

# MIL-DTL-38999, Series II JT

## MIL-DTL-38999, Series I LJT



**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<sub>2</sub>O<sub>4</sub> resistance provided they are mated, and un-grommated 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<sup>-7</sup> cm<sup>3</sup> 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**

### 38999

|             |
|-------------|
| III         |
| HD          |
| Dualok      |
| II          |
| I           |
| SJT         |
| Accessories |
| Aquacon     |
| Herm/Seal   |
| PCB         |

|              |
|--------------|
| HIGH SPEED   |
| Fiber Optics |
| Contacts     |
| Connectors   |
| Cables       |

|            |
|------------|
| EMI Filter |
| Transient  |

|          |
|----------|
| 26482    |
| Matrix 2 |

|               |
|---------------|
| 83723 III     |
| Matrix I Pyle |

|       |
|-------|
| 26500 |
| Pyle  |

|                           |
|---------------------------|
| 5015                      |
| Crimp Rear Release Matrix |

|         |
|---------|
| 22992   |
| Class I |

|             |
|-------------|
| Back-Shells |
|-------------|

|         |
|---------|
| Options |
| Others  |

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

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

### Step 1. Select a Connector Type

| 1.             | 2.          | 3.                                               | 4.                          | 5.           | 6.                 | 7.                 |
|----------------|-------------|--------------------------------------------------|-----------------------------|--------------|--------------------|--------------------|
| Connector Type | Shell Style | Service Class                                    | Shell Size-<br>Insert Arrg. | Contact Type | Alternate Position | 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.                                      | 2.                  | 3.                                                             | 4.                          | 5.                                                     | 6.                 | 7.                 |
|-----------------------------------------|---------------------|----------------------------------------------------------------|-----------------------------|--------------------------------------------------------|--------------------|--------------------|
| Connector Type                          | Shell Style         | Service Class                                                  | Shell Size-<br>Insert Arrg. | Contact Type                                           | Alternate Position | Special Variations |
|                                         | 00                  |                                                                |                             |                                                        |                    |                    |
| JT<br>JTS<br>JTN<br>LJT<br>LJTS<br>LJTN | JTL<br>JTLN<br>JTLS | JTPQ<br>JTP<br>JTPN<br>JTPS<br>LJTPQ<br>LJTP<br>LJTPN<br>LJTPS | JTG<br>JTNG                 | Designates                                             |                    |                    |
| 00                                      |                     | 00                                                             |                             | Wall mount receptacle (Hermetic option)                |                    |                    |
| 01                                      |                     |                                                                |                             | Line mount receptacle (Non-hermetic)                   |                    |                    |
| 02                                      |                     | 02                                                             |                             | Box mount receptacle (Hermetic Option except for LJTN) |                    |                    |
| 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

#### Series II JT



Wall Mounting Receptacle



Wall Mounting Receptacle



Line Receptacle



Box Mounting Receptacle



Jam Nut Receptacle



Straight Plug



Straight Plug



Jam Nut Receptacle



Solder Mounting Receptacle



90° Plug



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



Solder Mounting Receptacle

## How to Order (Commercial)

**38999**

|             |
|-------------|
| III         |
| HD          |
| Dualok      |
| II          |
| I           |
| SJT         |
| Accessories |
| Aquacon     |
| Herm/Seal   |
| PCB         |

|              |
|--------------|
| HIGH SPEED   |
| Fiber Optics |
| Contacts     |
| Connectors   |
| Cables       |

|            |
|------------|
| EMI Filter |
| Transient  |

|          |
|----------|
| 26482    |
| Matrix 2 |

|               |
|---------------|
| 83723 III     |
| Matrix   Pyle |

|       |
|-------|
| 26500 |
| Pyle  |

|                           |
|---------------------------|
| 5015                      |
| Crimp Rear Release Matrix |

|         |
|---------|
| 22992   |
| Class I |

|             |
|-------------|
| Back-Shells |
|-------------|

|         |
|---------|
| Options |
| Others  |

### Step 3. Select a Service Class

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

| 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 <sup>-7</sup> 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<br>JTN<br>JTG<br>JTNG<br>JTPQ<br>LJT<br>JTPQ<br>LJTPQ | JTS | JTLS | JTL<br>JTLN<br>LJTP | LJTS | JTPS<br>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.             | 2.          | 3.            | 4.                      | 5.           | 6.                 | 7.                 |
|----------------|-------------|---------------|-------------------------|--------------|--------------------|--------------------|
| Connector Type | Shell Style | Service Class | Shell Size-Insert Arrg. | Contact Type | Alternate Position | Special Variations |
|                |             |               | <b>22-2</b>             |              |                    |                    |

### Step 5. Select a Contact Type

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

|   | Designates      |
|---|-----------------|
| P | Pin Contacts    |
| S | Socket Contacts |

### How to Order (Commercial)

38999

1. 2. 3. 4. 5. 6. 7.

| Connector Type | Shell Style | Service Class | Shell Size-Insert Arrg. | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|-------------------------|--------------|--------------------|--------------------|
|                |             |               |                         |              | A                  |                    |

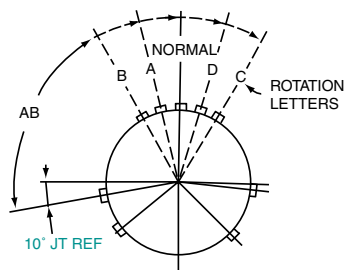
#### Step 6. Select an Alternate Keying Position

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

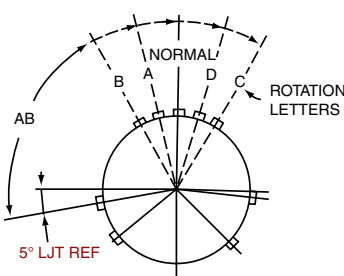
A plug with a given rotation letter will mate with a receptacle with the same rotation letter. The AB angle for a given connector is the same whether it contains pins or sockets. Only the master key/keyway rotates in the shell, and the minor keys are fixed.

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. 2. 3. 4. 5. 6. 7.

| Connector Type | Shell Style | Service Class | Shell Size-Insert Arrg. | Contact Type | Alternate Position | 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)         |                         |

## How to Order (Military)

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

## Military

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

### Step 1. Choose your Military Connector Type

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

| Series II JT  |                                                     | Series I LJT  |                                                     |
|---------------|-----------------------------------------------------|---------------|-----------------------------------------------------|
| MIL-DTL-38999 |                                                     | MIL-DTL-38999 |                                                     |
| MS27472       | Crimp Wall Mount Receptacle                         | MS27466       | Crimp Wall Mount Receptacle                         |
| MS27497       | Crimp Wall Mount Receptacle (Back Panel Mounting)   | MS27656       | Crimp Wall Mount Receptacle (Back Panel Mounting)   |
| MS27499       | Crimp Box Mounting Receptacle                       | MS27496       | Crimp Box Mounting Receptacle                       |
| MS27513       | Crimp Box Mounting Receptacle with grommet          | MS27505       | Crimp Box Mounting Receptacle (Back Panel Mounting) |
| MS27508       | Crimp Box Mounting Receptacle (Back Panel Mounting) | MS27467       | Crimp Straight Plug                                 |
| MS27473       | Crimp Straight Plug                                 | MS27468       | Crimp Jam Nut Receptacle                            |
| MS27484       | Crimp Straight Plug with Grounding Fingers          | MS27469       | Hermetic Wall Mounting Receptacle                   |
| MS27474       | Crimp Jam Nut Receptacle                            | MS27470       | Hermetic Jam Nut Receptacle                         |
| MS27500       | Crimp 90° plug                                      | MS27471       | Hermetic Solder Mounting Receptacle                 |
| MS27475       | Hermetic Wall Mounting Receptacle                   | MIL-DTL-27599 |                                                     |
| MS27476       | Hermetic Box Mounting Receptacle                    | MS20026       | Solder Wall Mounting Receptacle                     |
| MS27477       | Hermetic Jam Nut Receptacle                         | MS20027       | Solder Line Receptacle                              |
| MS27478       | Hermetic Solder Mounting Receptacle                 | MS20028       | Solder Straight Plug                                |
| MIL-DTL-27599 |                                                     | MS20029       | Solder Jam Nut Receptacle                           |
| MS27334       | Solder Wall Mount Receptacle                        |               |                                                     |
| MS27335       | Solder Box Mounting Receptacle                      |               |                                                     |
| MS27336       | Solder Straight Plug                                |               |                                                     |
| MS27337       | Solder Jam Mounting Receptacle                      |               |                                                     |

### Step 2. Select a Military Service Class

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

38999

III

HD

Duallok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others



38999

|             |
|-------------|
| III         |
| HD          |
| Dualok      |
| II          |
| I           |
| SJT         |
| Accessories |
| Aquacon     |
| Herm/Seal   |
| PCB         |

|                            |
|----------------------------|
| HIGH SPEED                 |
| Fiber Optics               |
| Contacts Connectors Cables |

|                      |
|----------------------|
| EMI Filter Transient |
|----------------------|

|                |
|----------------|
| 26482 Matrix 2 |
|----------------|

|                         |
|-------------------------|
| 83723 III Matrix   Pyle |
|-------------------------|

|            |
|------------|
| 26500 Pyle |
|------------|

|                               |
|-------------------------------|
| 5015 Cimp Rear Release Matrix |
|-------------------------------|

|               |
|---------------|
| 22992 Class I |
|---------------|

|             |
|-------------|
| Back-Shells |
|-------------|

|                |
|----------------|
| Options Others |
|----------------|

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

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

**Step 7. Select an Alternate Keying Position**  
See page 64 for information, No letter required for normal position

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

| 38999                          | Series | Series | Series | Military | MIL-DTL-27599<br>JT/LJT Solder |       | Hermetics |         |     |                |                | Contact Size |     |     |    |    |     |    |           |            |          |              |  |
|--------------------------------|--------|--------|--------|----------|--------------------------------|-------|-----------|---------|-----|----------------|----------------|--------------|-----|-----|----|----|-----|----|-----------|------------|----------|--------------|--|
|                                | JT II  | LJT I  | TV III | III      |                                | Crimp | Class H   | Class Y | TV* | Service Rating | Total Contacts | 23 HD        | 22D | 22M | 22 | 20 | 16  | 12 | 12 (Coax) | 10 (Power) | 8 (Coax) | 8†† (Twinax) |  |
| III                            |        |        | 7-D2   |          |                                |       |           |         |     | M              | 2              |              | 2   |     |    |    |     |    |           |            |          |              |  |
| HD                             |        |        | 7-D3   |          |                                |       |           |         |     | M              | 3              |              | 3   |     |    |    |     |    |           |            |          |              |  |
| Dualok                         |        |        | 7-D4   |          |                                |       |           |         |     | M              | 4              |              | 4   |     |    |    |     |    |           |            |          |              |  |
| II                             | 8-2■   |        |        |          | P                              |       |           |         |     | M              | 2              |              |     |     |    | 2  |     |    |           |            |          |              |  |
| I                              | 8-3■   |        |        |          | X                              | NA    | P         | P       |     | M              | 3              |              |     |     |    | 3  |     |    |           |            |          |              |  |
|                                | 9-3■   |        |        |          | X                              |       |           |         |     |                |                |              |     |     |    |    |     |    |           |            |          |              |  |
| SJT                            |        |        | 9-5★■  |          |                                |       |           |         |     | Grounded       | 1              |              |     |     |    |    |     |    |           |            |          | 1            |  |
| Accessories                    | 8-6    |        |        |          | X                              | X     | P         | P       |     | M              | 6              |              |     | 6   |    |    |     |    |           |            |          |              |  |
| Aquacon                        |        | 9-6    |        |          | X                              | X     | P         | P       |     | M              | 7              |              |     | 7   |    |    |     |    |           |            |          |              |  |
| Herm/Seal                      |        | 9-7■   |        |          | X                              |       |           |         |     | N              | 9              | 9            |     |     |    |    |     |    |           |            |          |              |  |
| PCB                            |        | 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  |     |    |           |            |          |              |  |
| Fiber Optics                   | 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  |     |    |           |            |          |              |  |
| Contacts Connectors Cables     | 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  |     |    |           |            |          |              |  |
| EMI Filter Transient           | 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   |     |    |    |     |    |           |            |          |              |  |
| 26482 Matrix 2                 | 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   |                |                |              |     |     |    |    |     |    |           |            |          |              |  |
| 83723 III Matrix   Pyle        | 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   |                |                |              |     |     |    |    |     |    |           |            |          |              |  |
| 26500 Pyle                     |        |        | 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           |     |     |    |    |     |    |           |            |          |              |  |
| 5015 Crimp Rear Release Matrix | 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              |              |     |     |    |    |     |    |           |            |          |              |  |
|                                | 12-98  |        |        |          | X                              | X     | P/S       | P/S     |     | I              | 10             |              |     |     |    | 10 |     |    |           |            |          |              |  |
|                                |        | 13-98  | 13-98  | C98      | X                              | X     | P/S       | P/S     | P   |                |                |              |     |     |    |    |     |    |           |            |          |              |  |
| 22992 Class I                  | 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

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

**38999**

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

**HIGH  
SPEED**

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others



| 38999                                   | Series | Series | Series   | Military | MIL-DTL-27599<br>JT/LJT<br>Solder | Crimp | Hermetics |     |     | Service<br>Rating | Total<br>Contacts | Contact Size |     |     |     |    |    |    |              |               |             |                 |
|-----------------------------------------|--------|--------|----------|----------|-----------------------------------|-------|-----------|-----|-----|-------------------|-------------------|--------------|-----|-----|-----|----|----|----|--------------|---------------|-------------|-----------------|
|                                         | JT II  | LJT I  | TV III   | III      |                                   |       | H         | Y   | TV* |                   |                   | 23<br>HD     | 22D | 22M | 22  | 20 | 16 | 12 | 12<br>(Coax) | 10<br>(Power) | 8<br>(Coax) | 8††<br>(Twinax) |
| III                                     | 20-2   |        |          |          |                                   | X     |           |     | M   | 65                |                   |              |     |     | 65  |    |    |    |              |               |             |                 |
| HD                                      |        | 21-2■  |          |          |                                   | X     |           |     |     |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
| Dualok                                  | 20-11■ |        |          |          |                                   | 3     |           |     | I   | 11                |                   |              |     |     |     |    |    | 11 |              |               |             |                 |
| II                                      |        | 21-11★ | 21-11★   | G11      |                                   | X     |           |     |     |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
| I                                       | 20-16  |        |          |          | X                                 | X     | P/S       | P/S |     | II                | 16                |              |     |     |     |    | 16 |    |              |               |             |                 |
| SJT                                     |        | 21-16★ | 21-16★   | G16      | X                                 | X     | P         | P   | P   | I                 | 25                |              |     |     |     | 25 |    |    |              |               |             |                 |
| Accessories                             |        | 21-25■ |          |          |                                   |       |           |     |     | I                 | 27                |              |     |     |     | 27 |    |    |              |               |             |                 |
| Aquacon                                 |        | 21-27■ |          |          | X                                 |       |           |     |     | I                 | 27                |              |     |     |     | 19 | 4  | 4  |              |               |             |                 |
| Herm/Seal                               | 20-35  |        | 21-29■   |          |                                   | X     |           |     |     | I                 |                   |              |     |     |     |    |    |    |              |               |             |                 |
| PCB                                     |        | 21-35  | 21-35    | G35      |                                   | X     | P         | P   | P   | M                 | 79                |              | 79  |     |     |    |    |    |              |               |             |                 |
|                                         | 20-39  |        |          |          | X                                 | X     | P         | P   | P   | I                 | 39                |              |     |     |     | 37 | 2  |    |              |               |             |                 |
|                                         |        | 21-39  | 21-39    | G39      | X                                 | X     | P         | P   | P   |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
|                                         | 20-41  |        |          |          | X                                 | X     | P         | P   | P   | I                 | 41                |              |     |     |     | 41 |    |    |              |               |             |                 |
| HIGH<br>SPEED                           |        | 21-41  | 21-41    | G41      | X                                 | X     | P/S       | P/S | P   |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
|                                         |        | 21-75★ | 21-75★◇  | G75      |                                   | 2     | X         |     |     | N                 | M                 | 4            |     |     |     |    |    |    |              |               | 4           | (4)             |
| Fiber<br>Optics                         |        | 21-79■ | 21-79■   |          |                                   | 2     | X         |     |     | II                | 19                |              | 17  |     |     |    |    |    |              |               | 2           | (5)             |
|                                         |        |        | 21-121■  |          |                                   |       |           |     |     | N                 | 121               | 121          |     |     |     |    |    |    |              |               |             |                 |
| Contacts<br>Connectors<br>Cables        | 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               |
| EMI Filter<br>Transient                 | 22-14■ |        |          |          |                                   | 2     | ◇         |     |     | I                 | 14                |              |     |     |     |    |    | 14 |              |               |             |                 |
|                                         |        | 23-14■ | 23-14■   |          |                                   | 2     | ◇         |     |     |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
|                                         | 22-21  |        |          |          | X                                 | X     | P         | 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 |    |    |              |               |             |                 |
| 26482<br>Matrix 2                       | 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   |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
| 83723 III<br>Matrix   Pyle              |        |        | 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 |    |    |              |               |             |                 |
| 26500<br>Pyle                           |        | 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     |           |     |     |                   |                   |              |     |     |     |    |    |    |              |               |             |                 |
| 5015<br>Crimp Rear<br>Release<br>Matrix | 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             |             |                 |
| 22992<br>Class I                        |        |        | 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.

