21-033384-451 (PIN)
21-033385-451 (SOCKET)

Contact, Pin and Socket, Quadrax,
Type D38999 Series I & III Special, Size 8

See table on reverse side for quadrax cable recommended and crimping tool information.

A 1. Cut cable for assembly of quadrax contacts. Note, contact assemblies of opposite gender should be assembled at cable junction adjacent ends, to have inner wire conductors in correct orientation during contact assembly.

B 1. Rubber end first, slide sealing boot back over cable jacket (not illustrated).
2. Strip cable jacket to expose cable outer braid as illustrated. Ends must be cut cleanly and at right angles to the axial plane of the cable. Cable must not be deformed while making cuts.

C 1. Slide crimp bushing, large diameter end first, over cable braid & jacket, until cable jacket front edge is even with bushing front edge.

D 1. Flair cable outer braid back over crimp bushing to expose inner wire pairs with braid shields. Trim away excess outer braid to crimp bushing shoulder.
2. Trim away inner wire pair braid shields to front edge of outer cable braid to expose inner wires as shown.

E 1. Carefully separate/re-arrange the white & blue wires of wire pair B to approximate diagonal positions as shown. Any bending of wires should be done at the base of the wire, as close to crimp ferrule as possible. Socket termination shown, pin orientation is mirrored horizontally.
2. Carefully re-route & cross over between the wires of pair B, either the white or black wire of wire pair A to approximate diagonal positions as shown. Any re-routing or crossing over of wires should be done at the base of the wire, as close to crimp ferrule as possible.

F 1. Assemble 4 inner wires through the 4 holes of the wire organizer (opened end of wire organizer must face crimp bushing). The larger diameter inner wires must be inserted through the larger organizer holes & smaller wires through the smaller holes. The inner wire color pattern must be maintained by the inner wires exiting the organizer holes.
2. Continue to insert the inner wires through the organizer holes until the organizer firmly butts against the crimp bushing & outer braid.

G 1. Make certain the inner wire color pattern was maintained by wires exiting the organizer holes & all wires are firmly & completely pulled through the holes.
2. Cut all inner wires to length shown. All wires must be cut to equal length.

H 1. Strip inner wires to expose center conductors as illustrated. All wires must be stripped to equal length.

I 1. Carefully splay inner wires perpendicular to the axis of the cable, leaving one wire extended parallel with the axis of the cable.
2. Assemble inner contact over wire center conductor of the extended wire until fully seated against inner wire insulation. Observe center conductor through the contact's wire inspection hole to make certain center conductor is properly positioned.
3. Crimp inner contact to center conductor using crimp tools listed in table. Splay crimped contact and wire perpendicular to the axis of of the cable, then extend another wire parrallel to the axis of the cable. Repeat steps i2 & i3 until all inner contacts are crimped and splayed.

J 1. Position rear insulator against wire organizer as illustrated. Make certain insulator slots are aligned with splayed inner contact wires. One-by-one, position wired inner contacts inside the insulator slots as shown. The inner contact's retention shoulder must be positioned in front of the insulator's front surface as illustrated.

Continued on back

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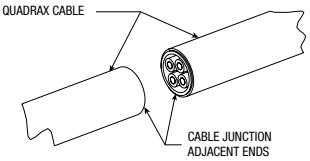
A



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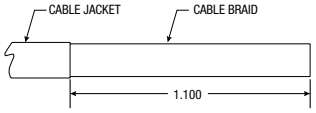

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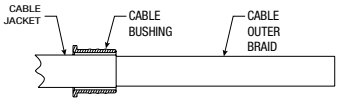

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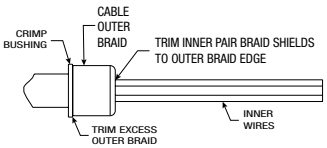

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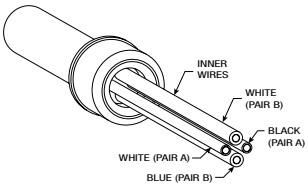
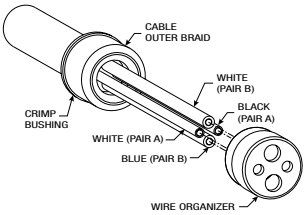


