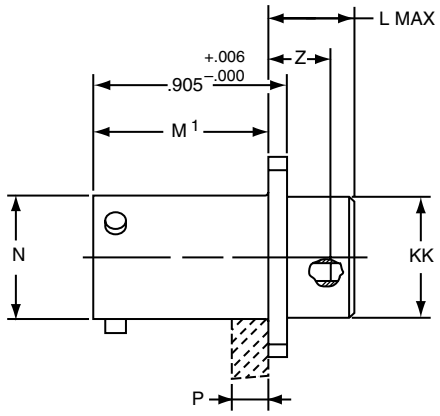
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27496	E	*14*	*A*	*18*	*P*	*A*
MS27505	E	*14*	*A*	*18*	*P*	*A*



LJT02RE-XX-XXX (MS27496E)





LJTP02RE-XX-XXX (MS27505E)

■ ⊕ .005 DIA Ⓜ

Shell Size	L Max.	M +.000 −.005	M[1] +.001 −.005	N Dia +.001 −.005	P Max. Panel Thickness	R (TP)	S +.011 −.010	T Dia. ±.005	Z ±.031	KK Dia. +.006 −.005	SS Dia. +.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.

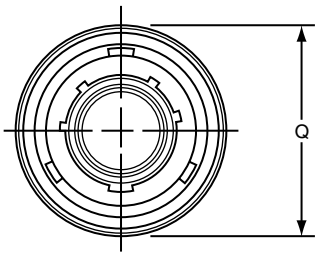
PART # Commercial

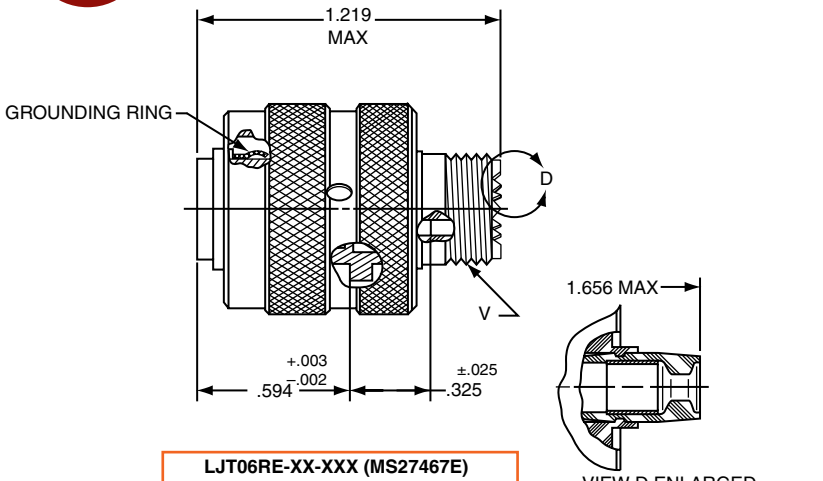
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	**06**	*RE*	*22-2*	*P*	*A*	*(XXX)*

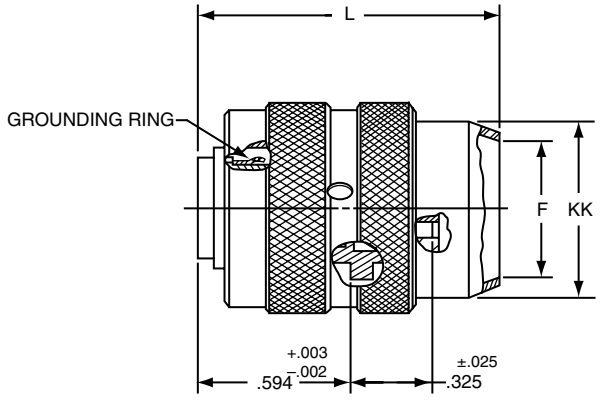
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27467	*E*	*14*	*A*	*18*	*P*	*A*





LJT06RE-XX-XXX (MS27467E)
LJT06RT-XX-XXX (MS27467T)



LJT06RP-XX-XXX (MS27467P)

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.