(5) MS Connector 21-79 has provision for two size 8 coax contacts. Coax contacts are not supplied unless specified by customer.

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

## Insert Availability and Identification Chart

| Series | Series | Series  | Military | MIL-DTL-27599 |       | Hermetics |   |     |                |                | Contact Size |     |     |    |    |    |    |           |            |          |              |          |
|--------|--------|---------|----------|---------------|-------|-----------|---|-----|----------------|----------------|--------------|-----|-----|----|----|----|----|-----------|------------|----------|--------------|----------|
| JT II  | LJT I  | TV III  | III      | JT/LJT Solder | Crimp | H         | Y | TV* | Service Rating | Total Contacts | 23 HD        | 22D | 22M | 22 | 20 | 16 | 12 | 12 (Coax) | 10 (Power) | 8 (Coax) | 8†† (Twinax) | 8 Quadrx |
| 24-24  |        |         |          |               | X     | P         | P |     | I              | 24             |              |     |     |    |    | 12 | 12 |           |            |          |              |          |
|        | 25-24★ | 25-24★  | J24      |               | X     | P         | P |     | I              | 25             |              |     |     |    | 16 | 5  |    |           |            | 4        |              |          |
|        |        | 25-26■★ |          |               | ◆     |           |   |     | I              | 25             |              |     |     |    |    |    |    |           |            |          |              |          |
| 24-29  |        |         |          |               | X     |           |   |     | I              | 29             |              |     |     |    |    | 29 |    |           |            |          |              |          |
|        | 25-29★ | 25-29★  | J29      | X             | X     |           |   |     | I              | 29             |              |     |     |    |    |    |    |           |            |          |              |          |
| 24-35  |        |         |          |               | X     | P         | P |     | New            | 128            |              | 128 |     |    |    |    |    |           |            |          |              |          |
|        | 25-35  | 25-35   | J35      |               | X     | P         | P | P   | M              | 128            |              | 128 |     |    |    |    |    |           |            |          |              |          |
| 24-37  |        |         |          |               | X     |           |   |     | I              | 37             |              |     |     |    |    | 37 |    |           |            |          |              |          |
|        | 25-37★ | 25-37★  | J37      |               | X     |           |   |     | I              | 37             |              |     |     |    |    |    |    |           |            |          |              |          |
| 24-43■ |        |         |          |               | 3     |           |   |     | I              | 43             |              |     |     |    |    | 23 | 20 |           |            |          |              |          |
|        | 25-43  | 25-43   | J43      | X             | 2     | ◆         |   |     | I              | 43             |              |     |     |    |    |    |    |           |            |          |              |          |
|        | 25-46  | 25-46   | J46      |               | 2     | ◆         |   |     | I              | 46             |              |     |     |    | 40 | 4  |    |           |            | 2        |              |          |
| 24-61  |        |         |          |               | X     |           | P | P   | I              | 61             |              |     |     |    |    | 61 |    |           |            |          |              |          |
|        | 25-61  | 25-61   | J61      | X             | X     | P         | P | P   | I              | 61             |              |     |     |    |    |    |    |           |            |          |              |          |
|        |        | 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.

**38999**

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

**HIGH SPEED**

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

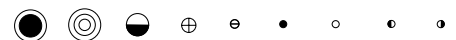
Back-  
Shells

Options  
Others

Front face of pin inserts illustrated

38999

|                                |                                |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
|--------------------------------|--------------------------------|-------|----------|-------|-------|----------|----------|--------|-------|--------|------|-----|----|----|-----|----|----|
| III                            | Shell Size & Insert Arrg. for: |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| HD                             | Series II JT                   | 8-2   | 8-3      | 8-6   | 8-35  | 8-44     | 8-97     | 8-98   |       |        |      |     |    |    |     |    |    |
| Dualok                         | Series I LJT                   |       | 9-3      | 9-6   | 9-7   | 9-22     | 9-35     | 9-44   | 9-98  |        |      |     |    |    |     |    |    |
| II                             | Series III TV                  | 7-D2  | 7-D3     | 7-D4  | 9-5   | 9-9 HD   | 9-35     | 9-94   | 9-98  |        |      |     |    |    |     |    |    |
| I                              | Service Rating                 | M     | M        | M     | M     | Grounded | M        | M      | N     | I      | M    | M   | M  | M  | I   |    |    |
| SJT                            | Number of Contacts             | 2     | 3        | 4     | 2     | 3        | 1        | 6      | 7     | 9      | 2    | 6   | 4  | 2  | 2   | 2  | 3  |
| Accessories                    | Contact Size                   | 22D   | 22D      | 22D   | 20    | 20       | 8 Twinax | 22M    | 22M   | 23     | 20   | 22D | 22 | 20 | 22M | 20 | 20 |
| Aquacon                        |                                |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| Herm/Seal                      |                                |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| PCB                            | Shell Size & Insert Arrg. for: |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| HIGH SPEED                     | Series II JT                   | 10-4  | 10-5     | 10-13 | 10-35 | 10-98    | 10-99    | 12-3   |       |        |      |     |    |    |     |    |    |
| Fiber Optics                   | Series I LJT                   | 11-2  | 11-4     | 11-5  | 11-6  | 11-13    | 11-35    | 11-98  | 11-99 | 13-3   |      |     |    |    |     |    |    |
| Contacts Connectors Cables     | 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    | 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  |    |    |     |    |    |
| EMI Filter Transient           | Shell Size & Insert Arrg. for: |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| 26482 Matrix 2                 | 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   |       |        |      |     |    |    |     |    |    |
| 83723 III Matrix   Pyle        | Series III TV                  | 13-4  | 13-8     |       | 13-26 | 13-32 HD | 13-35    | 13-63  | 13-98 | 15-4   | 15-5 |     |    |    |     |    |    |
| 26500 Pyle                     | 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 |    |     |    |    |
| 5015 Crimp Rear Release Matrix | 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   |     |    |    |     |    |    |
| 22992 Class I                  | Shell Size & Insert Arrg. for: |       |          |       |       |          |          |        |       |        |      |     |    |    |     |    |    |
| Back-Shells                    | Series II JT                   | 16-6  | 16-8     | 16-13 | 17-22 | 17-25    |          |        |       |        |      |     |    |    |     |    |    |
|                                | Series I LJT                   | 17-2  | 17-6     | 17-8  | 17-13 | 17-22    |          |        |       |        |      |     |    |    |     |    |    |
|                                | Series III TV                  | 17-2  | 17-6     | 17-8  | 17-22 |          |          |        |       |        |      |     |    |    |     |    |    |
| Options Others                 | 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 |      |     |    |    |     |    |    |



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

CONTACT LEGEND

8 10 12 16 20 22 22M 22D 23

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

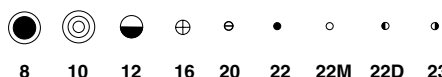
Front face of pin inserts illustrated

|                                |       |       |       |          |     |            |          |
|--------------------------------|-------|-------|-------|----------|-----|------------|----------|
| Shell Size & Insert Arrg. for: |       |       |       |          |     |            |          |
| <b>Series II JT</b>            | 16-26 | 16-35 | 16-42 | 16-55    |     |            |          |
| <b>Series I LJT</b>            | 17-26 | 17-35 | 17-42 | 17-55    |     |            |          |
| <b>Series III TV</b>           | 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: |       |       |              |       |       |       |
| <b>Series II JT</b>            | 16-99 | 18-11 |              |       | 18-28 | 18-30 |
| <b>Series I LJT</b>            | 17-99 | 19-11 | 19-18        | 19-18 | 19-28 | 19-30 |
| <b>Series III TV</b>           | 17-99 | 19-11 | 19-18        | 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: |               |       |       |       |       |       |
| <b>Series II JT</b>            |               | 18-32 | 18-35 | 18-53 | 18-66 |       |
| <b>Series I LJT</b>            |               | 19-32 | 19-35 | 19-53 | 19-66 | 19-67 |
| <b>Series III TV</b>           | 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: |       |       |          |             |      |      |
| <b>Series II JT</b>            | 18-68 | 18-96 |          |             | 20-1 | 20-2 |
| <b>Series I LJT</b>            | 19-68 |       |          |             | 21-1 | 21-2 |
| <b>Series III TV</b>           |       |       | 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)

**38999**

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2  
83723 III  
Matrix I Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

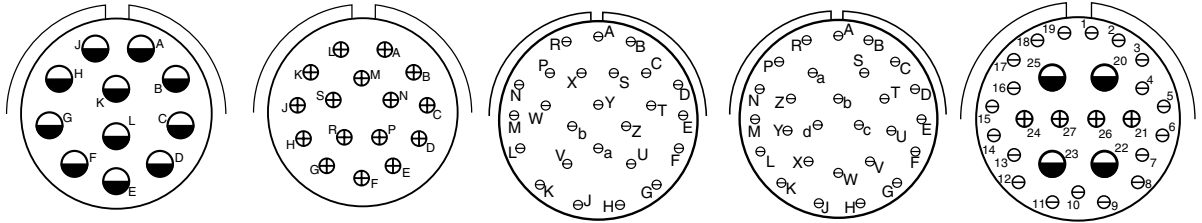
22992  
Class I

Back-  
Shells

Options  
Others

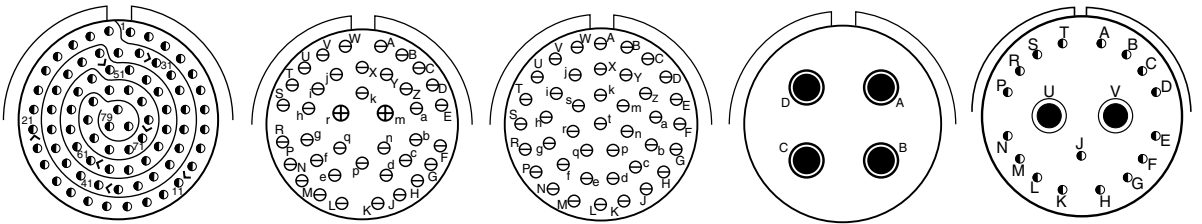
38999

Front face of pin inserts illustrated



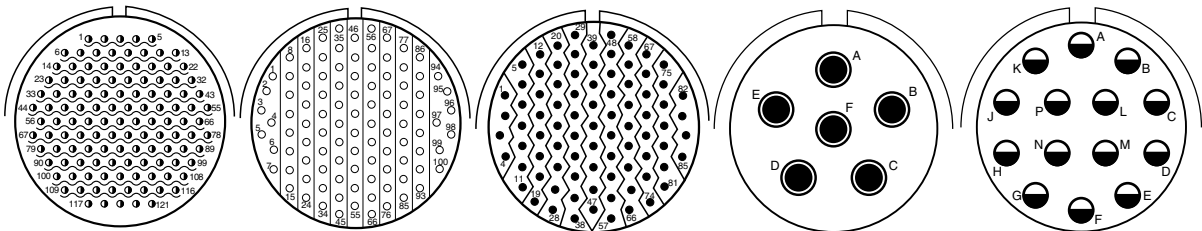
Shell Size &  
Insert Arrg. for:

|                    |       |       |       |       |          |
|--------------------|-------|-------|-------|-------|----------|
| 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           |

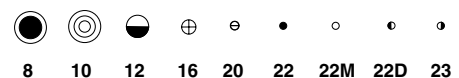


Shell Size &  
Insert Arrg. for:

|                    |           |      |      |             |
|--------------------|-----------|------|------|-------------|
| 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    | 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.



