

LJT 25-P1

1 x 500 A

500A power contact cylindrical connector.

MAIN CHARACTERISTICS

- **Corrosion resistance**
olive drab cadmium-plate aluminium or electroless nickel
- **Keying**
achieved by different key / keyway locations
- **Quick positive coupling**
3 point bayonet lock system
- **Durability**
500 cycles
- **Insulation resistance at ambient under 500 Vdc > 5 000 Mohms**
- **1 size 4/0 contact**
- **Temperature range**
- 65 °C / + 175 °C
- **Contact rating**
current capability 500 A

The socket contact is equipped with the Radsok® device which offers a high durability (20000 mating cycles) as well as a very low contact resistance and insertion force.



Contact		Crimp barrel		Cable sizes		
Size	Pin Contact diameter (mm)	Diameter (mm)	Depth (mm)	Cable designation *	Section (mm ²)	Outside diameter (without insulator) (mm)
4/0	14,0	14,6	21	CANUS 16012 FORISSIER 16013	100	14

* : for other cable designations, Amphenol Socapex is ready to realize pulling tests after crimping.



DESCRIPTION

The Amphenol Socapex power connector LJT 25-P1 (1 x 500 A) has been developed for military applications, when high power supply is required as well as EMI RFI protection for peripheral electronic devices.

LJT 25-P1 connector provides 1 size 4/0 power contact in a 25 shell size according to MIL-DTL-38999 Series I standard.



High performance for power supply

APPLICATIONS

- Shelters
- Firing posts
- Motor starting
- Air conditioning
- Automation

Amphenol

Application tools & process

Warning :

- Due to the power cable stiffness, a specific backshell has been designed compatible with both plug and receptacle. The standard M85049 backshells suitable for Mil-DTL-38999 Series I connectors are not compatible with this power connector.

Tool references (*Dubuis crimping tool*)

- **For size 00 Contact**
- Crimping pliers 922521
- Pliers adapter 922522
- Dies for 100 mm² 922518-90

- Contact positioner for the dies 922559
The contact positioner is installed on the dies to allow a perfect positioning of the contact before crimping operation.

- Insertion guide for 100 mm² 922525
The insertion guide ease insertion of the contact into the barrel before crimping.
- FACOM Clip pliers 922520

Connector assembling

- § Contact seal lubricating (to ease insertion in the insert)
- § Set up sealing O-ring on the contact
- § Insert the contact and the seal in the front insert
- § Set up rear insert
- § Set up clips with the FACOM pliers
- § Heat shrink sleeve necked with the heater generator



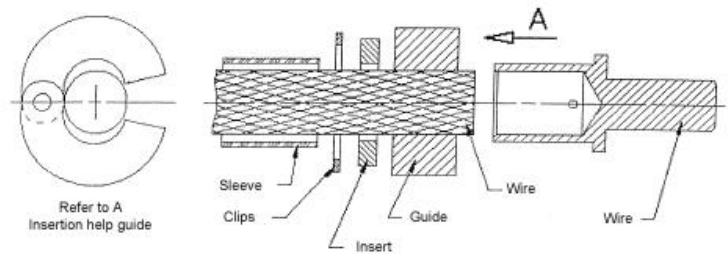
Installation instruction

- **Wire preparation**
- Before crimping, it is a must to place over the wire :
- The DR25 ¾ sleeve (insulation heat shrink sleeve)
- The clip for the contact retention
- The rear insert

