



# LJT 21-48

4x60 Amps circular power connector



## CHARACTERISTICS

- **Lightweight space saving design**
- **Corrosion resistance:**  
olive drab cadmium-plate aluminium or electroless nickel
- **100% scoop-proof for complete contact protection**
- **Keying:**  
achieved by different key / keyway locations
- **Quick positive coupling:**  
3 point bayonet locking system
- **Durability:**  
500 cycles
- **Insulation resistance at ambient under 500 Vdc > 5000 Mohms**
- **4 size 8 contacts**
- **Range temperature:**  
- 65°C to + 175°C
- **Contact rating:**  
Current capability 60 A
- **Service rating M:**
  - Operating voltage at sea level: 400 Vrms
  - Test voltage unmated
    - at sea level : 1300 Vrms
    - at 15000 m / 50000 ft : 550 Vrms
    - at 21000 m / 70000 ft : 350 Vrms
    - at 34000 m / 110000 ft : 200 Vrms
  - Test voltage mated, please consult us.

Hard piggy back grommet for size 8 cavity and power cable:  
ref.: 900471.



## DESCRIPTION

The Amphenol Socapex power connector LJT 21-48 provides 4 size 8 power contacts in a LJT 21 shell in accordance with the MIL-DTL-38999 Series I standard.

This arrangement was originally developed for military applications.

Due to the rigidity of the cables used, the front male insulator has been reinforced to maintain a perfect alignment of contacts during mating. A header is placed in the backshell to guide each wire and to guarantee tightness even when cables are bent. Available in Mil-DTL-38999 series III standard.

Available in TV-CTV (Mil-DTL-38999 Series III) version.

New hard piggy back grommet for easy installation.

*High performance  
for power supply*

## APPLICATIONS

- Power supplies
- Shelters
- Firing posts

LJT 21-48

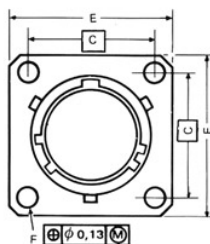
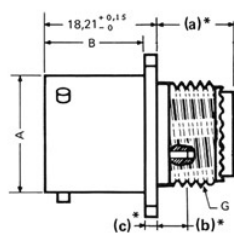
| Contact |                     | Crimp barrel |          | Cable sizes |            |                     |
|---------|---------------------|--------------|----------|-------------|------------|---------------------|
| Size    | Contact diameter mm | Diameter mm  | Depth mm | Gauge AWG   | Section mm | Outside diameter mm |
| 8       | 3.6                 | 4.6          | 10       | 8           | 8.98 to 10 | 4.5/5.8             |



**Amphenol**

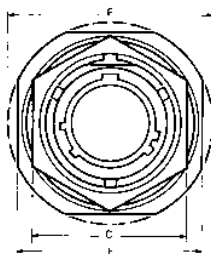
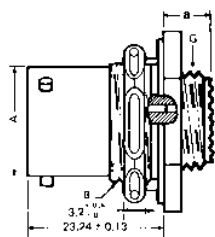
## Dimensional characteristics

### • Square flange receptacle



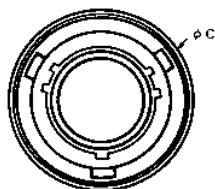
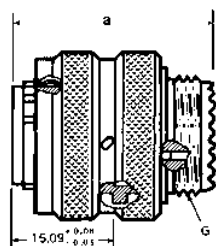
A = 33.83 mm  
B = 15.29 mm  
C = 31.75 mm  
E = 39.67 mm  
F = 3.25 mm  
G = 1.1875 - 18 2 A UNEF

### • Jam nut receptacle



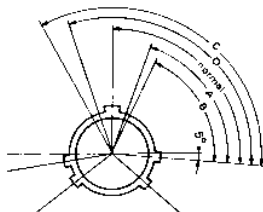
A = 33.83 mm  
B = 1.5000 - 18 UNEF inches  
C = 43.00 mm  
E = 49.23 mm  
F = 52.65 mm  
G = 1.1875 - 18 2 A UNEF  
a = 8.33 mm Max  
without protrusion of the piggy back grommet.

