

Amphenol® JT/LJT

high reliability and high contact density
with maximum weight and space savings



Amphenol® JT Connector



Amphenol® LJT Connector

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aerospace industries, and provided the impetus for development of the MIL-C-38999 specifications, which recently were superseded by MIL-DTL-38999.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
- **Mismatching 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** - per MIL-C-27599 (see page 52 and Amphenol Product Data Sheet 158)
- **Hermetic** - air leakage limited to $1 \times 10^{-7} \text{ cm}^3$ per second optional
- **“Breakaway” Lanyard Release Style** - available in LJT plugs. Provides quick disconnect of the connector plug and receptacle with axial pull on the lanyard. See pages 38-41.
- **Inventory Support Commonality** - uses standard MIL-DTL-38999 contacts, insert arrangements and application tools.
- **RoHS Compliant Product Available** - Consult Amphenol Aerospace Operations.



For additional information on Amphenol JT/LJT connectors, or for special application requirements, contact your local sales office or:

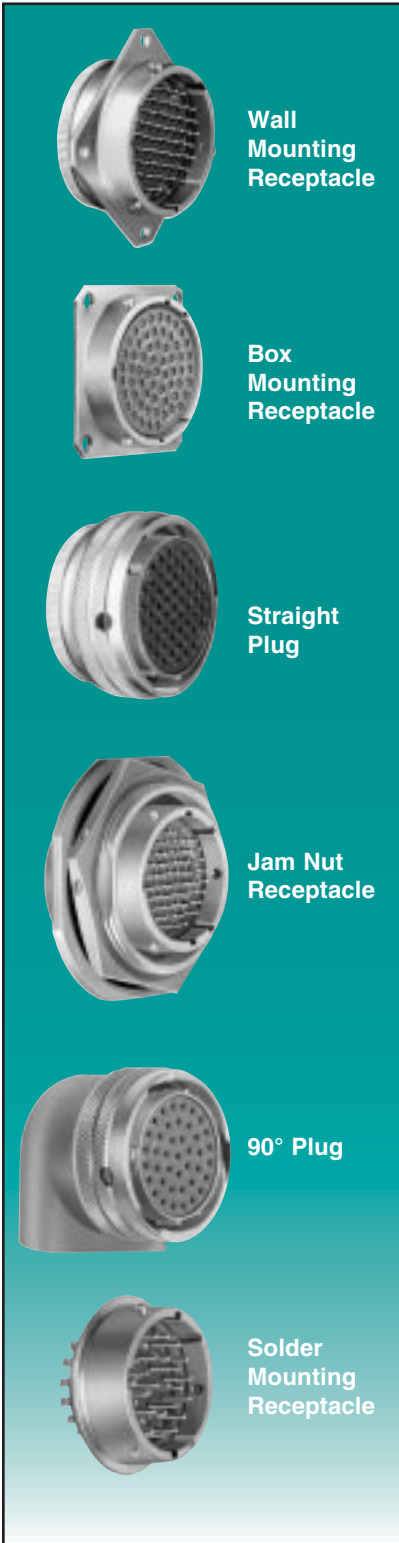
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Amphenol Aerospace
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Where proof of high reliability and lot control is required, MS approved equivalents to most proprietary JT and LJT connectors are available.

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

JT/LJT

the subminiature cylindrical
for every application



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 3). Hermetic seal receptacles are available in carbon steel or stainless steel shells. Dependable 5 key/keyway polarization with bayonet lock coupling is incorporated to aid and assure positive mating.

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

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

Contacts

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

Optional Features

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

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

For complete listing and definition of connector types, shell styles and service classes, see How to Order, page 53. For information on Fail-Safe Lanyard Release style plugs see pages 38-41.