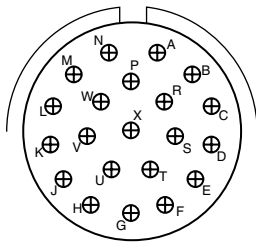
CONTACT LEGEND



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

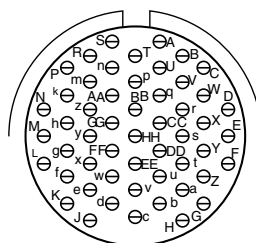
## Insert Arrangements

Front face of pin inserts illustrated



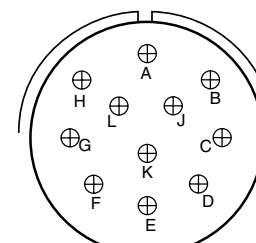
Shell Size &  
Insert Arr. for:

|                      |              |              |              |
|----------------------|--------------|--------------|--------------|
| <b>Series II JT</b>  | <b>22-21</b> | <b>22-32</b> | <b>22-35</b> |
| <b>Series I LJT</b>  | <b>23-21</b> | <b>23-32</b> | <b>23-34</b> |
| <b>Series III TV</b> | <b>23-21</b> |              | <b>23-35</b> |
| Service Rating       | II           | I            | M            |
| Number of Contacts   | 21           | 32           | 100          |
| Contact Size         | 16           | 20           | 22D          |



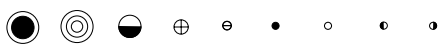
Shell Size &  
Insert Arr. for:

|                      |              |              |              |              |
|----------------------|--------------|--------------|--------------|--------------|
| <b>Series II JT</b>  | <b>22-53</b> | <b>22-55</b> | <b>22-55</b> | <b>23-97</b> |
| <b>Series I LJT</b>  | <b>23-53</b> | <b>23-55</b> | <b>23-55</b> |              |
| <b>Series III TV</b> | <b>23-53</b> | <b>23-54</b> | <b>23-55</b> |              |
| 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 Arr. for:

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



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

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

**38999**

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix I Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

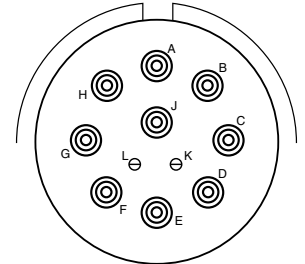
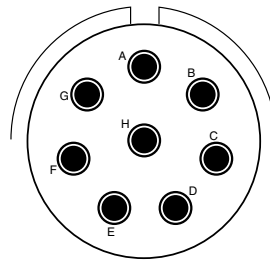
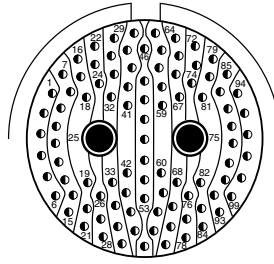
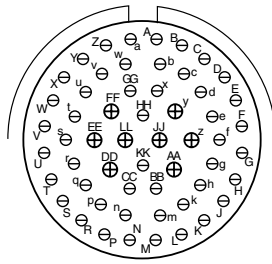
22992  
Class I

Back-  
Shells

Options  
Others

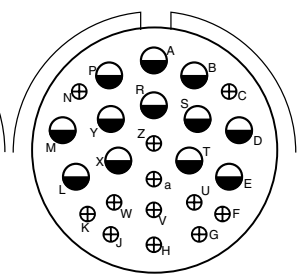
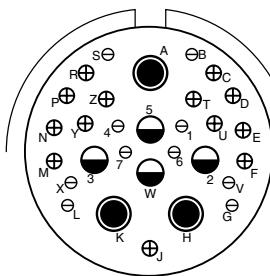
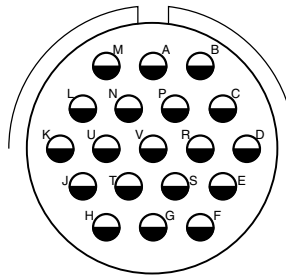
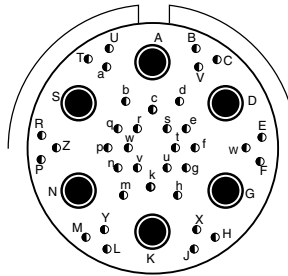
38999

Front face of pin inserts illustrated



Shell Size &  
Insert Arr. for:

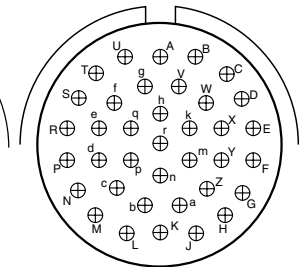
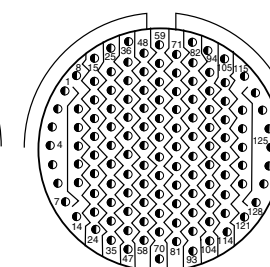
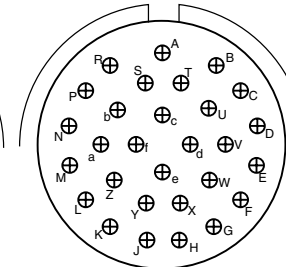
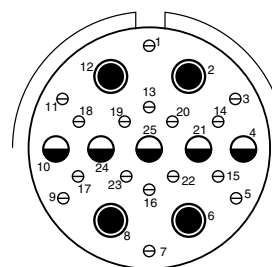
|                      |             |              |          |       |
|----------------------|-------------|--------------|----------|-------|
| <b>Series II JT</b>  | <b>24-4</b> |              |          |       |
| <b>Series I LJT</b>  | <b>25-4</b> |              |          |       |
| <b>Series III TV</b> | <b>25-4</b> |              |          |       |
| 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 Arr. for:

|                      |              |    |                        |       |
|----------------------|--------------|----|------------------------|-------|
| <b>Series II JT</b>  | <b>24-19</b> |    |                        |       |
| <b>Series I LJT</b>  | <b>25-19</b> |    |                        |       |
| <b>Series III TV</b> | <b>25-17</b> |    |                        |       |
| 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 |

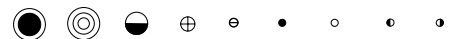
(With Matched Impedance)



Shell Size &  
Insert Arr. for:

|                      |              |    |     |    |
|----------------------|--------------|----|-----|----|
| <b>Series II JT</b>  | <b>24-29</b> |    |     |    |
| <b>Series I LJT</b>  | <b>25-29</b> |    |     |    |
| <b>Series III TV</b> | <b>25-26</b> |    |     |    |
| 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).

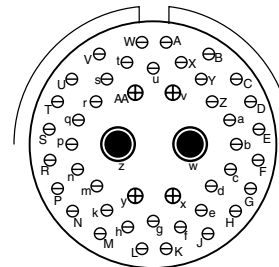
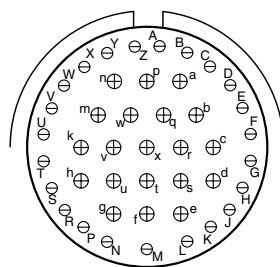
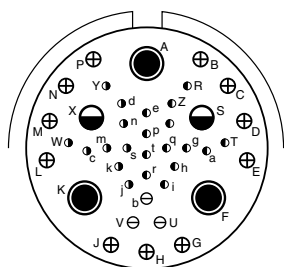


CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23

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

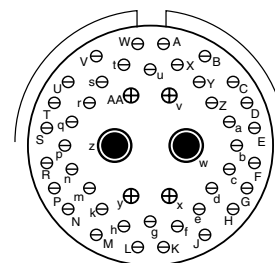
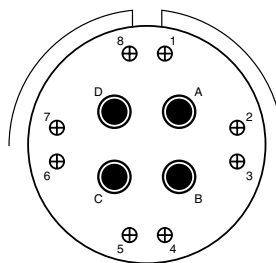
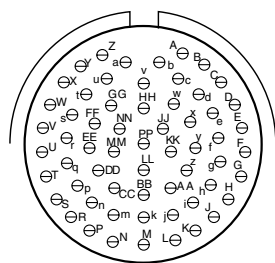
## Insert Arrangements

Front face of pin inserts illustrated



Shell Size &  
Insert Arrg. for:

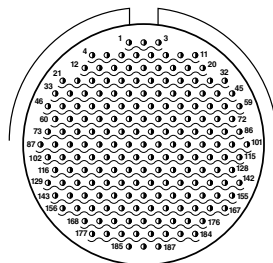
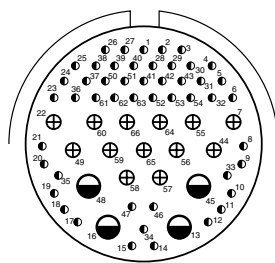
|                      |              |    |    |
|----------------------|--------------|----|----|
| <b>Series II JT</b>  | <b>25-43</b> |    |    |
| <b>Series I LJT</b>  | <b>25-43</b> |    |    |
| <b>Series III TV</b> | <b>25-46</b> |    |    |
| Service Rating       | N/Inst.      |    |    |
| Number of Contacts   | 22           | 3  | 11 |
| Contact Size         | 22D          | 20 | 16 |



Shell Size &  
Insert Arrg. for:

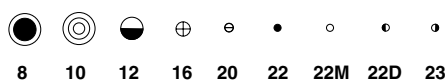
|                      |              |    |   |
|----------------------|--------------|----|---|
| <b>Series II JT</b>  | <b>24-61</b> |    |   |
| <b>Series I LJT</b>  | <b>25-61</b> |    |   |
| <b>Series III TV</b> | <b>25-62</b> |    |   |
| Service Rating       | I            |    |   |
| Number of Contacts   | 61           | 8  | 4 |
| Contact Size         | 20           | 16 | 8 |

Ground Plane  
Only



Shell Size &  
Insert Arrg. for:

|                      |                        |    |    |
|----------------------|------------------------|----|----|
| <b>Series II JT</b>  | <b>25-F4</b>           |    |    |
| <b>Series I LJT</b>  | <b>25-187 HD</b>       |    |    |
| <b>Series III TV</b> | <b>25-187 HD</b>       |    |    |
| Service Rating       | Size 22D=M, Balance =I |    |    |
| Number of Contacts   | 49                     | 13 | 4  |
| Contact Size         | 22D                    | 16 | 12 |



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

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

**38999**

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

**HIGH  
SPEED**

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

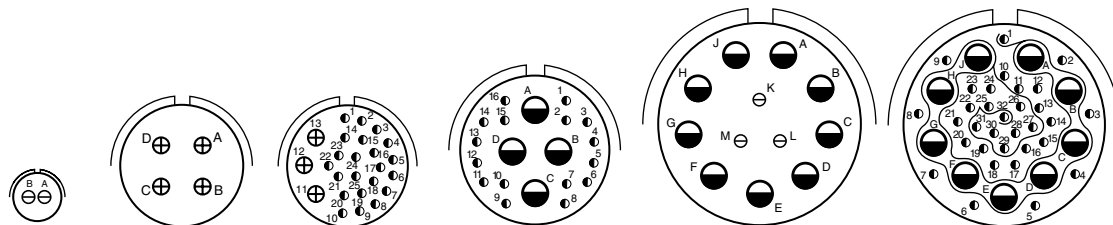
5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

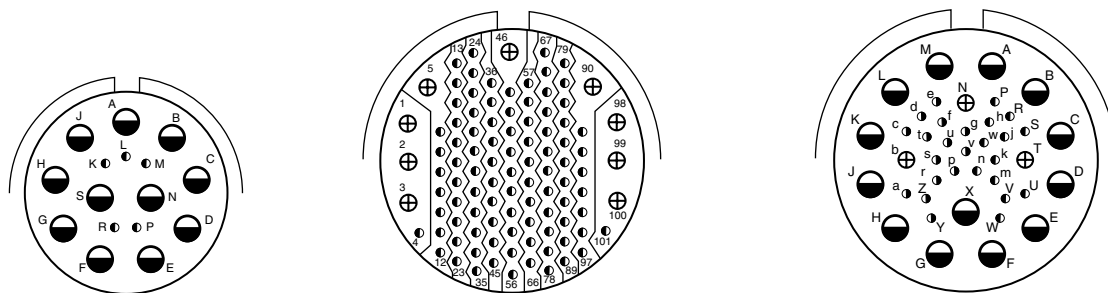
Options  
Others

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  |

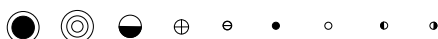


Shell Size &  
Insert Arrg. for:

| 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 |

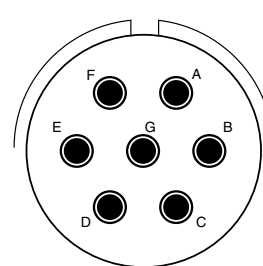
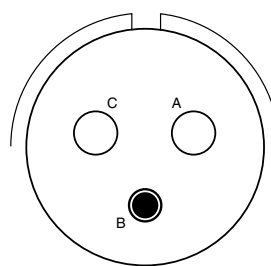
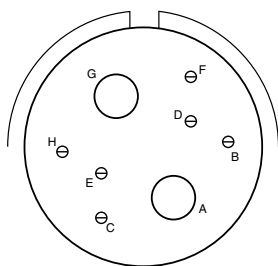
NOTE: Some specials shown here were formerly known as Pyle arrangements. Consult Amphenol for how to order information for connectors with these inserts. For further information on special arrangements consult Amphenol Aerospace, Sidney NY.

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



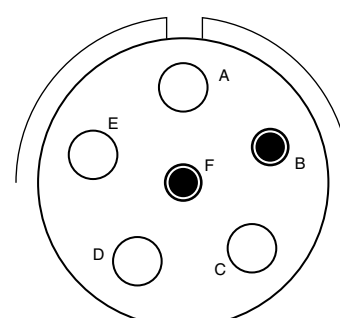
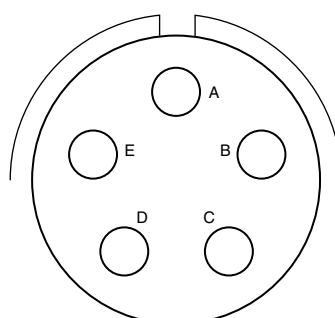
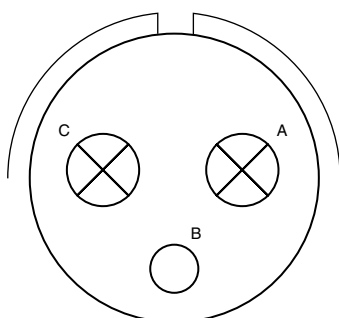
CONTACT LEGEND 8 10 12 16 20 22 22M 22D 23\*

Front face of pin inserts illustrated



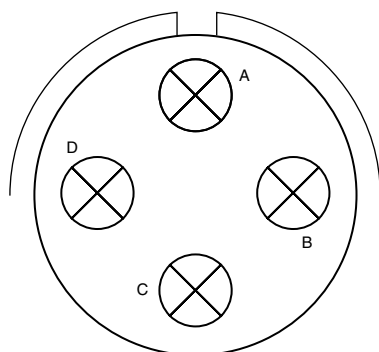
Shell Size &  
Insert Arrg. for:

| 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  |

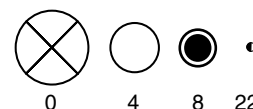


Shell Size &  
Insert Arrg. for:

| 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

**38999**

|             |
|-------------|
| III         |
| HD          |
| Dualok      |
| II          |
| I           |
| SJT         |
| Accessories |
| Aquacon     |
| Herm/Seal   |
| PCB         |

**HIGH SPEED**

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class I

Back-  
Shells

Options  
Others



38999

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

| Contact Size | Test Current (Amps) |          | Maximum Millivolt Drop Crimp* | Maximum Millivolt Drop |           | Contact Size | Crimp Well Data |                   | Solder Well Data    |                    |
|--------------|---------------------|----------|-------------------------------|------------------------|-----------|--------------|-----------------|-------------------|---------------------|--------------------|
|              | Crimp               | Hermetic |                               | Solder*                | Hermetic* |              | Well Diameter   | Normal Well Depth | Well Diameter       | Nominal Well Depth |
| 23           | 5                   | 3        | 73                            | 20                     | 85        | 23           | .0345 ± .0010   | .141              | .0345 ± .0010       | .130               |
| 22M          | 3                   | 2        | 45                            | 20                     | 60        | 22M          | .028 ± .001     | .141              | .029 +.004<br>-.000 |                    |
| 22D          | 5                   | 3        | 73                            |                        | 85        | 22D          | .0345 ± .0010   | .141              | .036 +.004<br>-.000 | .094               |
| 22           | 5                   | 3        | 73                            | 20                     | 85        | 22           | .0365 ± .0010   | .141              | .036 +.004<br>-.000 | .094               |
| 20           | 7.5                 | 5        | 55                            | 20                     | 60        | 20           | .047 ± .001     | .209              | .044 +.004<br>-.004 | .125               |
| 16           | 13                  | 10       | 49                            | 20                     | 85        | 16           | .067 ± .001     | .209              | .078 +.000<br>-.004 | .141               |
| 12           | 23                  | 17       | 42                            | 20                     | 85        | 12           | .100 ± .002     | .209              | .116 +.004<br>-.002 | .141               |
| 10 (Power)   | 33                  | NA       | 33                            | NA                     | NA        | 10 (Power)   | .137 ± .002     | .355              | NA                  | NA                 |
| 8 (Power)    | 46                  | NA       | 26                            | NA                     | NA        | 8            | .181 ± .002     | .490              | NA                  | NA                 |
| 4            | 80                  | NA       | 23                            | NA                     | NA        | 4            | .281 ± .002     | .490              | NA                  | NA                 |
| 0            | 150                 | NA       | 21                            | NA                     | NA        | 0            | .453 ± .002     | .585              | NA                  | NA                 |

\*When tested using silver plated wire.