### • Plug



G = 1.1875 - 18 2 A UNEF  
C = 41.28 mm  
a = 31 mm Max  
without protrusion of the piggy back grommet.

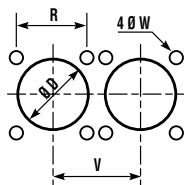
### • Position of major key way



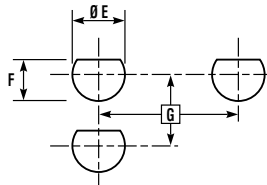
A = 80° B = 69° C = 121° D = 110°  
Receptacle: front face shown

### • Panel drilling for square flange and jam nut receptacle

Square flange receptacle  
front panel mounting



Jam nut receptacle  
back panel mounting

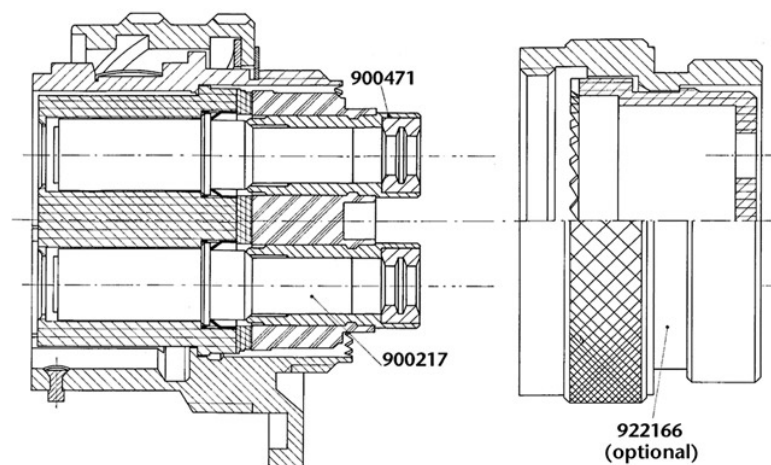


| Shell Size | R (mm) | V <sup>+0</sup> <sub>-0.25</sub> (mm) | W <sup>+0</sup> <sub>-0.25</sub> (mm) | G Mini (mm) | E Mini (mm) | F <sup>+0</sup> <sub>-0.25</sub> (mm) | D <sup>+0</sup> <sub>-0.25</sub> Mini (mm) |
|------------|--------|---------------------------------------|---------------------------------------|-------------|-------------|---------------------------------------|--------------------------------------------|
| 21         | 31.75  | 42.5                                  | 3.25                                  | 50.60       | 38.28       | 37.06                                 | 32.16                                      |

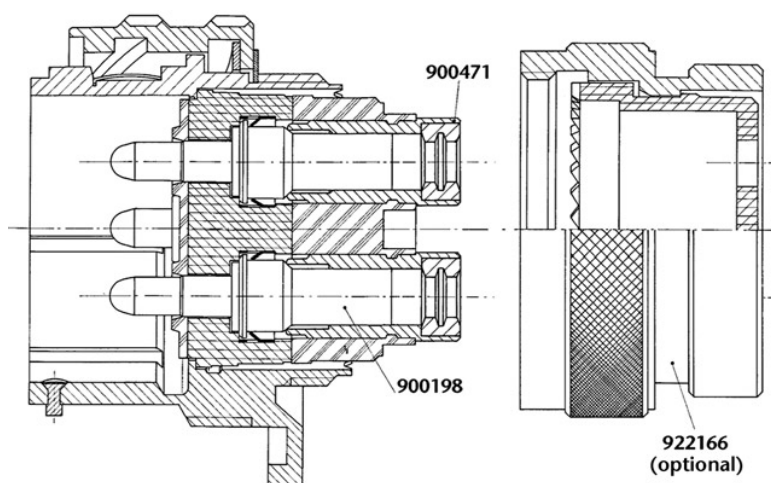
Panel thickness for jam nut receptacle : 1.6 mm mini  
3.2 mm maxi