JT/LJT specifications

CONTACT RATING

| Contact Size | Test Current | | Maximum Millivolt Drop Crimp* | Maximum Millivolt Drop | |
|--------------|----------------|----------|-------------------------------|------------------------|-----------|
| | Solder & Crimp | Hermetic | | Solder* | Hermetic* |
| 22M | 3 | 2 | 45 | 20 | 60 |
| 22D | 5 | 3 | 73 | | 85 |
| 22 | 5 | 3 | 73 | 20 | 85 |
| 20 | 7.5 | 5 | 55 | 20 | 60 |
| 16 | 13 | 10 | 49 | 20 | 85 |
| 12 | 23 | 17 | 42 | 20 | 85 |
| 10 (Power) | 33 | NA | 33 | NA | NA |

| Contact Size | Crimp Well Data | | Solder Well Data | |
|--------------|-----------------|--------------------|--|--------------------|
| | Well Diameter | Nominal Well Depth | Well Diameter | Nominal Well Depth |
| 22M | .028 ±.001 | .141 | .029 ^{+.004} _{-.000} | |
| 22D | .0345 ±.0010 | .141 | | |
| 22 | .0365 ±.0010 | .141 | .036 ^{+.004} _{-.000} | .094 |
| 20 | .047 ±.001 | .209 | .044 ^{+.004} _{-.004} | .125 |
| 16 | .067 ±.001 | .209 | .078 ^{+.000} _{-.004} | .141 |
| 12 | .100 ±.002 | .209 | .116 ^{+.004} _{-.002} | .141 |
| 10 (Power) | .137 ±.002 | .355 | NA | NA |

* When tested using silver plated wire.

SERVICE RATING**

| Service Rating | Suggested Operating 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.