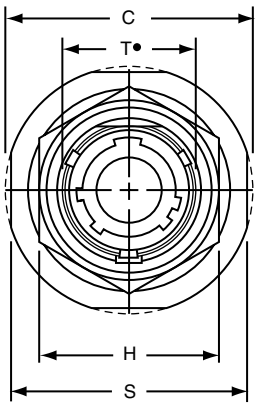
PART #
Commercial

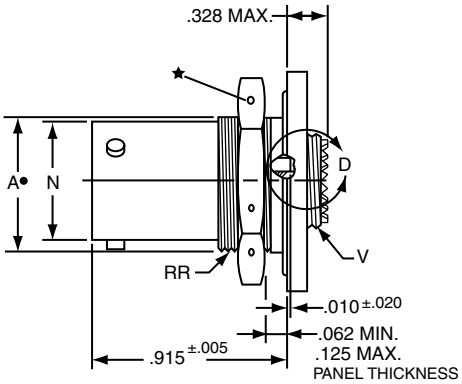
Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	**07**	*RE*	*22-2*	*P*	*A*	*(XXX)*

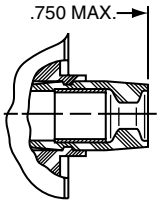
Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27498	*E*	*14*	*A*	*18*	*P*	*A*





LJT07RE-XX-XXX (MS27468E)
LJT07RT-XX-XXX (MS27468T)



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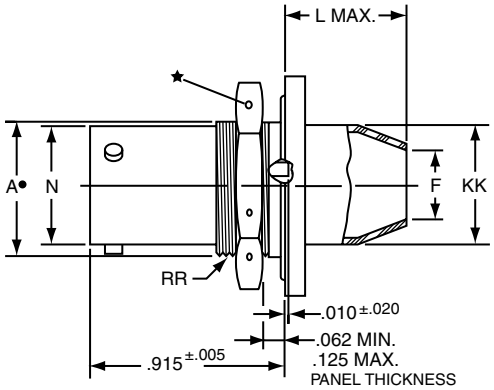


LJT07RP-XX-XXX (MS27468P)

★ .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.

PART

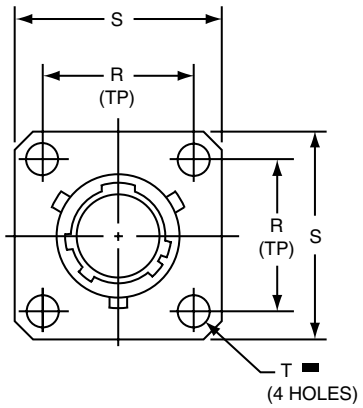
Part number reference. To complete, see how to order pages 62-66.

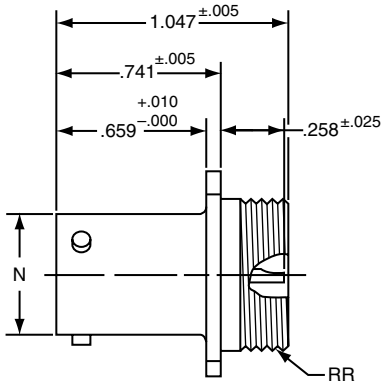
Commercial

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT/LJTS	**00**	*Y*	*22-2*	*P*	*A*	*(XXX)*

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27469	**Y**	*14*	*D*	*18*	*P*	*A*





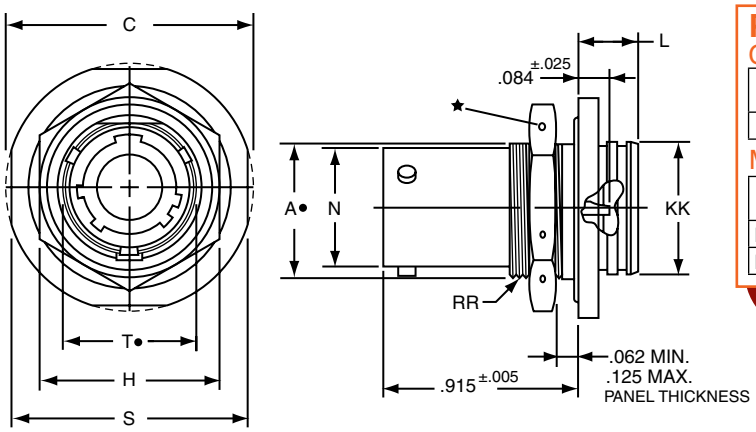
* **LJT00H-XX-XXX**
** **LJT00Y-XX-XXX (MS27469YXXD)**
*** **LJTS00Y-XX-XXX (MS27469YXXE)**

▬ ⌖ .005 DIA Ⓜ

* 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.



