



ENABLING THE ELECTRONICS REVOLUTION

L-40969-029

TIPS FOR CONNECTORS POPULATED WITH OCTONET
CONTACTS

Component selection

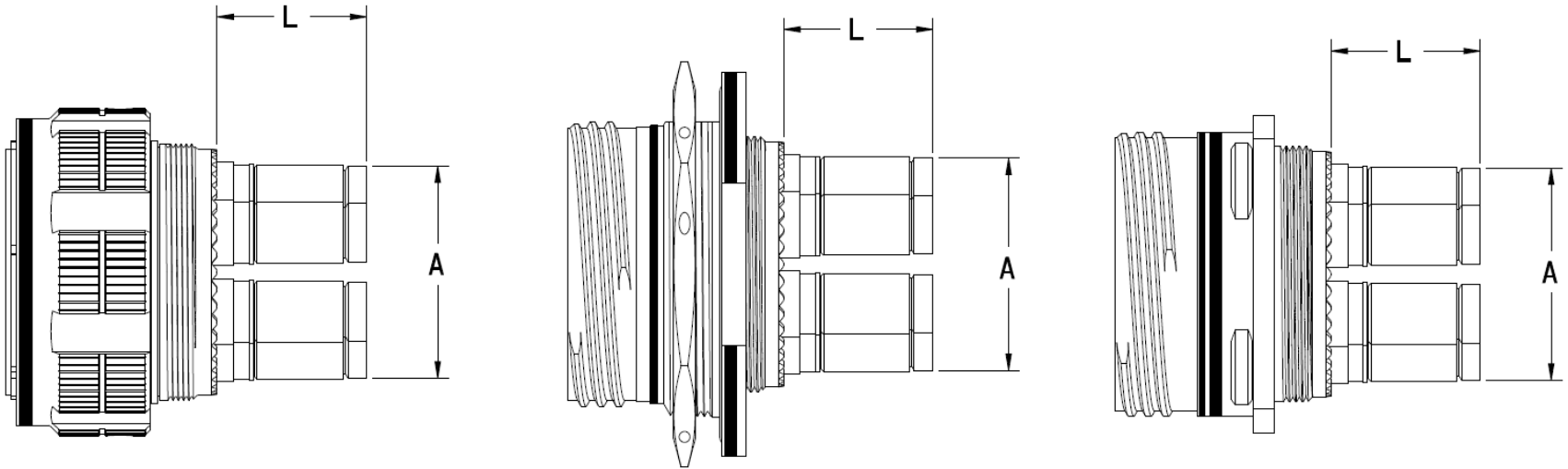
Termination instructions are included with all contact assemblies and can be downloaded from:

<https://www.amphenol-aerospace.com/Resources/TerminationInstructions>

Once the Octonet contact is terminated by following the provided contact termination instructions, the correct Backshell/extender must be selected.

Connector being used will dictate the proper back shell required. Octonets have a larger stick-out from the connector than other contact designs. The proper clearance from contacts to Backshell will ensure there is no damage to the cable or contacts. See Figure 1 for Backshell selection.

DIMENSIONS IMPACTING BACKSHELL SELECTION



SHELL SIZE	A DIA MIN	L MIN
9	.355	.840
17	.734	.840
19	.869	.840
21	.869	.840
23	1.088	.840
25	1.234	.840

FIGURE 1

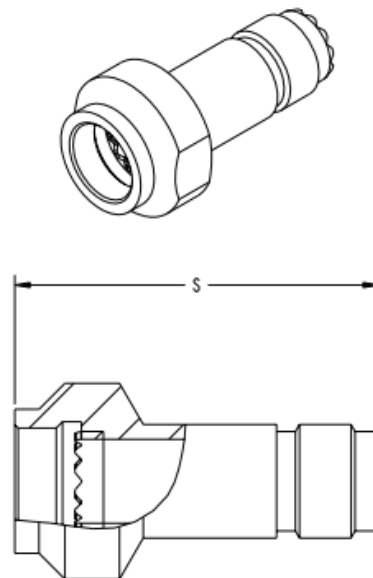
BACKSHELL EXTENDER

Due to the protusion of the Octonet Contacts through the rear of the grommet, a Backshell Extender must be used. The Extender is compatible with any Mil-Spec Backshell. Consult the factory for more information.