FINISH DATA

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

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

JT/LJT

insert availability and identification, alternate positioning

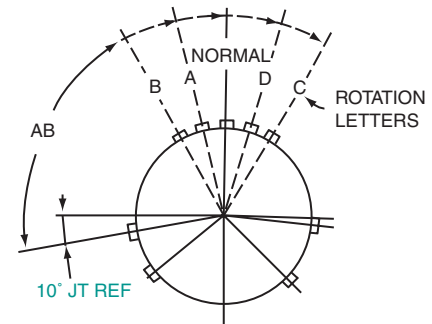
| JT | LJT | Solder | Crimp | Hermetics | | Service Rating | Total Con-tacts | Contact Size | | | | | | | |
|-------|-------|--------|-------|-----------|----------|----------------|-----------------|--------------|-----|----|----|----|----|----------|--|
| | | | | Class H | Class Y* | | | 22D | 22M | 22 | 20 | 16 | 12 | 8 (Coax) | |
| 8-2 | | P | | | | M | 2 | | | | 2 | | | | |
| 8-3 | | X | N/A | P | P | M | 3 | | | | 3 | | | | |
| | 9-3 | X | | | | | | | | | | | | | |
| 8-6 | | X | X | P | P | M | 6 | | 6 | | | | | | |
| | 9-6 | X | X | P | P | | | | | | | | | | |
| | | | | | | M | 7 | | 7 | | | | | | |
| | 9-7 | X | | | | | | | | | | | | | |
| | | | | | | I | 2 | | | | 2 | | | | |
| 8-35 | | | X | P | P | M | 6 | 6 | | | | | | | |
| | 9-35 | | X | P | P | | | | | | | | | | |
| 8-44 | | | X | P | P | M | 4 | | | 4 | | | | | |
| | 9-44 | | X | | | | | | | | | | | | |
| 8-97 | | X | | | | M | 4 | | 2 | | 2 | | | | |
| 8-98 | | S | X | P | P | I | 3 | | | | 3 | | | | |
| | 9-98 | X | X | P | P | | | | | | | | | | |
| | | | | | | I | 2 | | | | | 2 | | | |
| 10-4 | | | 3 | | | I | 4 | | | | 4 | | | | |
| | 11-4 | X | 2 | | | | | | | | | | | | |
| 10-5 | | X | X | P | P | I | 5 | | | | 5 | | | | |
| | 11-5 | X | X | | | | | | | | | | | | |
| | | | | | | I | 6 | | | | 6 | | | | |
| 10-13 | | X | X | P | P | M | 13 | | 13 | | | | | | |
| | 11-13 | X | X | P | P | | | | | | | | | | |
| 10-35 | | | X | P | P | M | 13 | 13 | | | | | | | |
| | 11-35 | | X | P | P | | | | | | | | | | |
| 10-98 | | X | X | P | P | I | 6 | | | | 6 | | | | |
| | 11-98 | X | X | P | P | | | | | | | | | | |
| 10-99 | | | X | P | P | I | 7 | | | | 7 | | | | |
| | 11-99 | | P | | | | | | | | | | | | |
| 12-3 | | X | X | P | P | II | 3 | | | | | 3 | | | |
| | 13-3 | | P | | | | | | | | | | | | |
| 12-4 | | X | X | P | P | I | 4 | | | | 4 | | | | |
| | 13-4★ | X | X | P | P | | | | | | | | | | |
| 12-8 | | X | X | P | P | I | 8 | | | | 8 | | | | |
| | 13-8 | X | X | P | P | | | | | | | | | | |
| 12-22 | | | X | P | P | M | 22 | | 22 | | | | | | |
| | 13-22 | X | X | P | P | | | | | | | | | | |
| 12-35 | | | X | P | P | M | 22 | 22 | | | | | | | |
| | 13-35 | | X | P | P | | | | | | | | | | |
| 12-98 | | X | X | P | P | I | 10 | | | | 10 | | | | |
| | 13-98 | X | X | P | P | | | | | | | | | | |
| 14-4 | | | 2 | | | I | 4 | | | | | 4 | | | |
| | 15-4 | | 2 | | | | | | | | | | | | |
| 14-5 | | X | X | P | P | II | 5 | | | | 5 | | | | |
| | 15-5★ | X | X | | | | | | | | | | | | |
| 14-15 | | X | X | P | P | I | 15 | | | | 14 | 1 | | | |
| | 15-15 | X | X | P | P | | | | | | | | | | |
| 14-18 | | X | X | P | P | I | 18 | | | | 18 | | | | |
| | 15-18 | X | X | P | P | | | | | | | | | | |
| 14-19 | | X | X | | | I | 19 | | | | 19 | | | | |
| | 15-19 | | X | | | | | | | | | | | | |
| 14-35 | | | X | P | P | M | 37 | 37 | | | | | | | |
| | 15-35 | | X | P | P | | | | | | | | | | |
| 14-37 | | X | X | P | P | M | 37 | | 37 | | | | | | |
| | 15-37 | X | X | P | P | | | | | | | | | | |
| 14-68 | | | 2 | | | I | 8 | | | | 8 | | | | |
| | 15-68 | X | 3 | | | | | | | | | | | | |
| 14-97 | | | 2 | P | P | I | 12 | | | | 8 | 4 | | | |
| | 15-97 | X | X | P | P | | | | | | | | | | |

JT MASTER KEY/KEYWAY ROTATION

| Shell Size | AB ANGLE OF ROTATION (Degrees) | | | | |
|------------|--------------------------------|-----|-----|------|------|
| | 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° |

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 insert always remains in the same position relative to the minor keys.

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.



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

- (P) Pin inserts only (consult Amphenol, Sidney, NY for socket availability)
- (2) Not tooled for RP or O2RE
- (3) Pin inserts only, not tooled for RP or O2RE (consult Amphenol, Sidney, NY for availability)
- * Same as H with interfacial seal
- ** Tooled with special terminal only (consult Amphenol, Sidney, NY for availability of standard terminal)
- ★ Ground plane proprietary option available. See page 55 for further information on ground plane connectors.