PART #
Commercial

Part number reference. To complete, see how to order pages 62-66.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT/LJTS	H	RE	22-2	P	A	(XXX)

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27470	Y	14	A	18	P	A
MS27471	Y	14	A	18	P	A

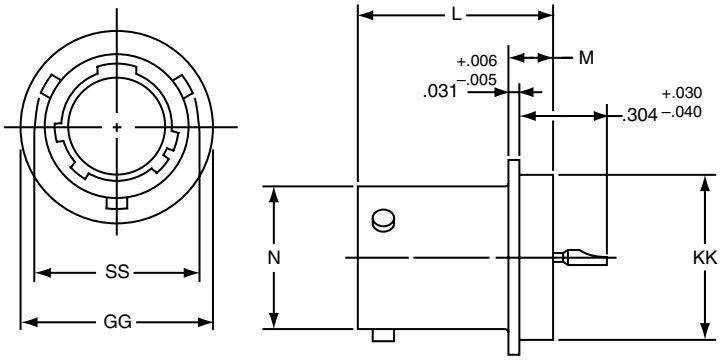
Shell Size	A• +.000 –.010	C Max.	H Hex +.017 –.016	L Max.	N +.000 –.005	S ±.016	T• +.010 –.000	KK +.011 –.000	RR Thread Class 2A (Plated)
9	.669	1.199	.875	.297	.572	1.062	.697	.642	.6875-24 UNEF
11	.769	1.386	1.000	.297	.700	1.250	.822	.766	.8125-20 UNEF
13	.955	1.511	1.188	.297	.850	1.375	1.007	.892	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.

* LJT07H-XX-XXX
** LJT07Y-XX-XXX (MS27470YXXD)
*** LJTS07Y-XX-XXX (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

LJTI (MS27471) Series I
– Hermetic Solder Mounting Receptacle



* 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.

* LJTIH-XX-XXX
** LJTIY-XX-XXX (MS27471YXXD)
*** LJTSIY-XX-XXX (MS27471YXXE)

LJT00 (MS20026) Series I – Solder
Wall Mounting Receptacle

Military qualified to MIL-DTL-27599

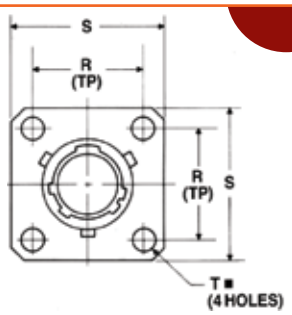
PART #
Commercial

Part number reference. To complete, see how to order pages 62-66.

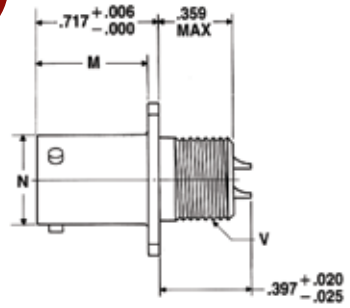
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	00	P	22-2	P	A	(XXX)

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS20026	T	14	A	18	P	A
MS20027	T	14	A	18	P	A

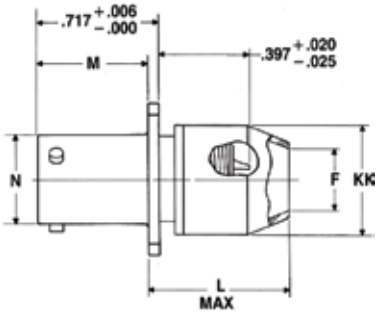
LJT00T-XX-XXX (MS20026T)