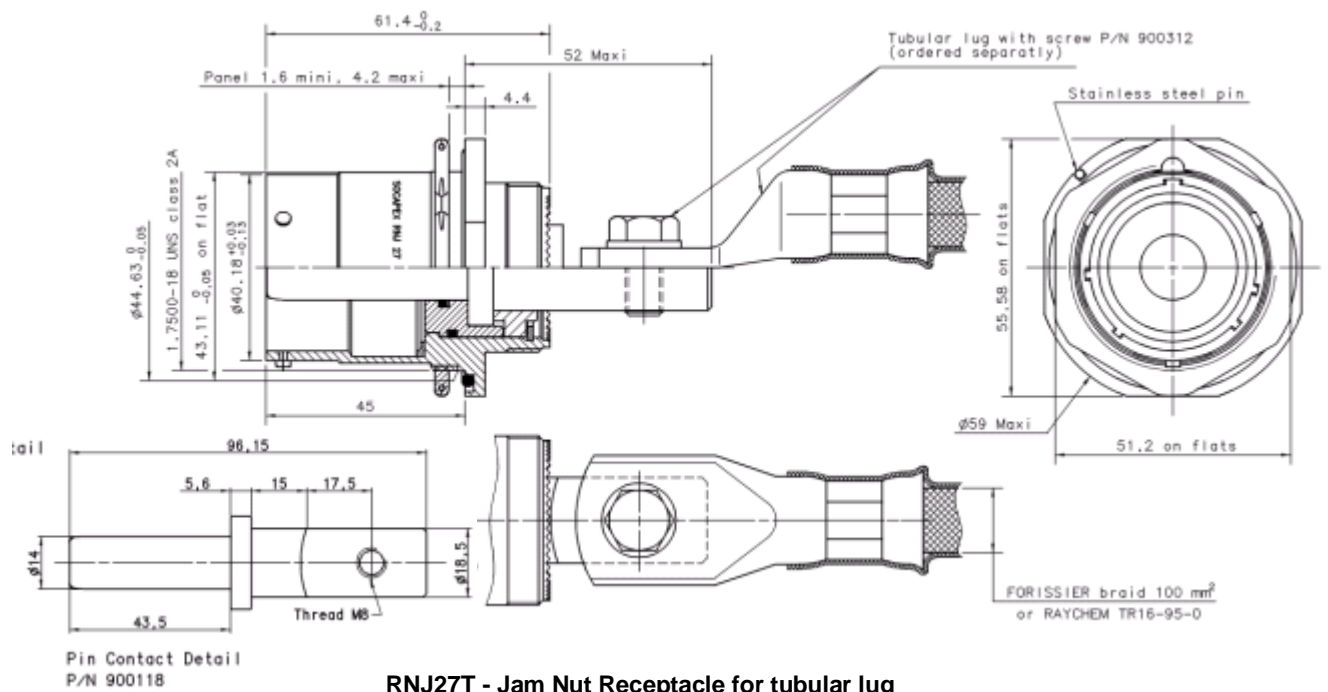
Crimping process

Use the insertion help guide to allow easily installing the wire in the barrel.

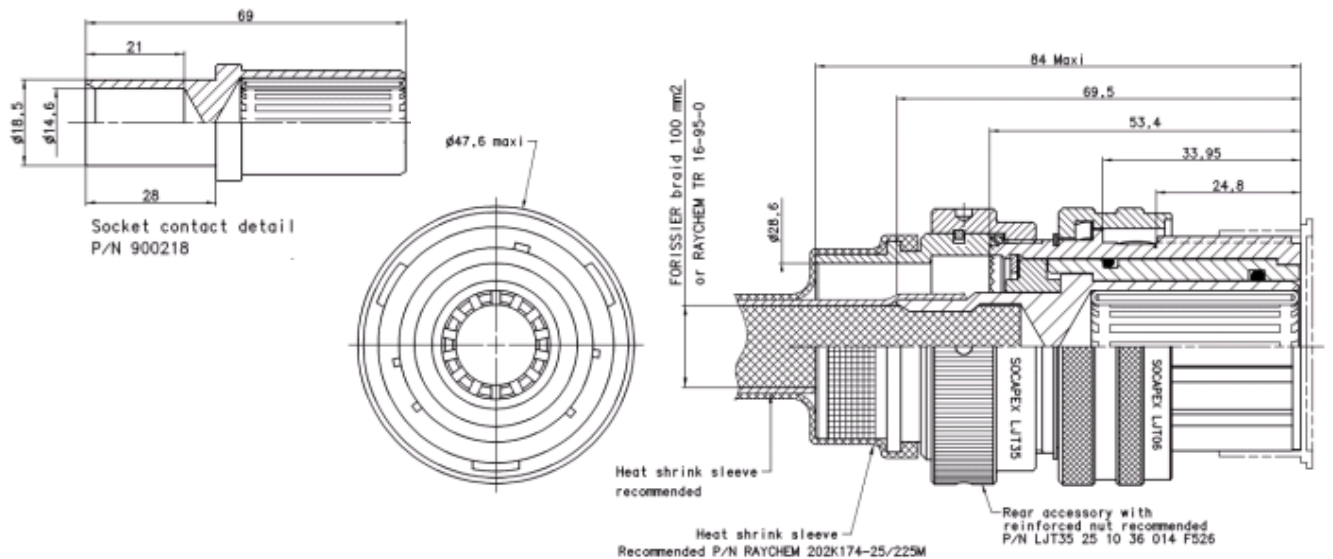
See drawing enclosed.