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

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

## Thermocouple Contacts/Sealing Plugs/Finishing Data

### 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 |                                                     |                                                      |            |
| 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                                           |          |            | JT( )H / JT( )Y                                     | LJT( )Y                                              |
| Tin Plated Shell and Contacts                                |          |            | JTL( )H / JTL( )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<br>JTLS( )Y                                 | LJTS( )Y                                             |

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2  
83723 III  
Matrix I Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

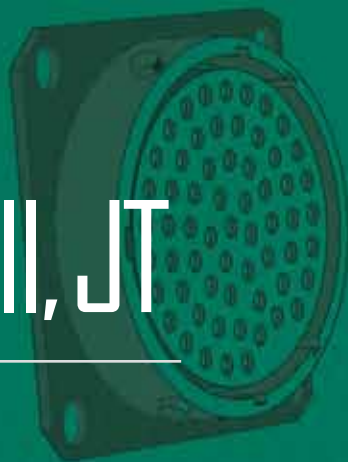
22992  
Class I

Back-  
Shells

Options  
Others

# Amphenol

## MIL-DTL-38999, Series II, JT



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### MIL-DTL-38999 Series II Typical Markets:

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

**Amphenol**  
Aerospace

38999

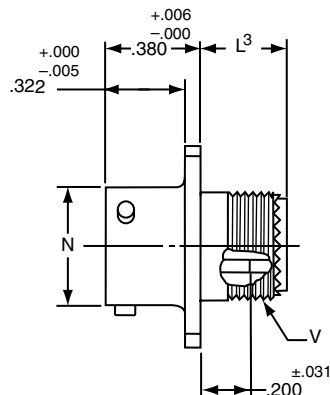
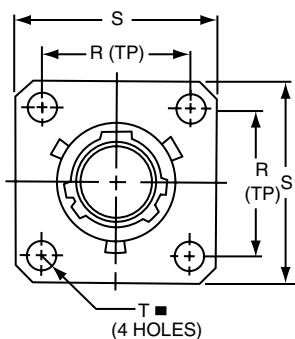
### PART # Commercial

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

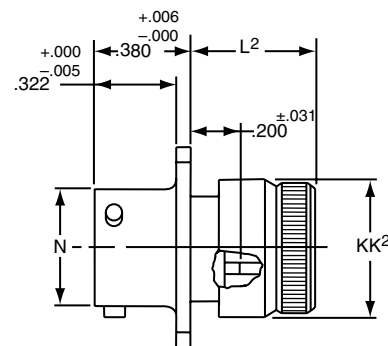
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JT/JTS/JTN     | 00          | RT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

### Military

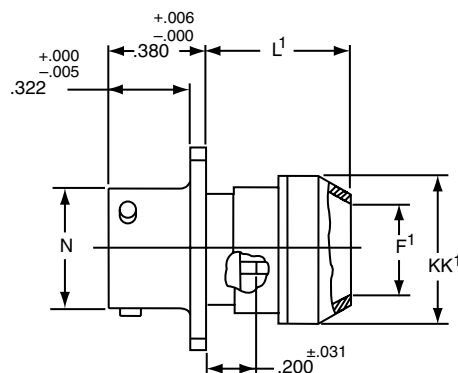
| MS Number | Service Class | Shell Size | Finish | Insert Arrg | Contact Style (P or S) | Alternate Position |
|-----------|---------------|------------|--------|-------------|------------------------|--------------------|
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| MS27479   | E        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



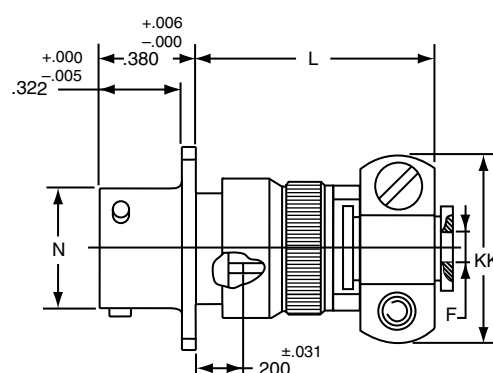
\* JT00RT-XX-XXX(MS27472T)  
\*\* JTS00RT-XX-XXX(MS27479T)  
\*\*\* JTN00RT-XX-XXX



\* 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 M

- \* Standard Junior Tri-Lock
- \*\* High temperature version
- \*\*\* Clear iridite finish (gold color), N<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | F Dia. +.010 - .025 | F <sup>1</sup> Dia. ±.010 | L Max. | L <sup>1</sup> Max. | L <sup>2</sup> Max. | L <sup>3</sup> Max. | N +.001 - .005 | R (TP) | S ±.016 | T ±.005 | V Thread UNEF Class 2A (Plated) | KK Max. | KK <sup>1</sup> Dia. Max. | KK <sup>2</sup> 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.

# JTPQ00R (MS27497) Series II – Crimp Wall Mounting Receptacle (Back Panel Mounting)

38999

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH  
SPEED  
Fiber  
Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

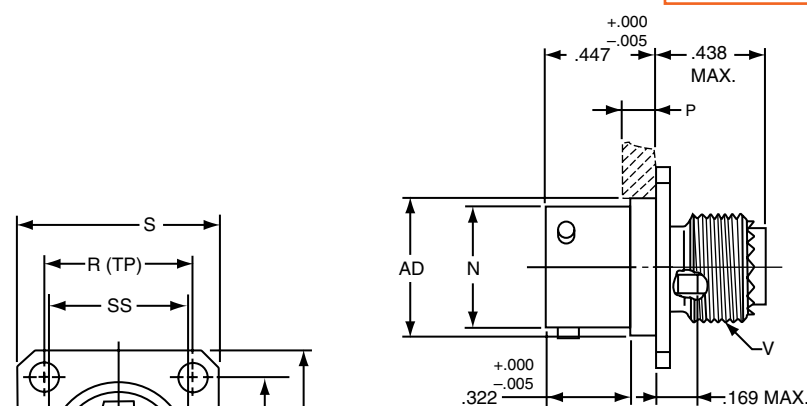
## PART #

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

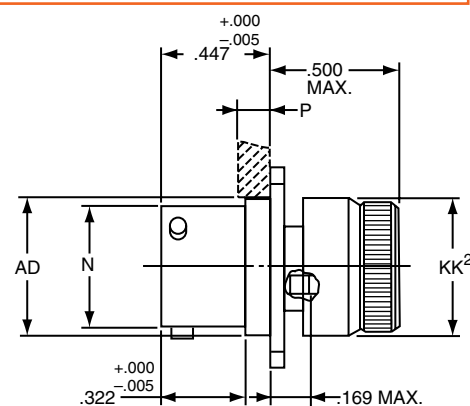
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arr | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|-------------------------|--------------|--------------------|--------------------|
| JTPQ/JTPSQ     | 00          | RT 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

## Military

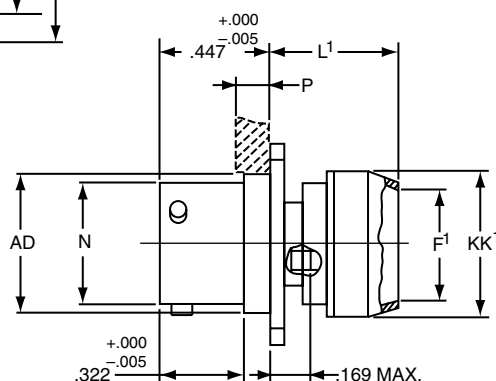
| MS Number | Service Class | Shell Size | Finish | Insert Arr | Contact Style (P or S) | Alternate Position |
|-----------|---------------|------------|--------|------------|------------------------|--------------------|
| MS27497   | E             | 14         | A      | 18         | P            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



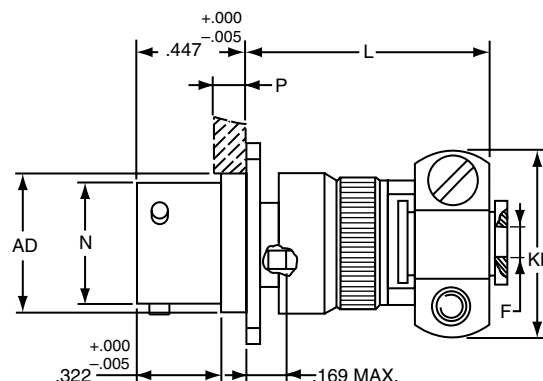
\* JTPQ00RT-XX-XXX(MS27497T)  
\*\* JTPSQ00RT-XX-XXX



\* JTPQ00RE-XX-XXX (MS27497E)



\* JTPQ00RP-XX-XXX(MS27497P)



\*JTPQ00RE-XX-XXX (SR)

⊕ .005 DIA (M)

\* Standard Junior Tri-Lock

\*\* High temperature version

| Shell Size | F Dia. +.010 - .025 | F' Dia. ±.010 | L Max. | L' Max. | N +.001 - .005 | P Max. Panel Thickness | R (TP) | S ±.016 | T ±.005 | V Thread UNEF Class 2A (Plated) | AD Dia. ±.005 | KK Max. | KK' 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.

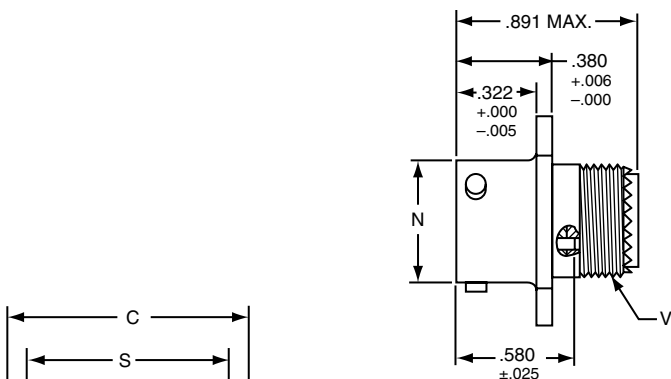


38999

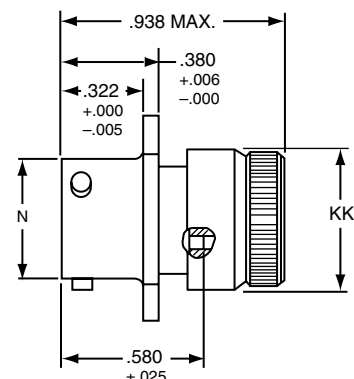
### PART # Commercial

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

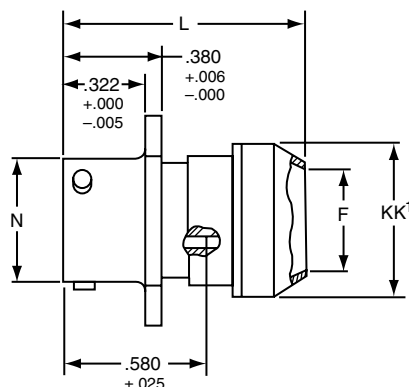
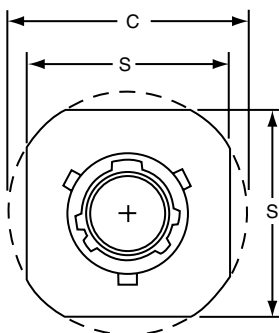
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JT/JTS/JTN     | 01          | RT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



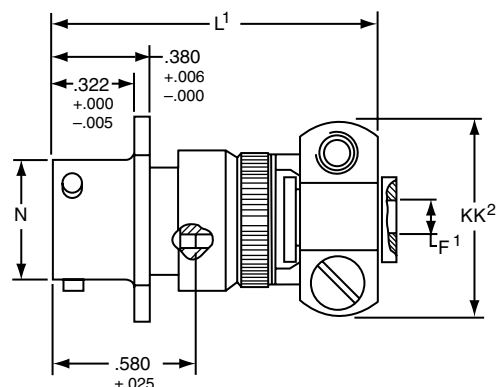
\* JT01RT-XX-XXX  
\*\* JTS01RT-XX-XXX  
\*\*\* JTN01RT-XX-XXX



\* 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<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | C Max. | F Dia. +.010 | F¹ Dia. +.010 - .025 | L Max. | L¹ Max. | N Dia. +.001 - .005 | S +.017 - .016 | V Thread UNEF Class 2A (Plated) | KK Dia. Max. | KK¹ Dia. Max. | KK² 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.

# JT02RE (MS27499) Series II – Crimp

## JT02RE (053) (MS27513)

### Box Mounting Receptacle

#### PART #

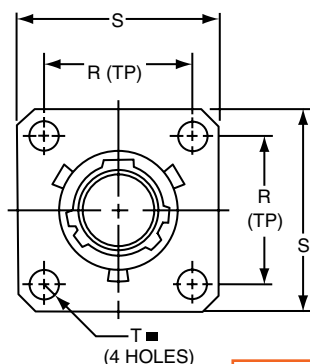
#### Commercial

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

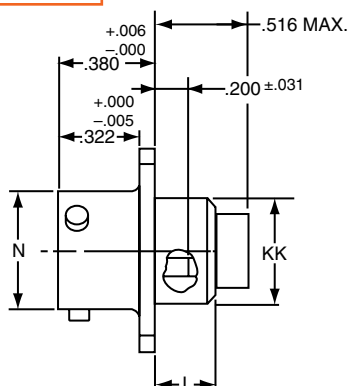
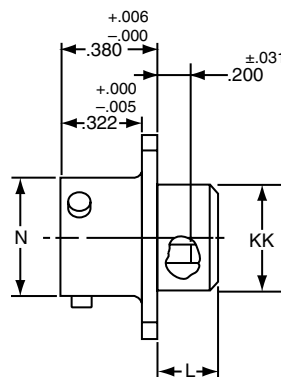
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JT/JTS/JTN     | 02          | RE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

#### Military

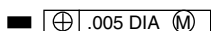
| MS Number | Service Class | Shell Size | Finish | Insert Arrg | Contact Style (P or S) | Alternate Position |
|-----------|---------------|------------|--------|-------------|------------------------|--------------------|
| MS27499   | E             | 14         | A      | 18          | P         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



- \* Standard Junior Tri-Lock
- \*\* High temperature version
- \*\*\* Clear iridite finish (gold color), N<sub>2</sub>O<sub>4</sub> resistant

All dimensions for reference only.