■ ⊕ .005 DIA Ⓜ



LJT00P-XX-XXX

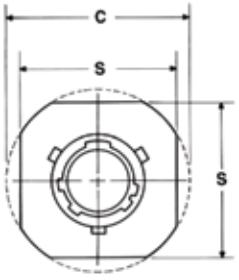


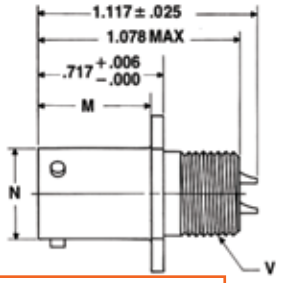
NOTE: For availability of back panel mounting types, check with nearest sales office or call Amphenol Aerospace.

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

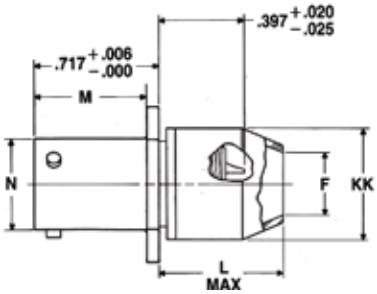
LJT01 (MS20027) Series I – Solder
Line Receptacle

Military qualified to MIL-DTL-27599





LJT01T-XX-XXX (MS20027T)

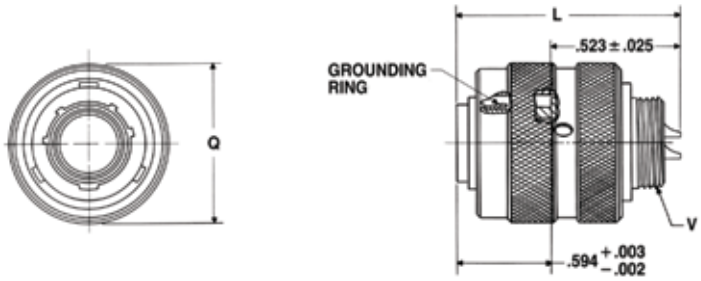


LJT01P-XX-XXX

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

All dimensions for reference only.

Military qualified to MIL-DTL-27599



PART # Commercial

Part number reference. To complete, see how to order pages 62-66.

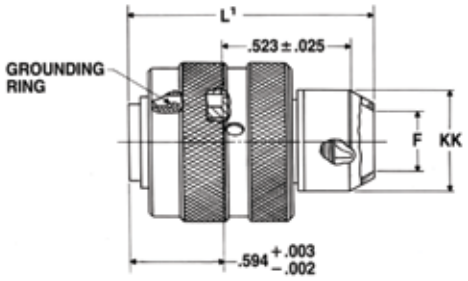
Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
LJT	06	T	22-2	P	A	(XXX)

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS20028	T	14	A	18	P	A
MS20029	T	14	A	18	P	A

LJT06T-XX-XXX (MS20028T)

Shell Size	F Dia.	L Max.	L¹ 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

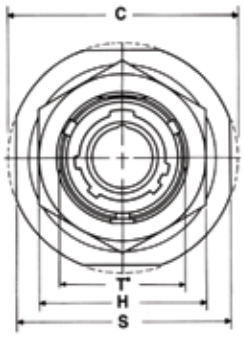


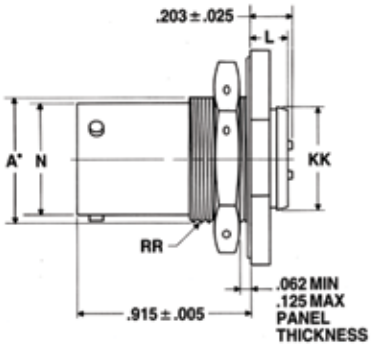
LJT06P-XX-XXX

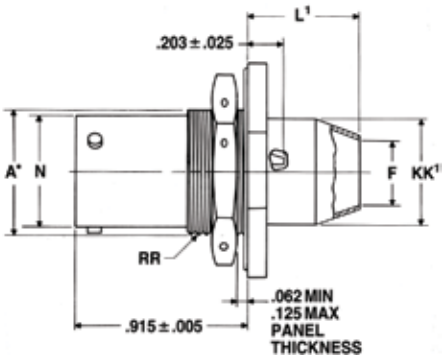
LJT07 (MS20029) Series I – Solder

Military qualified to MIL-DTL-27599

Jam Nut Receptacle







- "D" shaped mounting hole dimensions

LJT07T-XX-XXX (MS20029T)