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insert arrangements

black arrangements – JT or LJT
 green arrangements – JT only
 blue arrangements – LJT only

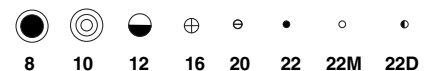
front face of pin inserts illustrated

| | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|------|------|------|--------|------|
| | | | | | | | | | |
| Insert Arrangement (JT) | 8-2 | 8-3 | 8-6 | | | 8-35 | 8-44 | 8-97 | 8-98 |
| Insert Arrangement (LJT) | | 9-3 | 9-6 | 9-7 | 9-22 | 9-35 | 9-44 | | 9-98 |
| Service Rating | M | M | M | M | I | M | M | M | I |
| Number of Contacts | 2 | 3 | 6 | 7 | 2 | 6 | 4 | 2 2 | 3 |
| Contact Size | 20 | 20 | 22M | 22M | 20 | 22D | 22 | 22M 20 | 20 |

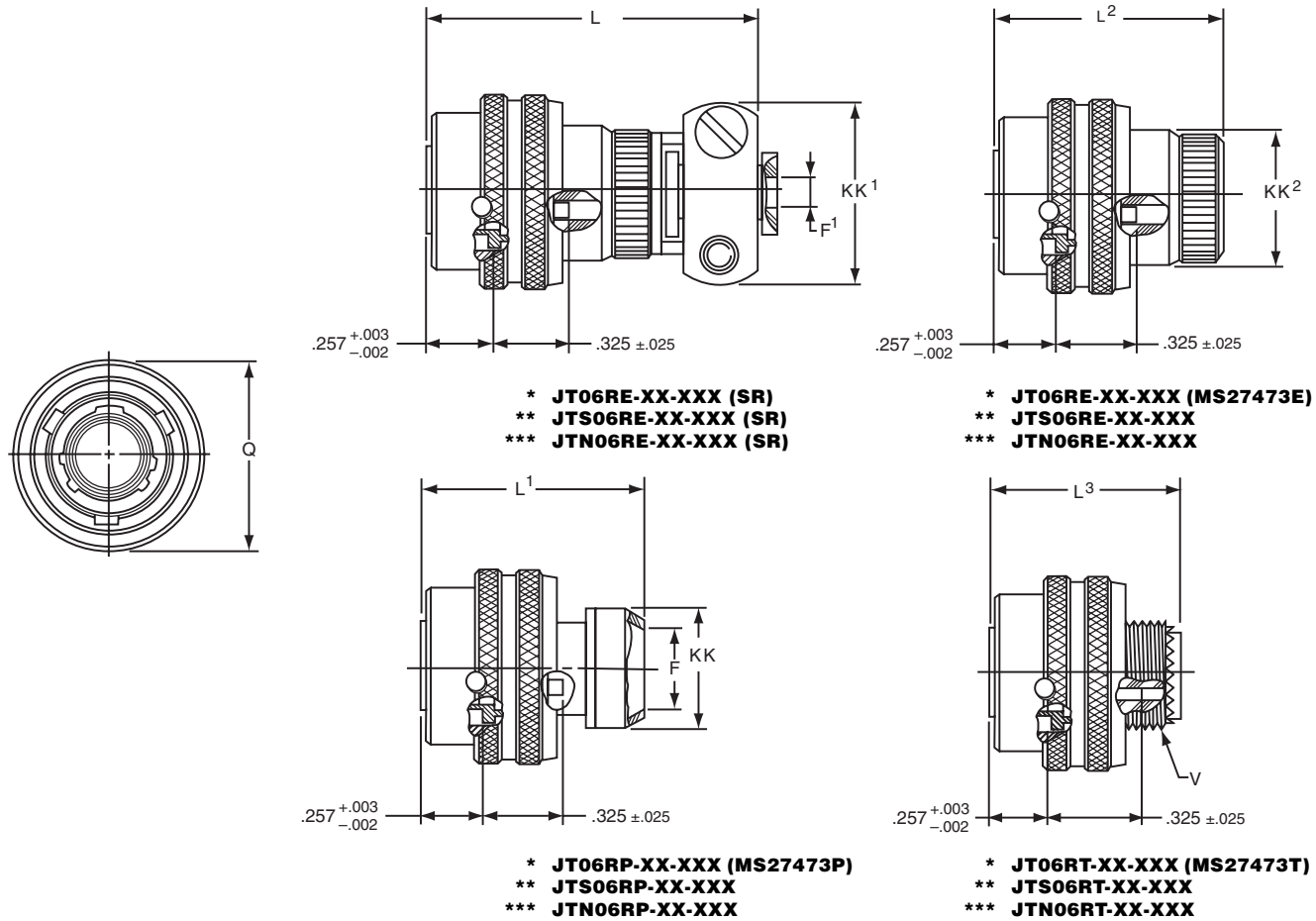
| | | | | | | | | |
|---------------------------------|------|------|------|------|-------|-------|-------|-------|
| | | | | | | | | |
| Insert Arrangement (JT) | | 10-4 | 10-5 | | 10-13 | 10-35 | 10-98 | 10-99 |
| Insert Arrangement (LJT) | 11-2 | 11-4 | 11-5 | 11-6 | 11-13 | 11-35 | 11-98 | 11-99 |
| Service Rating | I | I | I | I | M | M | I | I |
| Number of Contacts | 2 | 4 | 5 | 6 | 13 | 13 | 6 | 7 |
| Contact Size | 16 | 20 | 20 | 20 | 22M | 22D | 20 | 20 |