## Insert arrangement 21-48 particularities

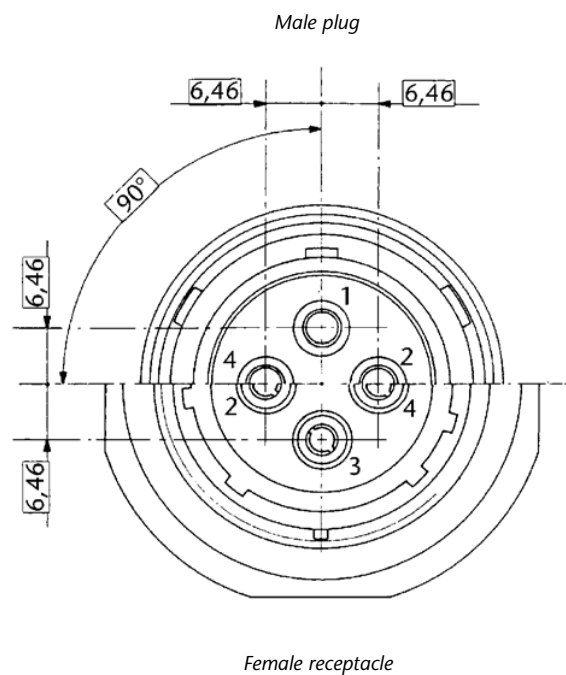
- Side half-view of female plug/receptacle



- Side half-view of male plug/receptacle



- Insert arrangement: front face shown



## Connectors

### Proprietary P/N

| Series                                                                                                                                               | LJT | 00 | RT | 21 | 48 | P | A | 014 |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|----|----|---|---|-----|
| Shell type:<br>00: square flange receptacle<br>01: in-line receptacle<br>07: jam nut receptacle<br>06: plug                                          |     |    |    |    |    |   |   |     |
| Connector class:<br>RT: for environmental applications (supplied without rear accessories).<br>Design provides serrations on rear threads of shells. |     |    |    |    |    |   |   |     |
| 21: shell size                                                                                                                                       |     |    |    |    |    |   |   |     |
| 48: insert arrangement (4 size 8 contacts)                                                                                                           |     |    |    |    |    |   |   |     |
| Contact type:<br>P: pin<br>S: socket                                                                                                                 |     |    |    |    |    |   |   |     |
| Polarization, rotation of major keyway:<br>None = normal<br>A, B, C, D.                                                                              |     |    |    |    |    |   |   |     |
| Shell finish :<br>014: olive drab cadmium<br>023: electroless nickel                                                                                 |     |    |    |    |    |   |   |     |

(Connector supplied with 4 contacts and 4 piggy back grommets 900471)  
 For additional information, please see our LJT catalog.

### Contacts

**Male contact:** 900198 **Female contact:** 900217

**Reducing sleeve for AWG10:** 900154 **Piggy Back grommet:** 900471

Numerous piggy back grommets are available depending to cable diameters. Please consult us.

### Backshells

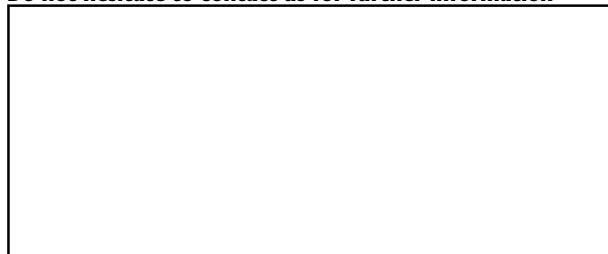
This connector is compatible with all backshells available for LJT connectors (MIL-DTL-38999 Series I / HE 308):  
 LJT NSA = HE308-13 / LJT NSB / LJT NSD = HE308-14 / LJT SAD / LJT SAC  
 HE308-35 band backshell (BAND-IT System).

### Tooling

**Crimping plier:** 809872 **Controlling gauge:** 809877

**Positioner:** 809873 **Metallic removal tool:** 809845

Do not hesitate to contact us for further information



# Amphenol

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