WIRE COLOR ORIENTATION SHOWN IS FOR SOCKET CONTACT, PAIR A IS MIRRORED FOR PIN CONTACT

F



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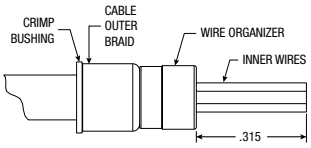

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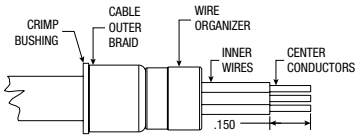
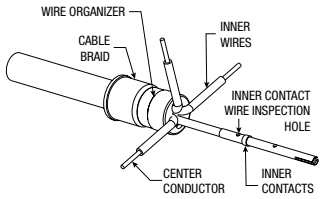


I



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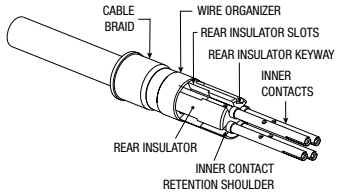

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* Position of rear insulator keyway (if present) is immaterial

K 1. With inner contacts positioned inside rear insulator slots, assemble front insulator over the inner contacts as shown. The front insulator must butt the rear insulator and inner contact retention shoulders must enter front insulator bores.

2. Observe the front insulator keyway. When viewing the socket inner contact assembly from the mating end, the inner socket contact with the insulator keyway adjacent & clockwise will be positioned at the S1 position shown in the socket contact mating face view. See contact mating face view.

3. For this assembly it is reccommended the front insulator keyway be positioned between the white (pair B) and black (pair A) inner contacts/wires.

L 1. Align front insulator keyway with the outer contact's rivet key. Slide the inner contact assembly inside the outer contact body until fully seated. Observe the mating end of the assembly to make certain one pair of inner contacts are in vertical alignment with the outer contact's orientation key.

2. Crimp outer contact body in the area indicated using crimp tools listed in table.

L-2119-GV **FSCM77820**
February 2020

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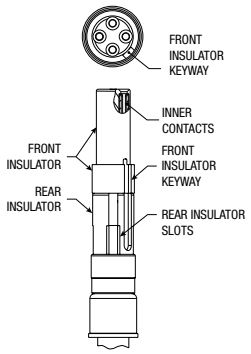
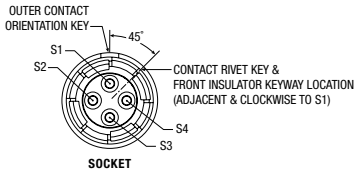
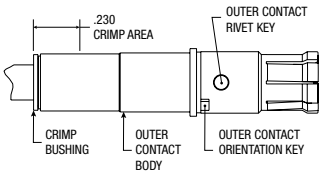
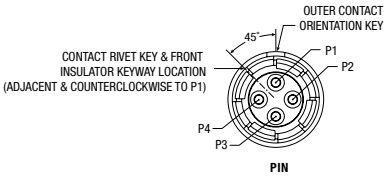
K





L





MATING FACE VIEW
(SUGGESTED INNER CONTACT NUMBERING)

Amphenol Part Number	Description	Quadrax Cable Recommended	Inner Crimp Tools		Outer Crimp Tools	
			Tool (Setting)	Positioner	Tool	Die Set (Location)
21-033384-451	Quadrax Pin (100 Ohm)	GORE RCN9200 (100 Ohm)	M22520/2-01 (5)	Daniels K709 (M22520/2-37)	M22520/5-01	Daniels Y1999 (A) or M22520/5-45 (A)
21-033385-451	Quadrax Socket (100 Ohm)					

CONTACT INSERTION INTO CONNECTOR

Contacts are inserted by hand. Insert the contact assembly into the proper rear grommet hole. Contact must be aligned with hole and not inserted at an angle. The contact's orientation key must be in vertical alignment with the connector's main key or keyway (holding contact key and connector key/keyway at "12 o'clock" orientation position is recommended). Push forward until contact is felt to snap into position within the insert. Contact may need to be slightly rotated to properly align contact orientation key with connector insert keyway. Gently tug on cable to assure retention. Slide sealing boot into position inside the connector grommet and over the crimped end of the contact

CONTACT REMOVAL FROM CONNECTOR

Remove sealing boot from the connector grommet. Position removal tool part number mil-i-81969/14-12, daniels drk-264-8, around cable and slide tool toward connector until tool tips enter rear grommet and comes to a positive stop on the contact. Grip cable and simultaneously remove tool, contact and cable.

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