- § Insert the wire until it appears in the inspection hole
 - § Introduce the contact between the dies
 - § Handle pliers until the hearing and sensitive click
 - § Piston returns by rotating the free handle and closure.
- See pliers picture enclosed.



RNJ27T - Jam Nut Receptacle for tubular lug

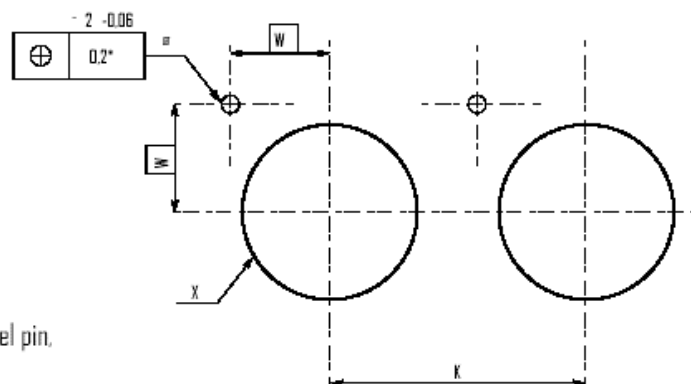


LJT06RT - Free Plug

26T - Floating Plug (in progress)

Panel drilling and recommended nut torque values

	Shell size	K min Mm (in)	W Mm (in)	Ø X (+/- 0.1) Mm (in)	Nut torque values N.m
Receptacle	25	54.20 (2.134)	20.24 (0.797)	44.68 (1.759)	13.6/14.7



* Hole to be fitted with a stainless steel pin, which must be inserted by force.
A stainless steel pin is supplied with connectors.

LJT 25-P1 (1 X 500A)

Connector part number :

Series	LJT	06	RT	25	P1	S	N	O14	-
(LJT to be replaced by "RNJ" for jam nut receptacle)									
Shell type									
06 - Free plug (delivered w ith the backshell)									
26 - Floating Plug (for rack and panel application), <i>In progress</i>									
27 - Jam nut receptacle (RNJ27...)									
Class									
RT - Environmental (for 06 plug)									
T - Environmental (for RNJ26 & RNJ27)									
Shell size									
25									
Contact arrangements									
P1 - Single way 500 A contact									
Contact type									
P - Pin contact for receptacle only									
S - Socket contact for plug only									
Polarization									
N - Normal or A only									
Shell finish									
014 - Olive drab cadmium									
023 - Electroless nickel plated									
Contacts :									
Blank : Connector supplied w ith contact (Socket contact for crimping, Pin contact for tubular lug)									
LC - Connector supplied w ithout contact.									

Backshell part-number :

The deviation F526 means that the nut is reinforced due to the rigidity of the power cable. Standard M85049 rear accessories suitable for Mi-DTL-38999 Series I connectors are not compatible with LJT 25-P1 power connectors.

LJT 35 25 10 28 014 F526 (Backshell with internal exit diameter : 22,2mm Min)

LJT 35 25 10 36 014 F526 (Backshell with internal exit diameter : 28,6mm Min)

For electroless nickel finish, please replace 014 by 023 in the part number.

Band (Amphenol ref) : 072952

For installation procedure, please refer to « Band Backshell HE308-35 » datasheet (referenced E118)

Contact part number :

Part numbers	Designation	Acceptable wire section
900218	500 A crimp socket contact	100 mm ²
900118	500 A Pin contact for terminal spade tag	100 mm ²
900119	500 A crimp pin contact	100 mm ²

Tubular lug delivered with screw: P/N 900312