| | | | | | | | | |
|---------------------------------|------|------|------|-------|-------|-------|------|------|
| | | | | | | | | |
| Insert Arrangement (JT) | 12-3 | 12-4 | 12-8 | 12-22 | 12-35 | 12-98 | 14-4 | 14-5 |
| Insert Arrangement (LJT) | 13-3 | 13-4 | 13-8 | 13-22 | 13-35 | 13-98 | 15-4 | 15-5 |
| Service Rating | II | I | I | M | M | I | I | II |
| Number of Contacts | 3 | 4 | 8 | 22 | 22 | 10 | 4 | 5 |
| Contact Size | 16 | 16 | 20 | 22M | 22D | 20 | 12 | 16 |

| | | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | | |
| Insert Arrangement (JT) | 14-15 | 14-18 | 14-19 | 14-35 | 14-37 | 14-68 | 14-97 |
| Insert Arrangement (LJT) | 15-15 | 15-18 | 15-19 | 15-35 | 15-37 | 15-68 | 15-97 |
| Service Rating | I | I | I | M | M | I | I |
| Number of Contacts | 14 1 | 18 | 19 | 37 | 37 | 8 | 8 4 |
| Contact Size | 20 16 | 20 | 20 | 22D | 22M | 16 | 20 16 |



JT06R (MS27473) – crimp straight plug



- * To complete order number see page 53.
- ** High temperature version; to complete order number see page 53.
- *** Clear iridite finish (gold color), N₂O₄ resistant; to complete order number see page 53.

| Shell Size | F Dia. | F ¹ Dia. +.010 - .025 | L Max. | L ¹ Max. | L ² Max. | L ³ Max. | Q Dia. Max. | V Thread Modified | | KK Dia. Max. | KK ¹ Max. | KK ² Dia. Max. |
|------------|--------|----------------------------------|--------|---------------------|---------------------|---------------------|-------------|-------------------|---------------------|--------------|----------------------|---------------------------|
| | | | | | | | | Class 2A UNEF | Modified Major 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.

The following data includes information pertaining to the application tools which have been established for crimping, inserting, and removing the size 12, 16, 20, 22, 22D and 22M contacts incorporated in the JT-R, LJT-R and MIL-DTL-38999 (MS) series connectors as applicable.