NOTE: For applications requiring an environmental seal, please refer to JT00R, page 63.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class L

Back-  
Shells

Options  
Others

## JTP02R (MS27508) Series II – Crimp Box Mounting Receptacle Back Panel Mounting

38999

### PART #

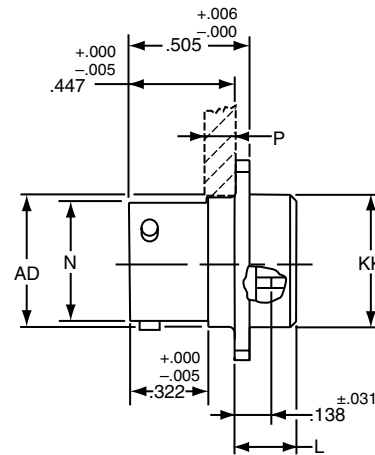
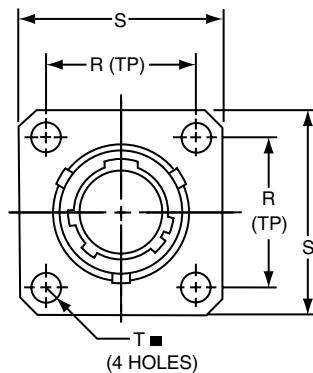
Commercial

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

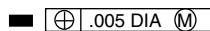
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JT/JTPS/JTPN   | 02          | RE            | 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



- \* Standard Junior Tri-Lock
- \*\* High temperature version
- \*\*\* Clear iridite finish (gold color), N<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | L Max. | N +.001<br>-.005 | P Max.<br>Panel<br>Thickness | R (TP) | S ±.016 | T Dia.<br>±.005 | AD Dia.<br>±.005 | KK Dia.<br>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           |

# JT06R (MS27473) Series II – Crimp Straight Plug

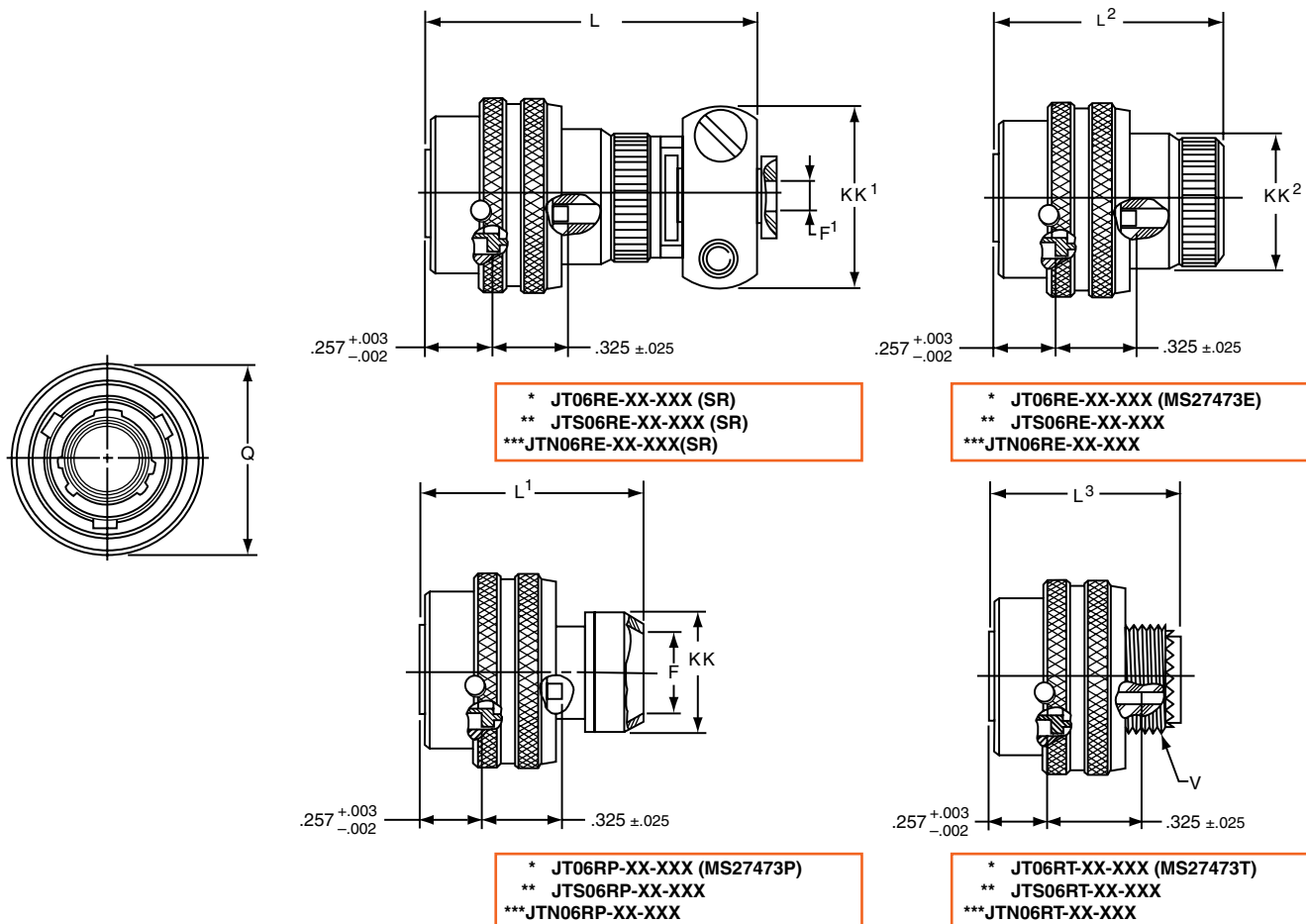
## PART # Commercial

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                  |



- \* Standard Junior Tri-Lock
- \*\* High temperature version
- \*\*\* Clear iridite finish (gold color), N<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | F Dia. | F' Dia.<br>+.001<br>-.025 | L<br>Max. | L'<br>Max. | L <sup>2</sup><br>Max. | L <sup>3</sup><br>Max. | Q Dia<br>Max. | V Thread Modified |                        | KK Dia.<br>Max. | KK'<br>Max. | KK <sup>2</sup><br>Dia.<br>Max. |
|------------|--------|---------------------------|-----------|------------|------------------------|------------------------|---------------|-------------------|------------------------|-----------------|-------------|---------------------------------|
|            |        |                           |           |            |                        |                        |               | Class 2A<br>UNEF  | Modified Major<br>Dia. |                 |             |                                 |
| 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.

38999

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH  
SPEED  
Fiber  
Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class L

Back-  
Shells

Options  
Others

## PART #

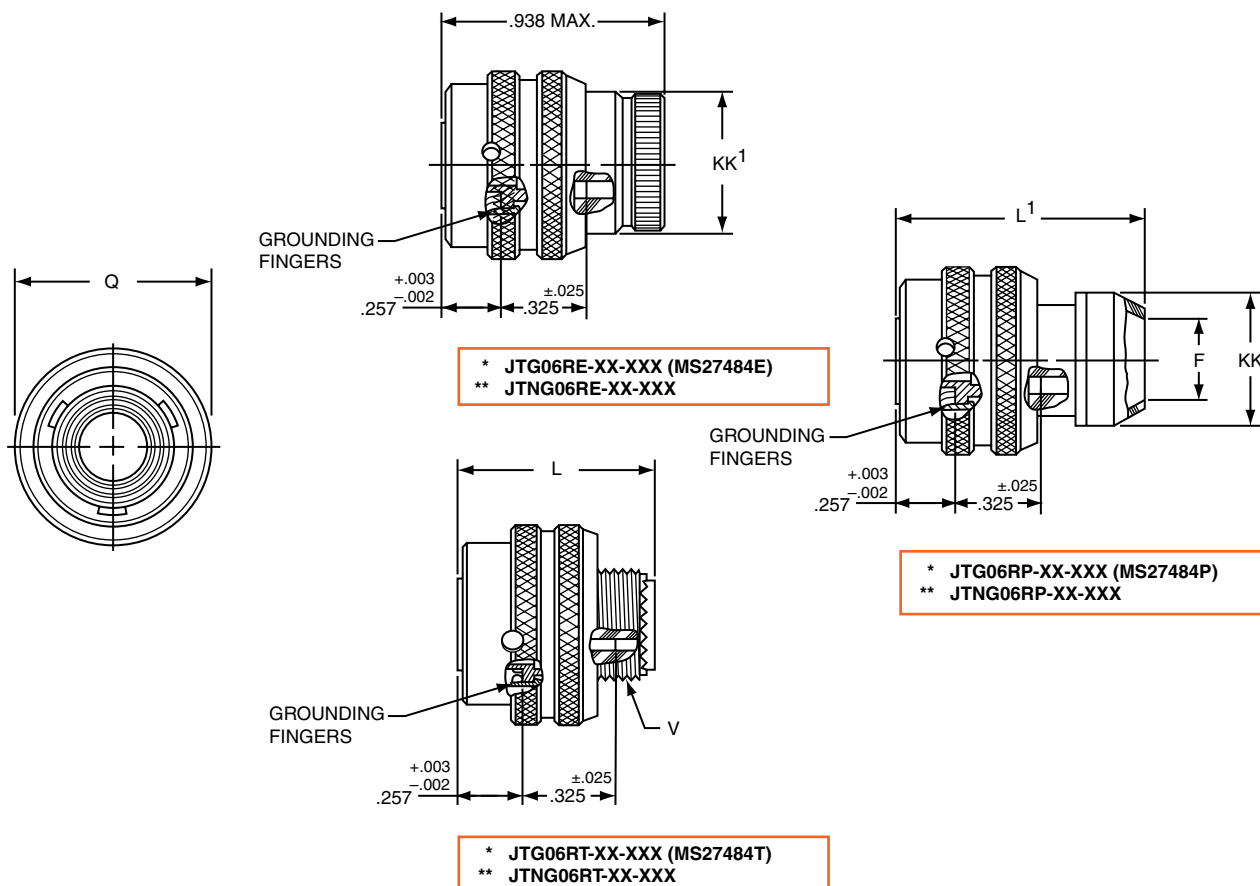
## Commercial

**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 |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| 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 |
|----------------|---------------|------------|----------|-------------|------------------------|--------------------|
| <b>MS27484</b> | <i>E</i>      | <i>14</i>  | <i>A</i> | <i>18</i>   | <i>P</i>               | <i>A</i>           |



\* Plug with grounding fingers

\*\* Clear iridite finish (gold color), N<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | F Dia. | L Max. | L <sup>1</sup> Max. | Q Dia Max. | V Thread Modified |                     | KK Dia. Max. | KK <sup>1</sup> 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.



# JT07R (MS27474) Series II – Crimp Jam Nut 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     | 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                  |

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

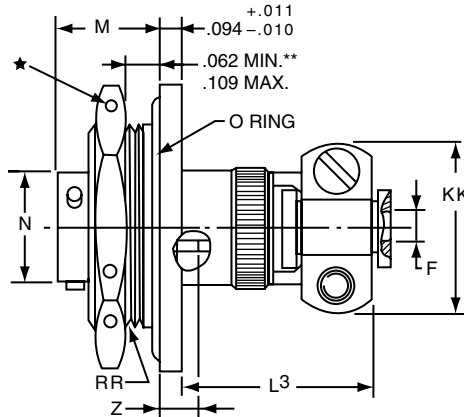
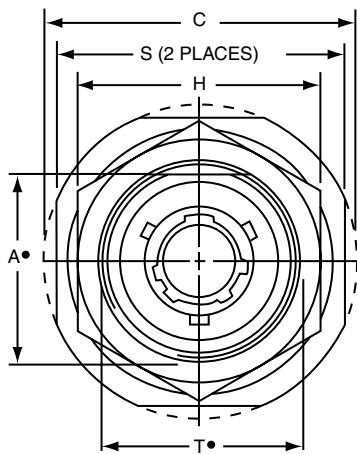
26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

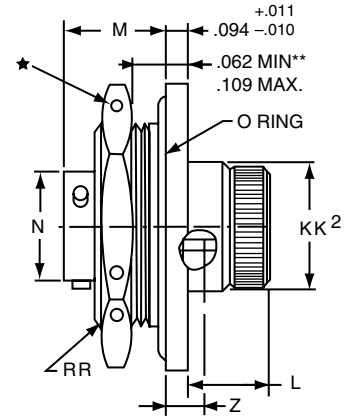
22992  
Class 1

Back-  
Shells

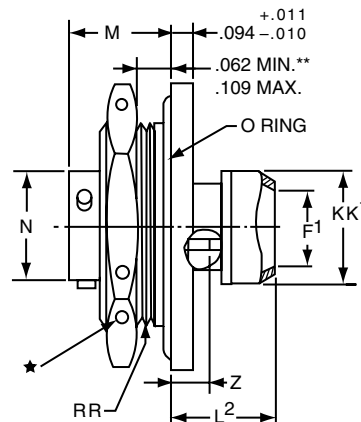
Options  
Others



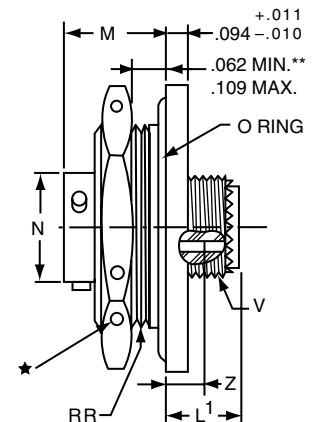
\* JT07RE-XX-XXX (SR)  
\*\*\* JTS07RE-XX-XXX (SR)  
\*\*\*\* JTN07RE-XX-XXX (SR)



\* 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<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | A*<br>+.000<br>-.010 | C<br>Max. | F Dia.<br>+.010<br>-.025 | F' Dia. | H Hex<br>+.017<br>-.016 | L<br>Max. | L'<br>Max. | L <sup>2</sup><br>Max. | L <sup>3</sup><br>Max. | M<br>±.005 | N Dia.<br>+.001<br>-.005 | S<br>±.016 | T*<br>+.010<br>-.000 | V Thread<br>UNEF<br>Class 2A | Z<br>±.031 | KK<br>Max. | KK <sup>1</sup><br>Dia.<br>Max. | KK <sup>2</sup><br>Max. | RR Thread<br>(Plated)<br>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                       |

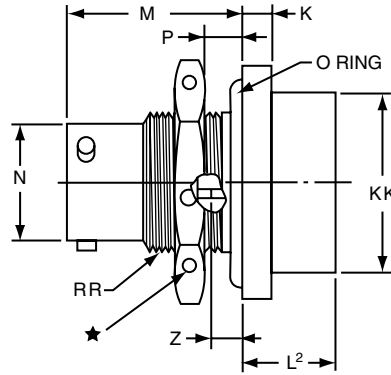
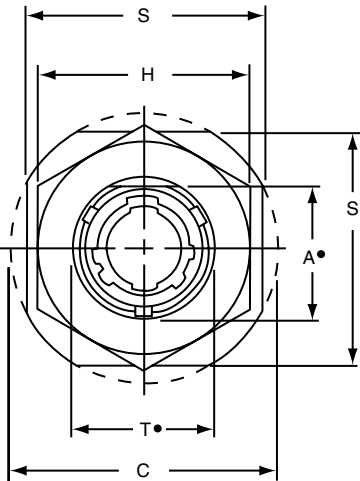
All dimensions for reference only.