Part Number	Shell Size
FX-646409-01 ()	9
FX-646409-02 ()	11
FX-646409-03 ()	13
FX-646409-04 ()	15
FX-646409-05 ()	17
FX-646409-06 ()	19
FX-646409-07 ()	21
FX-646409-08 ()	23
FX-646409-09 ()	25

FINISH TABLE	
Prefix	Description
F2	Black Zinc Nickel
F4	Green Zinc Nickel
F7	Durmalon
F9	Thick OD Cadmium plate, Nickle Base
FH	Thick Electroless Nickel
FJ	Black Electroless Nickel

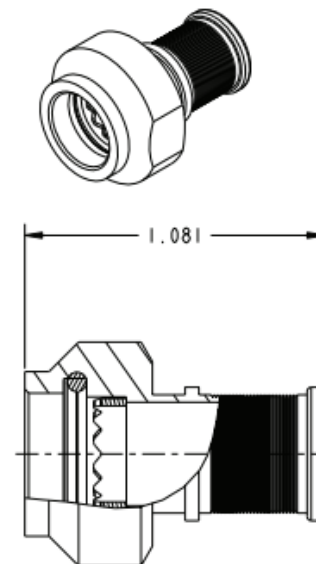
LENGTH TABLE	
Prefix	S ±.060
3	1.500
4	2.000
5	2.500
6	3.000
7	3.500
8	4.000
9	4.500



BANDING BACKSHELL

Part Number	Shell Size
FX-646409-500 ()	07
FX-646409-510 ()	09
FX-646409-520 ()	11
FX-646409-530 ()	13
FX-646409-540 ()	15
FX-646409-550 ()	17
FX-646409-560 ()	19
FX-646409-570 ()	21
FX-646409-580 ()	23
FX-646409-590 ()	25

FINISH TABLE	
Prefix	Description
F2	Black Zinc Nickel
F4	Green Zinc Nickel
F7	Durmalon
F9	Thick OD Cadmium plate, Nickle Base
FH	Thick Electroless Nickel
FJ	Black Electroless Nickel



Steps for proper installation

When installing the Octonet contacts:

- use isopropyl alcohol for lubrication. Apply at the indicated areas in Figure 2.
- ensure the contact Key is oriented correctly to the connector insert keyway.

If contact Key is at 12 o'clock, the insert keyway must be at 12 o'clock also. Note, when the connector main key(way) is at 12 o'clock, the insert keyway is also at 12 o'clock.

(see Figure 3)

- following the arrow shown in figure 3, ensure the integrated removal tool is in the fully back position prior to installation.
- Due to the resistance created by the integrated Octonet removal tool and friction from rear grommet, extra caution must be taken when pushing the contact into the contact cavity, as the contact can damage the insert if pushed too hard when improperly aligned. See Figure 4

Tip for banding backshell

For a 9-5 connector: If a banding backshell (FX-646409-510) or backshell extender (FX-646409-01X) is being used, assemble in the following order:

1. terminate contact
2. slide backshell without serrated ring past the contact
3. add ring
4. insert contact, slide backshell up to connector and thread on