All crimping tools included are the “full cycling” type and when used as specified in the installation instructions (L-624 and

L-844 covering the JT-R, LJT-R and MS series connectors) will provide reliable crimped wire to contact terminations. There is a possibility of additional crimping tools other than those included being available at present or in the future for this specific application.

For additional information on coaxial contacts, consult Amphenol catalog section 12-130.

CRIMPING TOOLS

| Contact Size/Type | Crimping Tool | Turret Die or Positioner |
|--|---|---|
| 12 Pin and Socket | M22520/1-01 | M22520/1-04 |
| 16 Pin and Socket | M22520/1-01 M22520/7-01 | M22520/1-04 M22520/7-04 |
| 20 Pin and Socket | M22520/1-01 M22520/2-01 M22520/7-01 | M22520/1-04 M22520/2-10 M22520/7-08 |
| 22, 22D, 22M Pin | M22520/2-01 M22520/7-01 | M22520/2-09 M22520/7-07 |
| 22, 22D, 22M Socket (LJT-R) | M22520/2-01 M22520/7-01 | M22520/2-07 M22520/7-05 |
| 22D Socket (JT-R) | M22520/2-01 M22520/7-01 | M22520/2-06 M22520/7-06 |
| 8 Twinax Center Pin and Socket | M22520/2-01 | M22520/2-37 |
| 8 Twinax Intermediate Outer Pin & Socket | M22520/5-01 | M22520/5-200 |

| Contact Size/Type | Crimping Tool | Turret Die or Positioner |
|----------------------------------|---------------|-------------------------------|
| 8 (Coaxial Inner Pin and Socket) | M22520/2-01 | M22520/2-31 |
| 8 Coaxial Outer Pin and Socket | M22520/5-01 | M22520/5-05 Die Closure B |
| | M22520/5-01 | M22520/5-41 Die Closure B |
| | M22520/10-01 | M22520/10-07 Die Closure B |
| 16 Coaxial Inner Pin and Socket | M22520/2-01 | M22520/2-35 |
| 16 Coaxial Outer Pin and Socket | M22520/4-01 | M22520/4-02 |
| 12 Coaxial Inner Pin and Socket | M22520/2-01 | M22520/2-34 |
| 12 Coaxial Outer Pin and Socket | M22520/31-01 | M22520/31-02 |
| 10 (Power) | †† | †† |

Where 2 or 3 tools are listed for a contact size, only one tool and its die or positioner are required to crimp the contact. The above crimping tools and positioners are available from the approved tool manufacturer.

INSERTION TOOLS

| Use with Contact Size | Plastic Tools | | Metal Tools | | | |
|-----------------------|---------------|----------------|----------------|-------------------------|---------------------------------------|------------|
| | Part Number | Color Code | Angle Type | | Straight Type Proprietary Part Number | Color Code |
| | | | MS Part Number | Proprietary Part Number | | |
| 10 (Power) | M81969/14-05* | Gray/White | M81969/8-11 | † | † | Green |
| 12 | M81969/14-04* | Yellow/(White) | M81969/8-09 | 11-8674-12 | 11-8794-12 | Yellow |
| 16 | M81969/14-03* | Blue/(White) | M81969/8-07 | 11-8674-16 | 11-8794-16 | Blue |
| 20 | M81969/14-10* | Red/(Orange) | M81969/8-05 | 11-8674-20 | 11-8794-20 | Red |
| 22 | M81969/14-09 | Brown/(White) | M81969/8-03 | 11-8674-22 | 11-8794-22 | Brown |
| 22D, 22M | M81969/14-01* | Green/(White) | M81969/8-01 | 11-8674-24 | 11-8794-24 | Black |
| 8 Coaxial | None Required | | | | | |
| 8 Twinax | None | | M81969/46-06** | None | | Red |