38999

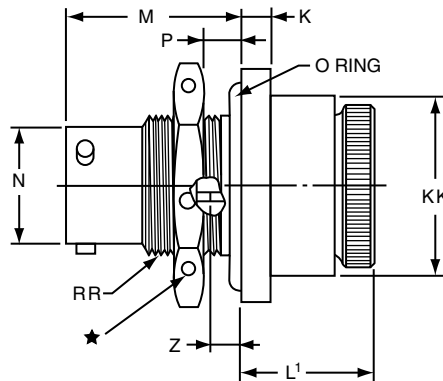
### PART # Commercial

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

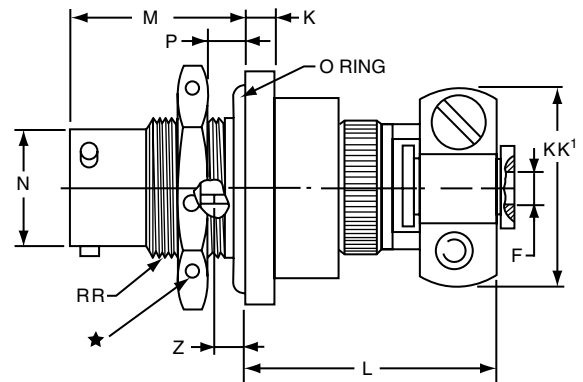
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JTL/JTLS/JTLN  | 07          | RP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



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



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



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

- ★ .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<sub>2</sub>O<sub>4</sub> resistant

| Shell Size | A*<br>+.000<br>-.010 | C<br>Max. | F Dia.<br>+.010<br>-.025 | H Hex<br>+.017<br>-.016 | K<br>+.011<br>-.010 | L<br>Max. | L1<br>Max. | L2<br>Max. | M<br>±.005 | N Dia.<br>+.001<br>-.005 | P Panel Thickness |      | S<br>±.016 | T*<br>+.010<br>-.000 | Z<br>±.026 | KK Dia.<br>Max. | KK1<br>Max. | RR Thread<br>Class 2A |
|------------|----------------------|-----------|--------------------------|-------------------------|---------------------|-----------|------------|------------|------------|--------------------------|-------------------|------|------------|----------------------|------------|-----------------|-------------|-----------------------|
|            |                      |           |                          |                         |                     |           |            |            |            |                          | Min.              | Max. |            |                      |            |                 |             |                       |
| 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.

# JT08R (MS27500) Series II – Crimp 90° Plug

## PART # Commercial

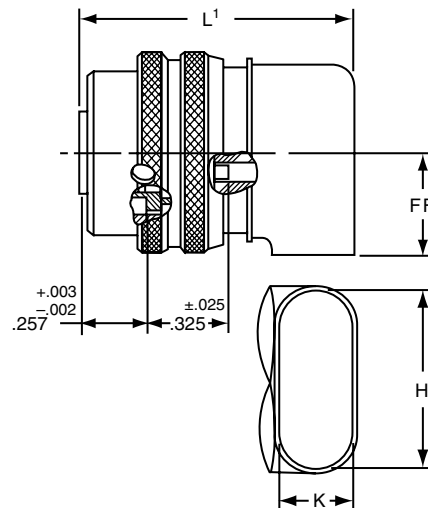
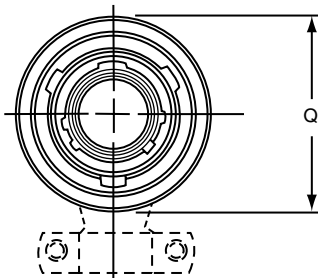
Part number reference. To complete,  
see how to order pages 62-66.

| 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)              |

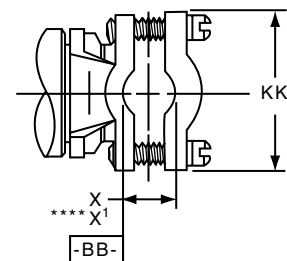
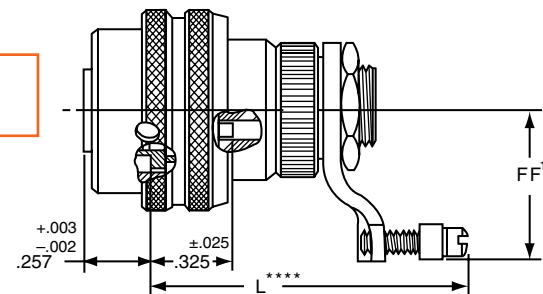
## Military

| 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<sub>2</sub>O<sub>4</sub> resistant
- \*\*\*\*Dimensions L and X' are applicable when the end of the screw is flush with the surface BB.

| Shell Size | H<br>±.010 | K<br>±.010 | L Max. | L' Max. | Q Dia.<br>Max. | X Min.<br>Cable | X' Max.<br>Cable | FF Max. | FF' 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.

38999

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class L

Back-  
Shells

Options  
Others

38999

### PART #

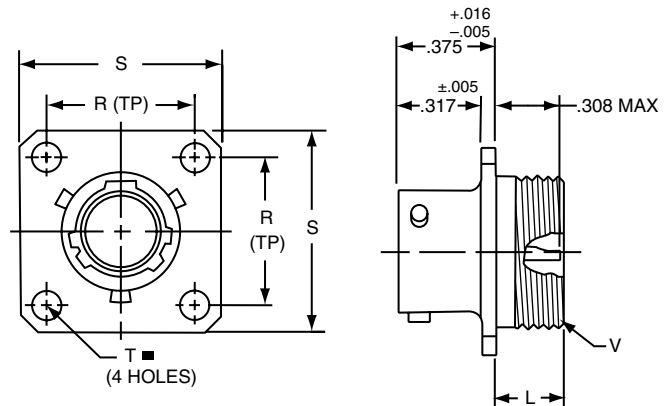
#### Commercial

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                  |



⊕ .005 DIA (M)

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

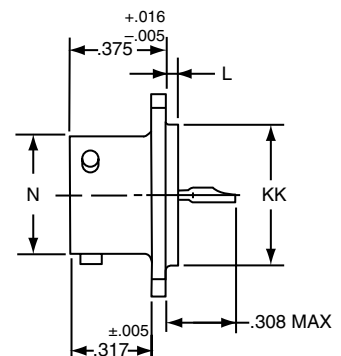
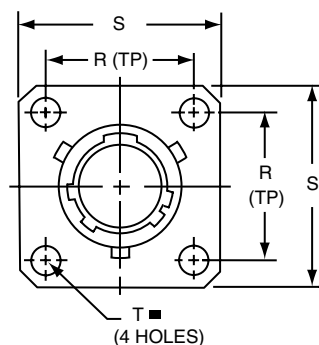
\* JT00H-XX-XXX  
\*\* JT00Y-XX-XXX (MS27475YXXDXXX)  
\*\*\* JTS00Y-XX-XXX (MS27482YXXEXXX)

| 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     |

## JT02 (MS27476) Series II – Hermetic Box Mounting Receptacle

⊕ .005 DIA (M)

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

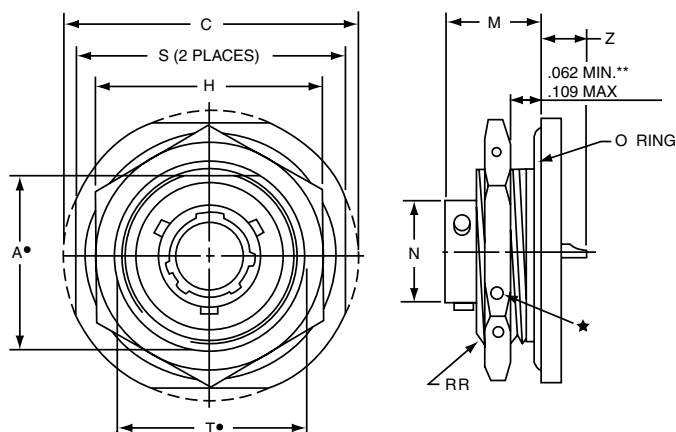


\* JT02H-XX-XXX  
\*\* JT02Y-XX-XXX (MS27476YXXDXXX)  
\*\*\* JTS02Y-XX-XXX (MS27476YXXEXXX)

| 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.

# JT07 (MS27477) Series II – Hermetic Jam Nut Receptacle



- \* 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

## 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                  |

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

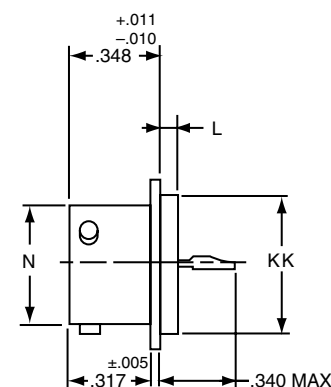
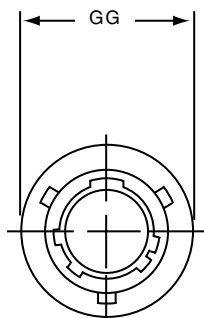
| Shell Size | A*<br>+.000<br>-.010 | C<br>Max. | H<br>+.017<br>-.016 | M<br>±.005 | N<br>+.001<br>-.005 | S<br>±.016 | T*<br>+.010<br>-.000 | Z Max. | RR Thread<br>Class 2A |
|------------|----------------------|-----------|---------------------|------------|---------------------|------------|----------------------|--------|-----------------------|
| 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<br>+.011<br>-.010 | N<br>+.001<br>-.005 | GG<br>+.011<br>-.010 | KK<br>+.001<br>-.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.  
Weld mounting hermetic receptacle also available.  
Consult Amphenol Aerospace for availability and dimensions.

All dimensions for reference only.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crmp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others

38999

### PART #

Commercial

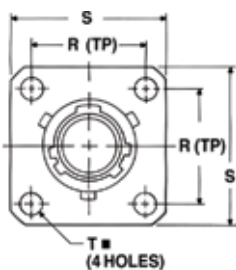
Part number reference. To complete, see how to order pages 62-66.

| 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)              |

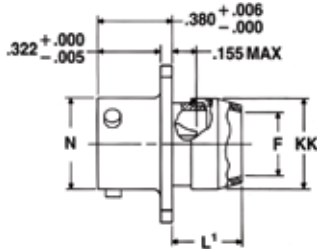
### Military

| 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                  |

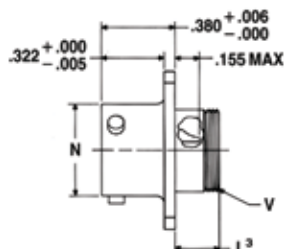
Military qualified to MIL-DTL-27599



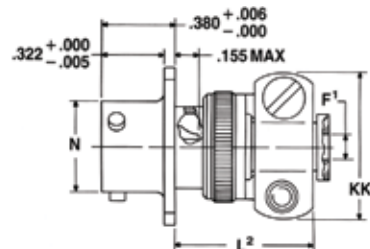
⊕ .005 DIA (M)



\*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

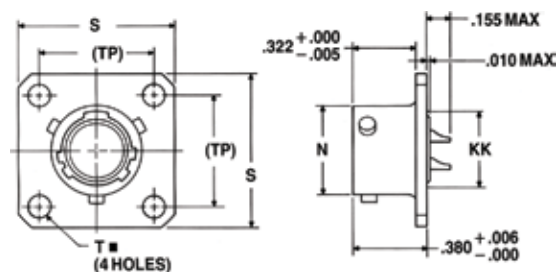
NOTE: For availability of back panel mounting types, consult Amphenol Aerospace.

| Shell Size | F Dia. Min. | F1 +.010 / -.025 | L1 Max. | L2 Max. | L3 Max. | N +.001 / -.005 | R (TP) | S ±.016 | T ±.005 | VThread Modified |                     | KK Dia. Max. | KK' 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

### Box Mounting Receptacle

Military qualified to MIL-DTL-27599



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

⊕ .005 DIA (M)

\* 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.



# JT06 (MS27336) Series II – Solder Straight Plug

**Military qualified to MIL-DTL-27599**

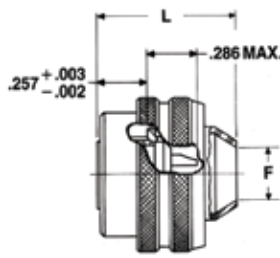
## PART # Commercial

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

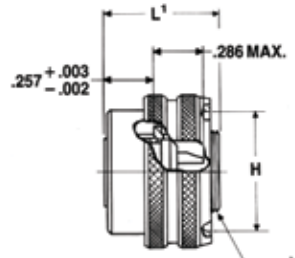
| Connector Type  | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|-----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| JT/JTN/JTG/JTNG | 06          |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

## Military

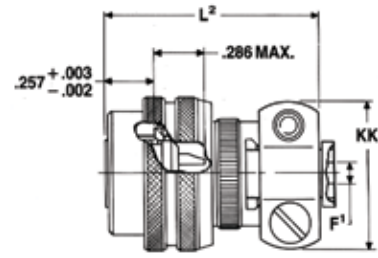
| MS Number | Service Class | Shell Size | Finish | Insert Arrg | Contact Style (P or S) | Alternate Position |
|-----------|---------------|------------|--------|-------------|------------------------|--------------------|
| MS27336   | P             | 14         | A      | 18          | P         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



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



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



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

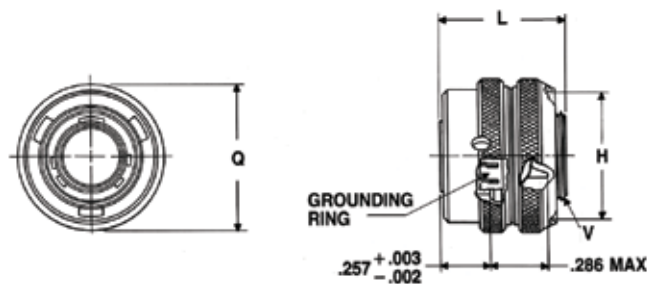
\*Standard Junior Tri-Lock

| Shell Size | F Min. | F1<br>+.010<br>-.025 | H<br>+.010<br>-.001 | L Max. | L1 Max. | L2 Max. | Q Max. | VThread 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  
\*\*JTN06A-XX-XXX

\* Plug with grounding fingers

\*\* Coupling nut is clear iridite finish (gold color), shell and grounding fingers are gold plated N<sub>2</sub>O<sub>4</sub> resistant.

| Shell Size | H Dia.<br>+.010<br>-.001 | L Max. | Q Dia. Max. | VThread 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.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others

## JT07 (MS27337) Series II – Solder Jam Mounting Receptacle

38999

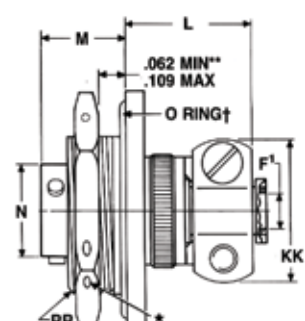
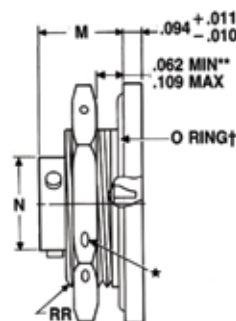
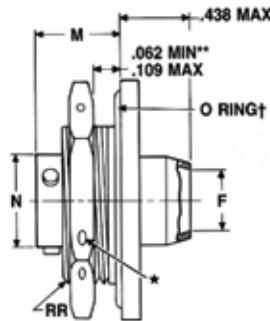
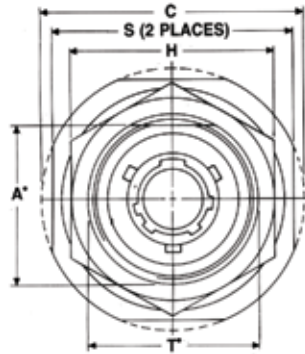
### PART #