LJT07P-XX-XXX (MS20029P)

Shell Size	A● +.000 −.010	C Max.	F Dia.	H Hex +.017 −.016	L Max.	L¹ Max.	N +.001 −.005	S ±.016	T● +.010 −.000	KK +.011 −.000	KK¹ 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.

Series I, LJT Breakaway Fail Safe
Lanyard Release Plug Insert Availability

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

HOW TO ORDER - BY MILITARY PART NUMBER 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 94.

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

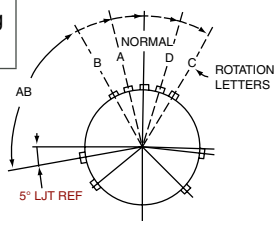
MIL-DTL-38999, see insert identification chart on page 94.

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)



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

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 - BY COMMERCIAL PART NUMBER 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 specification 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 and 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 94) for coded part number that correlates to insert arrangement.

4. Select a Lanyard Length Code

See Table II (page 94) 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 commercial 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

Amphenol LJT Breakaway Fail Safe Connectors provide unequaled 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:

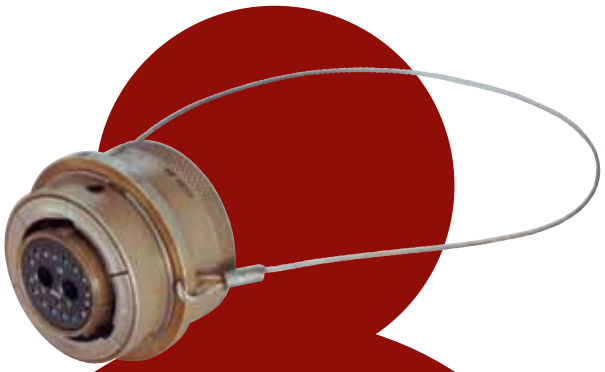
- Instant decoupling and damage free separation
- Completely intermateable with standard LJT receptacles
- Inventory support commonality through the use of standard insert arrangements and contacts

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.

PART #
Commercial

Part number reference. To complete, see how to order pages 95.

Connector Type	Shell Style	Service Class	Shell Size & Insert Arrg	Contact Type	Alternate Position	Special Variations
88/91	**5388**	*T*	*22-2*	*P*	*A*	*(XXX)*

Military

MS Number	Service Class	Shell Size	Finish	Insert Arrg	Contact Style (P or S)	Alternate Position
MS27661	**T**	*14*	*A*	*18*	*P*	*A*

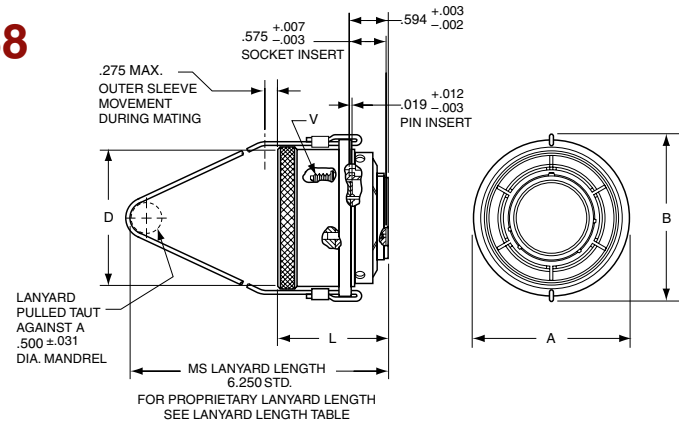
LJT Fail Safe 88-5388/91-5388 (MS27661)

Lanyard Release Plug

* To complete order number see page 95.

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.



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