REMOVAL TOOLS

| Use with Contact Size | Plastic Tools | | Metal Tools | | | | |
|-----------------------|---------------|----------------|--|----------------|-------------------------|---------------------------------------|--------------|
| | Part Number | Color Code | For Unwired Contacts Proprietary Part Number | Angle Type | | Straight Type Proprietary Part Number | Color Code |
| | | | | MS Part Number | Proprietary Part Number | | |
| 10 (Power) | M81969/14-05* | (Green)/White | † | M81969/8-12 | † | † | Green/White |
| 12 | M81969/14-04* | (Yellow)/White | 11-10050-11 | M81969/8-10 | 11-8675-12 | 11-8795-12 | Yellow/White |
| 16 | M81969/14-03* | (Blue)/White | 11-10050-10 | M81969/8-08 | 11-8675-16 | 11-8795-16 | Blue/White |
| 20 | M81969/14-10* | (Red) Orange | 11-10050-9 | M81969/8-06 | 11-8675-20 | 11-8795-20 | Red/White |
| 22 | M81969/14-09* | (Brown)/White | 11-10050-8 | M81969/8-04 | 11-8675-22 | 11-8795-22 | Brown/White |
| 22D, 22M | M81969/14-01* | (Green)/White | 11-10050-7 | M81969/8-02 | 11-8675-24 | 11-8795-24 | Green/White |
| 8 Coaxial | M81969/14-12 | Green | None | None | 11-9170 | DRK264-8†† | N/A |
| 8 Twinax | M81969/14-12 | Green | None | M81969/46-12** | 11-9170 | N/A | N/A |

The M81969/8, 11-8674, 11-8675, and 11-8794 metal contact insertion and removal tools will accommodate wires having the maximum outside diameter as follows: Contact size 12–.155, 16–.109, 20–.077, 22, 22D, 22M–.050. When wire diameters exceed those specified, the plastic tools must be used.

* Double ended insertion/removal tool.

** Twinax insertion and removal tools are available only in a straight type, metal version.

† To be determined

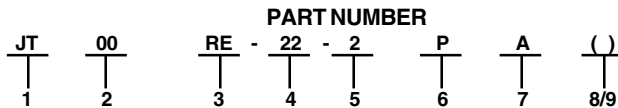
†† Contact Daniels Manufacturing Co. for availability.

JT/LJT

how to order

PROPRIETARY PART NUMBER

To more easily illustrate ordering procedure, part number JT00RE-22-2PA() is shown as follows:



See code below:

1. Connector Type:

- JT** designates standard Junior Tri-Lock connector
- LJT** designates long Junior Tri-Lock connector
- LJTS** **JTS** designates high temperature connector
- LJTN** **JTN** designates chemical and fuel resistant
- JTL** designates miniature mounting dimensions
- JTLN** designates miniature mounting dimensions - chemical resistant
- JTLS** designates miniature mounting dimensions - high temperature
- LJTPQ** **JTPQ** designates back panel mounted wall mounting receptacle
- LJTP** **JTP** designates back panel mounted box mounting receptacle
- LJTPN** **JTPN** designates back panel mounted - chemical resistant
- LJTSP** **JTSP** designates back panel mounted - high temperature
- JTG** designates plug with grounding fingers*
- JTNG** designates plug with grounding fingers* - chemical resistant

2. Shell Style

- 00 designates wall mount receptacle
- 01 designates line mount receptacle
- 02 designates box mount receptacle
- 06 designates straight plug
- 07 designates jam nut receptacle
- 08 designates 90 degree plug
- 1 designates solder mount receptacle - hermetic

Lanyard Release Connectors (See pages 38-41 for ordering)

- 88 designates Fail Safe lanyard release plug with corrosion resistant olive drab cadmium plate over nickel shells
- 91 designates Fail Safe lanyard release plug with electroless nickel plated aluminum shells.