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)              |

Military qualified to MIL-DTL-27599



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

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

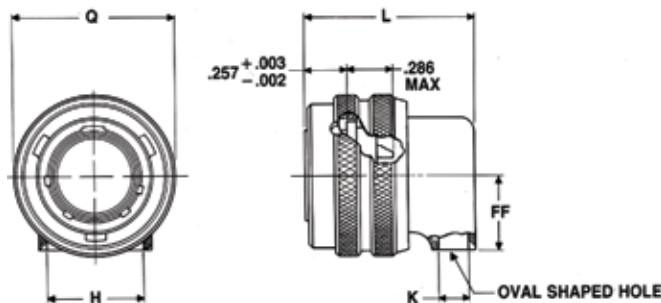
\*JT07A-XX-XXX  
\*JT07C-XX-XXX  
\*JTN07A-XX-XXX  
\*JTN07C-XX-XXX

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

| Shell Size | A*<br>+.000<br>-.010 | C<br>Max. | F<br>Min. | F1<br>+.010<br>-.025 | H<br>+.017<br>-.016 | L<br>Max. | M<br>±.005 | N<br>+.001<br>-.005 | S<br>±.016 | T*<br>+.010<br>-.000 | KK<br>Max. | RR<br>Thread<br>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

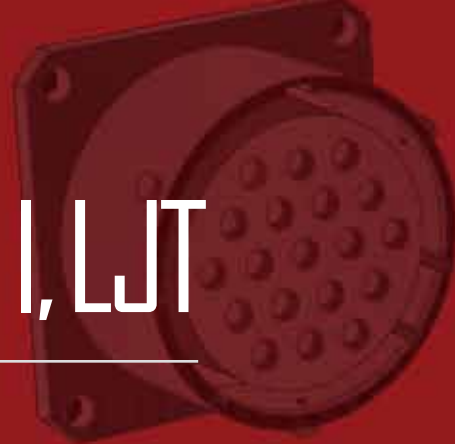
\* To complete order number see page 62.

| Shell Size | H<br>Min. | K<br>Min. | L<br>Max. | Q<br>Max. | FF<br>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



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### MIL-DTL-38999 Series I Typical Markets:

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

**Amphenol**  
Aerospace

38999

### PART #

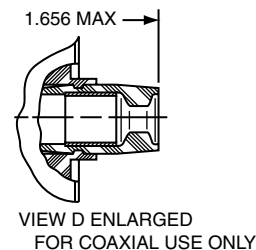
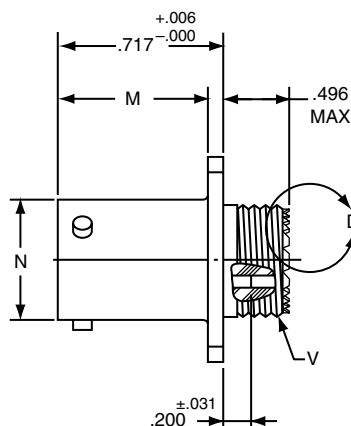
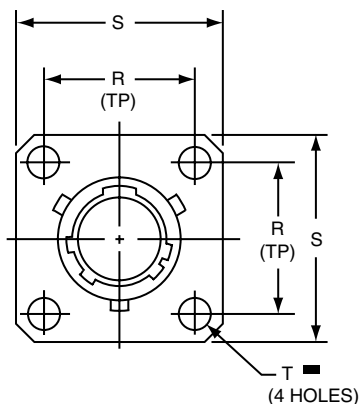
#### Commercial

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

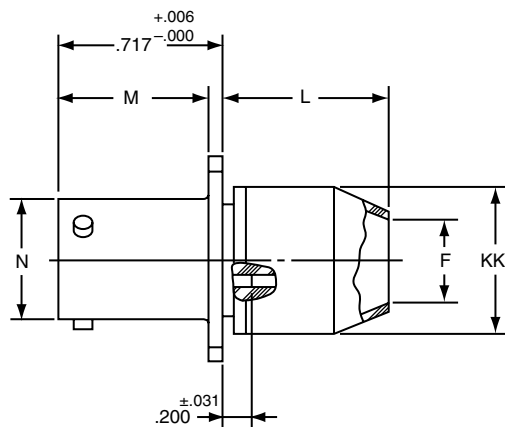
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJT            | 00          | RE            | 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.

# LJTPQ00R (MS27656) Series I – Crimp

## Wall Mounting Receptacle

(Back Panel Mounting)

### PART #

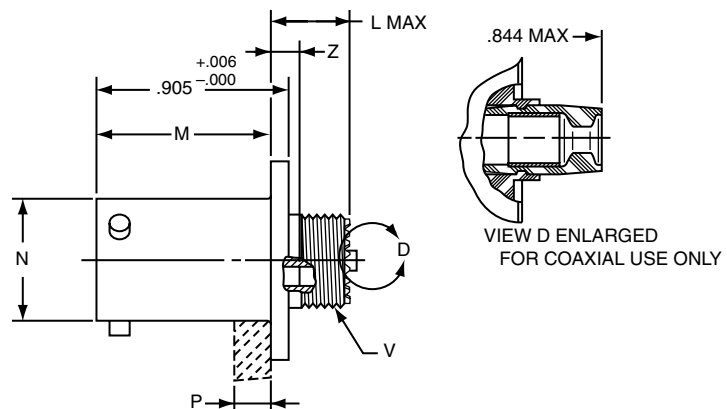
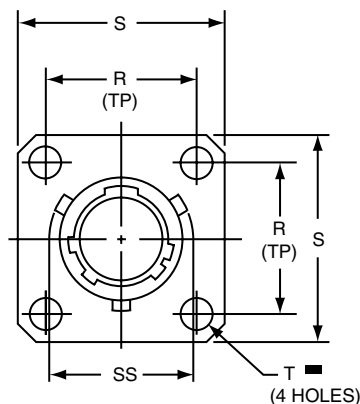
Commercial

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

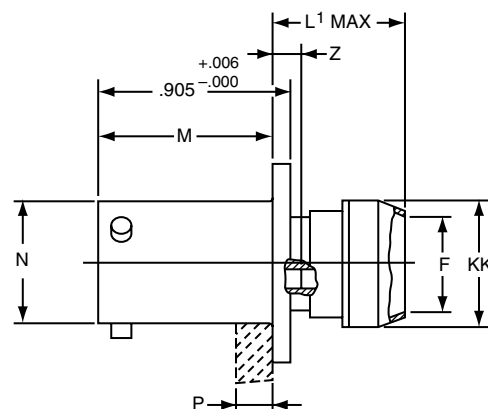
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJTPQ          | 00          | RE            | 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 M

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

All dimensions for reference only.

Note: MS27656 superseded MS 27515.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

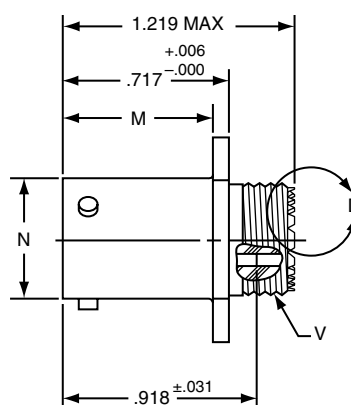
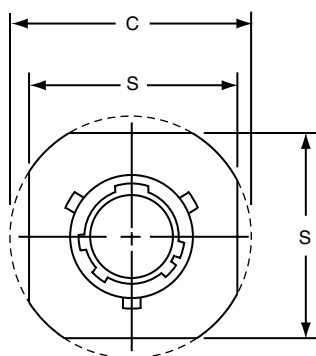


38999

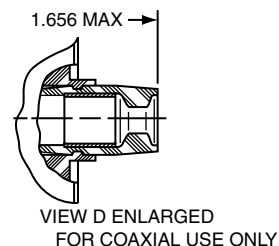
### PART # Commercial

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



| Shell Size | C Max. | M +.000<br>-.005 | N +.001<br>-.005 | S ±.016 | V Thread Class 2A<br>(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.



# LJT02R (MS27496) – Crimp (Box Mount Recept.) LJTP02R (MS27505) – Crimp

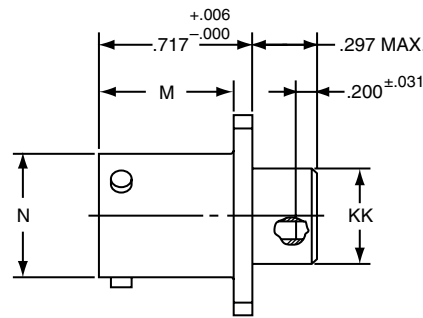
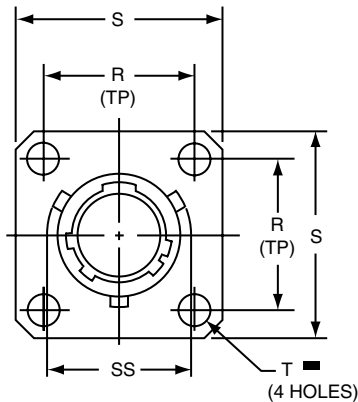
## Box Mounting Receptacle (Back Panel Mounting)

**PART #** Part number reference. To complete, see how to order pages 62-66.  
**Commercial**

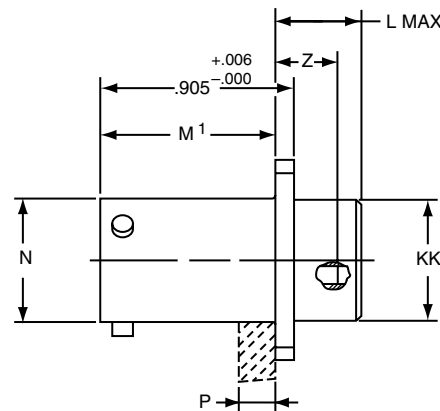
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJT/LJTP       | 02          | RE            | 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 M

| Shell Size | L Max. | M +.000<br>-.005 | M' +.001<br>-.005 | N Dia<br>+.001<br>-.005 | P Max.<br>Panel<br>Thickness | R (TP) | S<br>+.011<br>-.010 | T Dia.<br>±.005 | Z<br>±.031 | KK Dia.<br>+.006<br>-.005 | SS Dia.<br>+.000<br>-.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.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

38999

### PART #

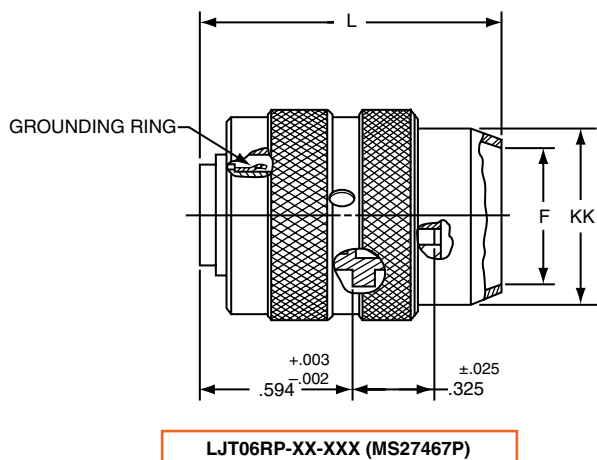
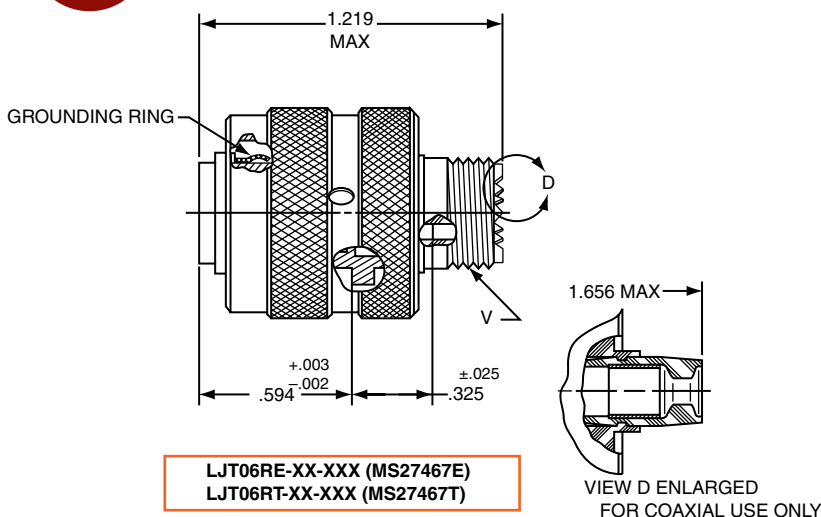
Commercial

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                  |



| Shell Size | F Dia. $\pm .010$ | 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.

# LJT07R (MS27468) Series I – Crimp Jam Nut Receptacle

## PART #

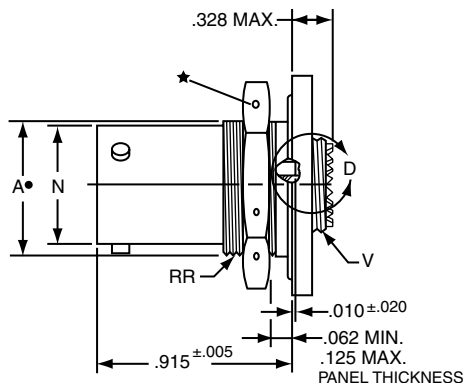
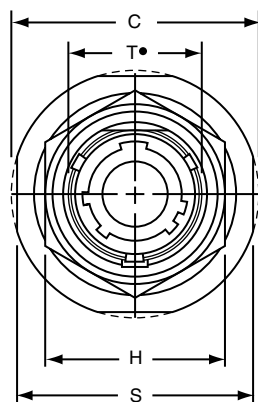
### Commercial

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

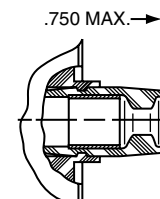
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJT            | 07          | RE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

### Military

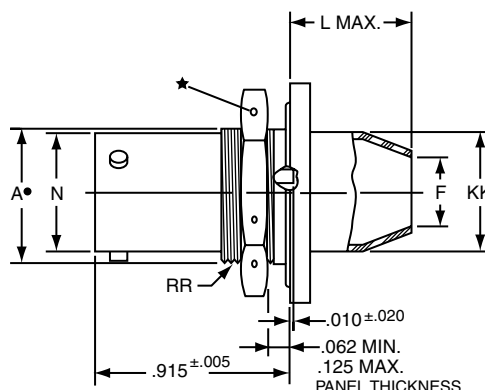
| MS Number | Service Class | Shell Size | Finish | Insert Arrg | Contact Style (P or S) | Alternate Position |
|-----------|---------------|------------|--------|-------------|------------------------|--------------------|
| MS27498   | E             | 14         | A      | 18          | P         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



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



VIEW D ENLARGED  
FOR COAXIAL USE ONLY



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*<br>+.000<br>-.010 | C Max. | F Dia.<br>±.010 | H Hex<br>+.017<br>-.016 | L<br>Max. | N<br>+.001<br>-.005 | S ±.016 | T*<br>+.010<br>-.000 | V Thread Class 2A<br>(Plated) | KK Dia.<br>Max. | RR Thread<br>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.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

38999

|             |
|-------------|
| III         |
| HD          |
| Dualok      |
| II          |
| I           |
| SJT         |
| Accessories |
| Aquacon     |
| Herm/Seal   |
| PCB         |

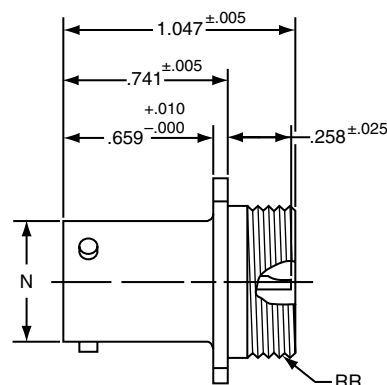
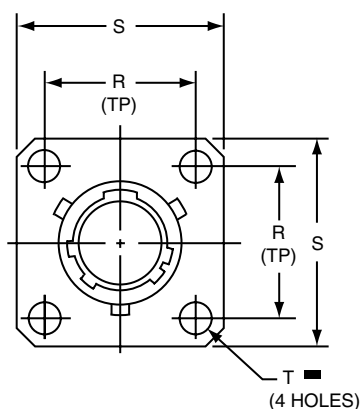
### PART # Commercial

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       | 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 M

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

| Shell Size | N Dia. +.001<br>-.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.