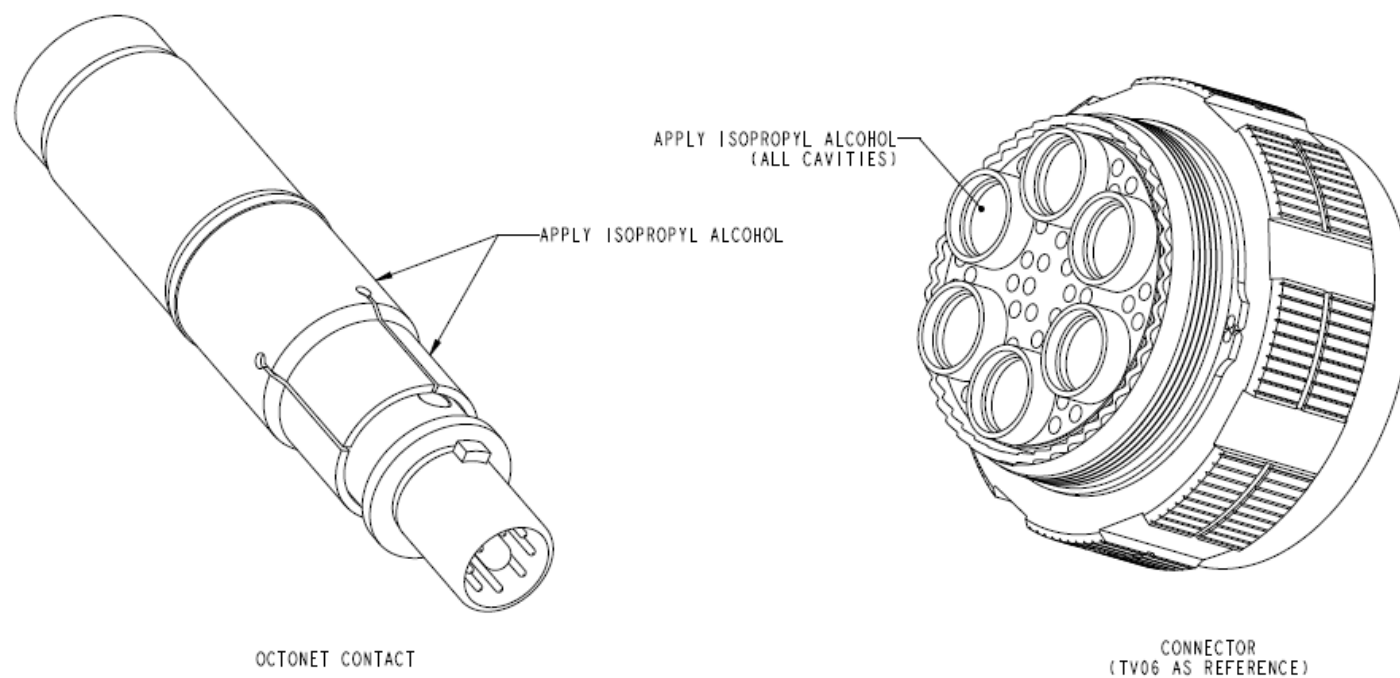


FIGURE 2

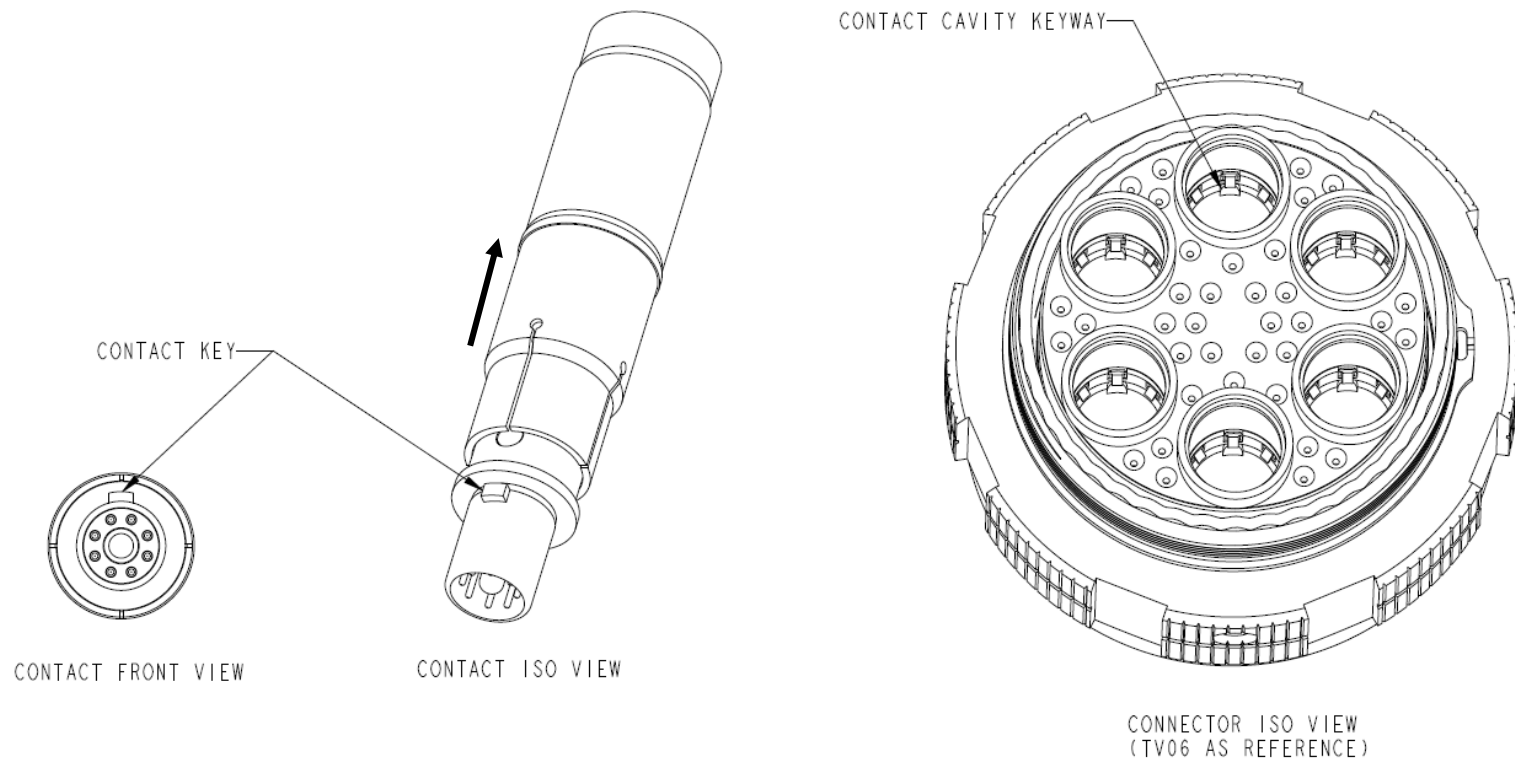


FIGURE 3

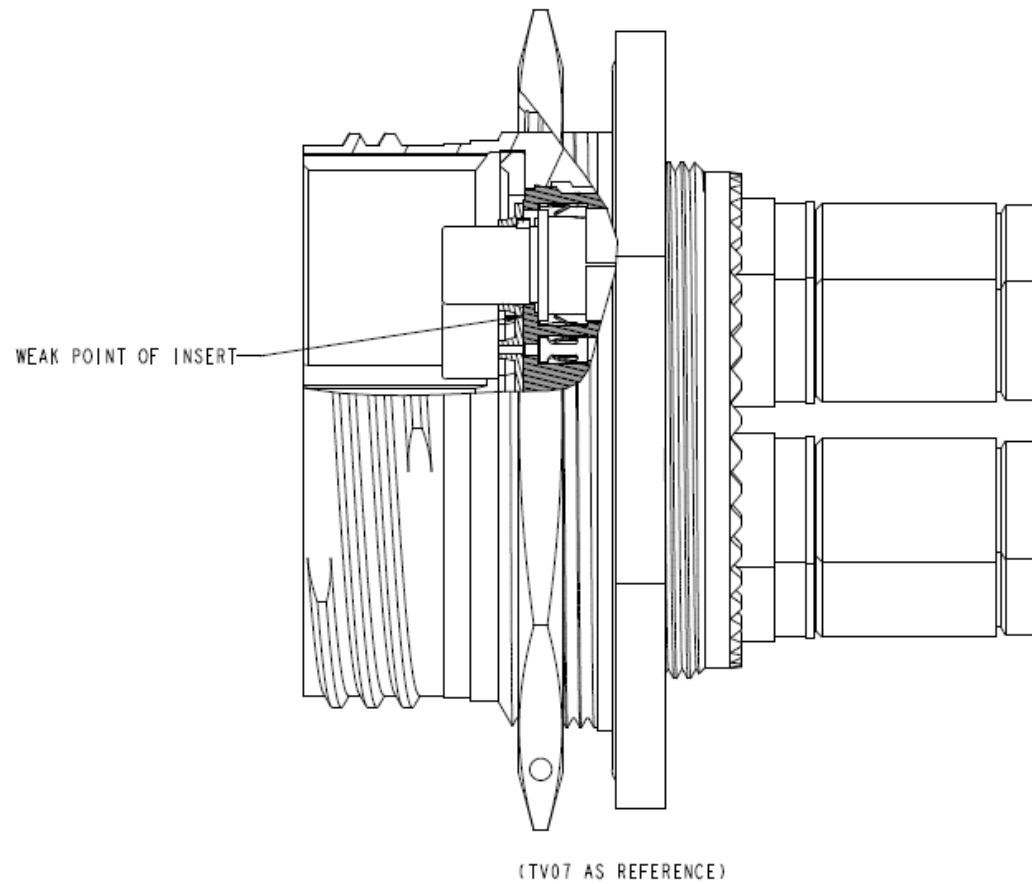


FIGURE 4

POST-INSTALLATION

- Ensure that the cables exiting the backshell are not combined into a tight bundle too close to the rear of the contacts, this would promote “flowering” of the contacts.
- Ensure that the cables exiting the backshell are not under excessive torsion, due to the stiffness of the cables this can cause damage over time to the insert keyways.
- If a 90° backshell is being used, it is recommended that the connector is mated prior to tightening the backshell onto the connector.