3. Service Class: Solder contacts/connectors:

- "P" for potting applications - These connectors are supplied with a potting boot. † All shells are designed with integral features to retain potting boots.
- "A" for general applications.
- "A (SR)" - threaded rear design with strain relief. †
- "C" for pressurized applications
- "C (SR)" - threaded rear design with strain relief. †
- "E" box mount and thru-bulkhead only with no backend threads.
- "H" for hermetic applications - Fused compression glass sealed inserts. Leakage rate less than .01 micron cu. ft./hr. (1 x 10⁻⁷ cc/sec.) at 15 psi differential.
- "Y" same as "H" with interfacial seal.
- "T" for MS27599A applications - general duty, pressurized (receptacles only)

3. Service Class: Crimp contacts/connectors:

- "RP" for potting crimp applications. Supplied with spacer grommet and potting boot. ††
- "RE" for 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).
- "RGF"* electroless nickel plated ground plane aluminum, 200°C
- "RGW"* olive drab cadmium plated ground plane aluminum, 175°C
- "RT" for environmental applications. Supplied without rear accessories. Design provides serrations on rear threads of shells.

For additional information defining description of service class, consult Amphenol, Sidney, NY.

4. Shell Size:

- JT shell sizes available from 8 through 24.
- LJT shell sizes available from 9 through 25.

5. Insert Arrangement:

- 22-2 designates insert arrangement. Refer to pages 4-11 for insert availability.

6. Contact Style:

- P designates pin contacts; S designates socket contacts.

7. Alternate Keying:

- "A" designates alternate keying connector assembly. Other basic alternate keys are "B", "C" and "D". No letter required for normal (no rotation) position. See pages 4 and 5.

8. Strain Relief Option:

- "SR" designates a strain relief clamp. Strain reliefs are available only on "A", "C" and "RE" class connectors.

9. Finish Variation Suffix:

- See finish variations available in table below:

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

MILITARY TYPES

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---------|---------------|---|------------|----|--------|---|--------------------|----|------------------------|---|---|---|---|-----------|--|---------------|--|------------|--|--------|--|--------------------|--|------------------------|--|---|--|--|
| <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">MS27473</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">E</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">14</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">A</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">18</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">P</td> <td style="width: 10%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">A</td> </tr> <tr> <td>MS Number</td> <td style="border-bottom: 1px solid black;"></td> <td>Service Class</td> <td style="border-bottom: 1px solid black;"></td> <td>Shell Size</td> <td style="border-bottom: 1px solid black;"></td> <td>Finish</td> <td style="border-bottom: 1px solid black;"></td> <td>Insert Arrangement</td> <td style="border-bottom: 1px solid black;"></td> <td>Contact Style (P or S)</td> <td style="border-bottom: 1px solid black;"></td> <td>Alternate Keying (No letter required for normal position)</td> <td style="border-bottom: 1px solid black;"></td> </tr> </table> | | MS27473 | | E | | 14 | | A | | 18 | | P | | A | MS Number | | Service Class | | Shell Size | | Finish | | Insert Arrangement | | Contact Style (P or S) | | Alternate Keying (No letter required for normal position) | | <p>Military Service Class</p> <ul style="list-style-type: none"> E environmental, same as RE T environmental, same as RT P potting, same as RP Y hermetically sealed, same as Y <p>For finish variations see above chart. For additional data, see page 3.</p> <p>For MS depictions and dimensional data see applicable Mil-Spec. (MIL-DTL-38999, MIL-C-27599).</p> <p>Military Fail Safe lanyard release plug MS27661 - See pages 38-41 for ordering.</p> |
| | MS27473 | | E | | 14 | | A | | 18 | | P | | A | | | | | | | | | | | | | | | | |
| MS Number | | Service Class | | Shell Size | | Finish | | Insert Arrangement | | Contact Style (P or S) | | Alternate Keying (No letter required for normal position) | | | | | | | | | | | | | | | | | |

* Grounding fingers standard on all LJT plugs

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

†† Not applicable to box mounting style.

** For more information on Coax/Triax/Twinax Ground Plane Connectors, see page 55.