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

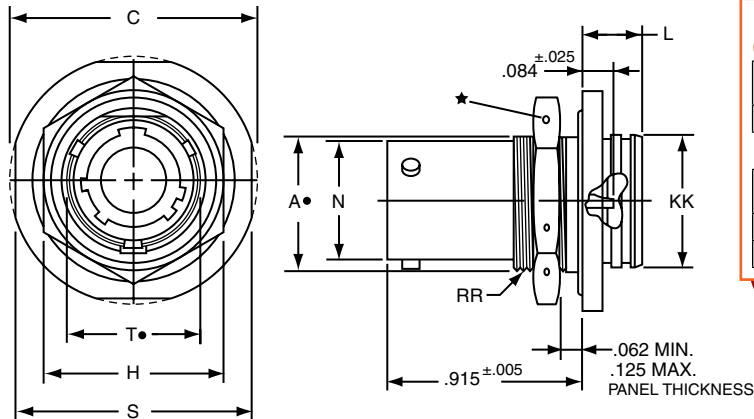
5015  
Crimp Rear Release Matrix

22992  
Class I

Back-  
Shells

Options  
Others

# LJT07 (MS27470) Series I – Hermetic Jam Nut 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 |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| 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                  |

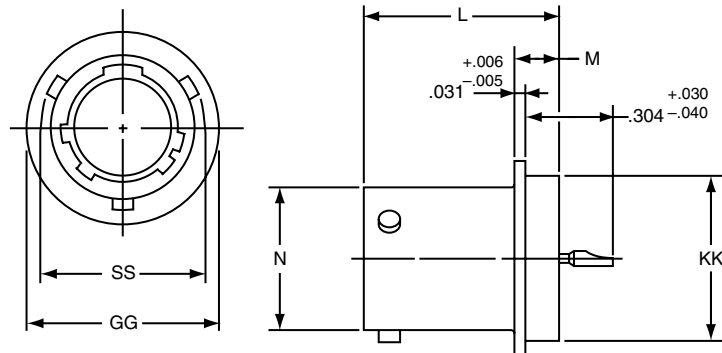
| Shell Size | A*<br>+.000<br>-.010 | C Max. | H Hex<br>+.017<br>-.016 | L Max. | N<br>+.000<br>-.005 | S<br>±.016 | T*<br>+.010<br>-.000 | KK<br>+.011<br>-.000 | RR Thread<br>Class 2A (Plated) |
|------------|----------------------|--------|-------------------------|--------|---------------------|------------|----------------------|----------------------|--------------------------------|
| 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.<br>+.001<br>-.005 | SS Dia.<br>+.000<br>-.016 | L +.011<br>-.000 | M<br>+.006<br>-.005 | GG Dia.<br>+.011<br>-.010 | KK Dia.<br>+.001<br>-.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)

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

38999

### PART # Commercial

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

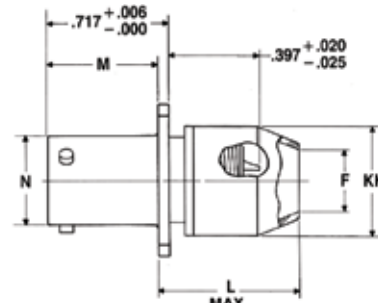
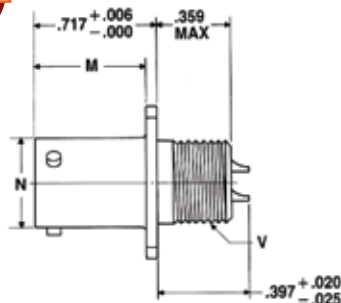
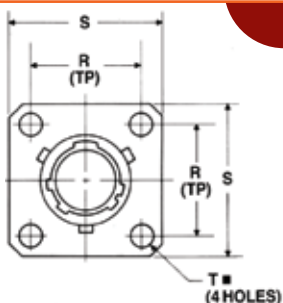
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJT            | 00          | P             | 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                  |

Military qualified to MIL-DTL-27599

LJT00T-XX-XXX (MS20026T)

LJT00P-XX-XXX



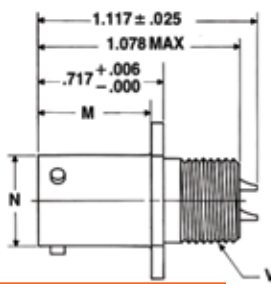
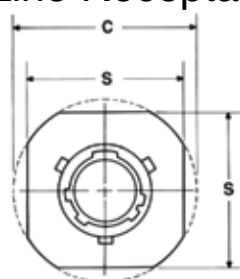
■  $\oplus$  .005 DIA (M)

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

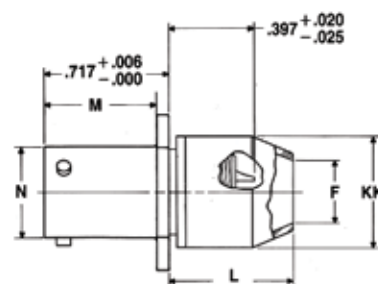
| Shell Size | F Dia. | L Max. | M +.000 - .005 | N +.001 - .005 | R (TP) | S ±.016 | T Dia. ±.005 | VThread Class 2A UNEF (Plated) | KK Dia. Max. |
|------------|--------|--------|----------------|----------------|--------|---------|--------------|--------------------------------|--------------|
| 9          | .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

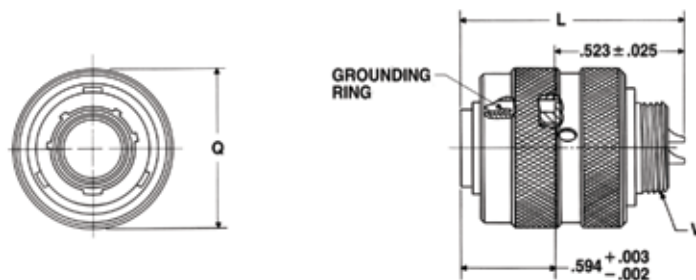
| Shell Size | C Max. | F Dia. | L Max. | M +.000 - .005 | N +.001 - .005 | S ±.016 | VThread Class 2A UNEF (Plated) | KK Dia. Max. |
|------------|--------|--------|--------|----------------|----------------|---------|--------------------------------|--------------|
| 9          | 1.094  | .327   | .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.



# LJT06 (MS20028) Series I – Solder Straight Plug

**Military qualified to MIL-DTL-27599**



## PART # Commercial

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

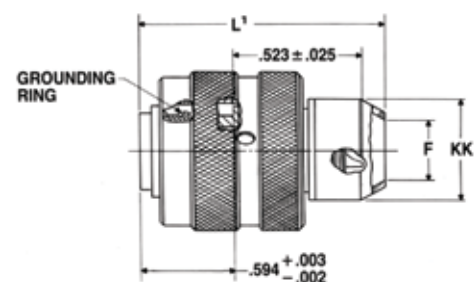
| Connector Type | Shell Style | Service Class | Shell Size & Insert Arrg | Contact Type | Alternate Position | Special Variations |
|----------------|-------------|---------------|--------------------------|--------------|--------------------|--------------------|
| LJT            | 06          | T             | 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)**

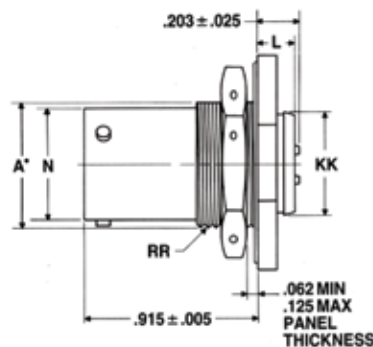
| Shell Size | F Dia. | L Max. | L <sup>1</sup> Max. | Q Max. | VThread Class 2A UNEF (Plated) | KK Dia. Max. |
|------------|--------|--------|---------------------|--------|--------------------------------|--------------|
| 9          | .327   | 1.128  | 1.488               | .844   | .4375-28                       | .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        |



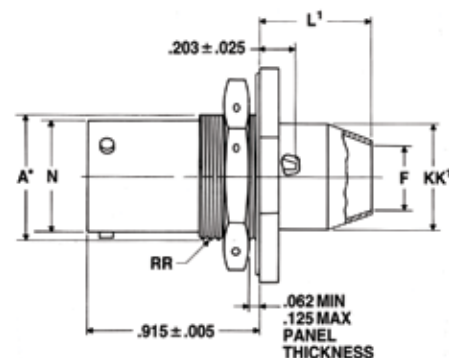
**LJT06P-XX-XXX**

# LJT07 (MS20029) Series I – Solder Jam Nut Receptacle

**Military qualified to MIL-DTL-27599**



**LJT07T-XX-XXX (MS20029T)**



**LJT07P-XX-XXX (MS20029P)**

- "D" shaped mounting hole dimensions

| Shell Size | A <sup>•</sup> +.000 / -.010 | C Max. | F Dia. | H Hex +.017 / -.016 | L Max. | L <sup>1</sup> Max. | N +.001 / -.005 | S ±.016 | T <sup>•</sup> +.010 / -.000 | KK +.011 / -.000 | KK <sup>1</sup> 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.

**38999**

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2  
83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crmp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others

38999

## INSERT AVAILABILITY

| Shell Size /<br>Insert<br>Arrangement | Service<br>Rating | Total<br>Contacts | Contact Size |    |    |    |            |            |             |
|---------------------------------------|-------------------|-------------------|--------------|----|----|----|------------|------------|-------------|
|                                       |                   |                   | 22D          | 20 | 16 | 12 | 12<br>Coax | 8<br>Coax* | 8<br>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 |    |    |            |            |             |

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<br>(in.) ±.250 | MS     | Commercial<br>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                 |

### LJT Lanyard Separation Forces

| Shell Size                 | Straight Plug<br>(lbs. max.) | 15 Degree<br>Pull (lbs.<br>Max.) |
|----------------------------|------------------------------|----------------------------------|
| 11<br>13<br>15             | 45                           | 55                               |
| 17<br>19<br>21<br>23<br>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.

# Series I, LJT Breakaway Fail Safe

## Lanyard Release Plug How to Order, cont.

### HOW TO ORDER - BY MILITARY PART NUMBER FAIL SAFE MS27661

| 1.        | 2.            | 3.         | 4.     | 5.           | 6.            | 7.                 |
|-----------|---------------|------------|--------|--------------|---------------|--------------------|
| MS Number | Service Class | Shell Size | Finish | Insert Arrg. | Contact Style | 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

|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| <b>E</b> | For environmental crimp applications (inactive for new design)                |
| <b>T</b> | 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>B</b> | Designates corrosion resistant olive drab cadmium plated aluminum, 500 hour extended salt spray, EMI shielding effectiveness -50dB @ 10 GHz specification min., 175°C |
| <b>F</b> | Designates electroless nickel plated aluminum, 48 hour salt spray, EMI shielding effectiveness -65dB @ 10 GHz 500 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

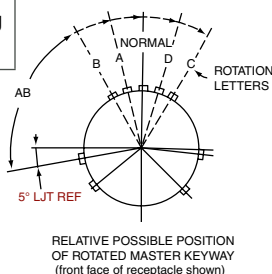
|          |                                                      |
|----------|------------------------------------------------------|
| <b>P</b> | Designates Lanyard Release plug with pin contacts    |
| <b>S</b> | Designates Lanyard Release plug with socket contacts |

#### 7. Alternate Keying Position

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

##### LJT Key/Keyway Rotation

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



### HOW TO ORDER - BY COMMERCIAL PART NUMBER FAIL SAFE 88-5388 OR 91-5388

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

#### 1. Select a Finish

|           |                                                                                                                                                 |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>88</b> | Designates corrosion resistant olive drab cadmium plate over nickel, 500 hour extended salt spray, EMI -50dB @ 10 GHz specification min., 175°C |
| <b>91</b> | 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

|             |                                                             |
|-------------|-------------------------------------------------------------|
| <b>5388</b> | 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

|          |                                                      |
|----------|------------------------------------------------------|
| <b>P</b> | Designates Lanyard Release plug with pin contacts    |
| <b>S</b> | 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               |

**38999**

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class I

Back-Shell

Options  
Others

38999

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

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

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

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

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

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

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

**PART #** 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                  |

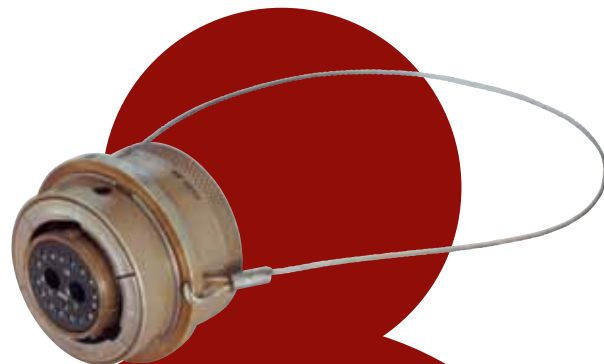
## LJT Fail Safe 88-5388/91-5388 (MS27661)

### 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                       |

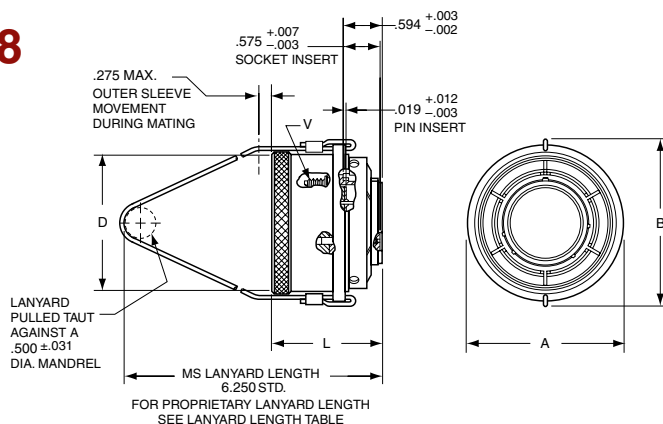
All dimensions for reference only.



## 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.



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[M39029/72-526](#) [M39029/48-324](#) [M39029/33-270](#) [M39029/87-479](#) [M39029/87-475](#) [M39029/71-392](#) [M39029/72-525](#)  
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