PIC Wire & Cable **Termination Instructions** T-110865 03/30/15 A Division of the Angelus Corporation Approved: Date: MCT Ph (262)-246-0500 Fax (262) 246-0450 www.picwire.com Rev. 0 PO Box 330 Sussex, WI 53089 Distribution: USER Uncontrolled if Printed

Termination Instructions for PIC 110865 SMZ 90° Plug connector

for PIC V76261, V73263, V75268 Coax Cable

Recommended Hand Tools:	X-acto Knife, Sharp Razor, Wire Cutters
Required Cable Tools:	M22520 / 5- 01 Hex Crimp Tool
	M22520/ 5-41, cav. B (.178" hex)
	Soldering equipment, Heat Gun

Install ATUM 8/2 dual wall shrink tube x 1.5" onto the cable. Install the crimp ferrule onto cable, small step first (Fig. 1). Make Cut A @ .140" from cable end, through the jacket, wire braids, and foil (Fig. 1). Do not cut into dielectric. Remove jacket, wire braids, and foil.

- Make Cut B @ .480" from the cable end, through the jacket only (Fig. 1). Do Not nick or cut into the wire braids. Remove the jacket.
- Make Cut C @ .070" from the cable end, through the dielectric (Fig 1). Do Not nick or cut into the center conductor. Remove the dielectric, verify center conductor integrity.
- Tin the center conductor (Fig. 2). For V76261, slightly flare wire braids away from the foil, leaving foil intact (Fig. 2). For V75268, flare all braids out. For V73263, unwrap the helical shield layer all the way down to the bottom (of Cut B) without twisting it. The helical strip can be positioned straight out along the inside of the flared braids. Dielectric must be exposed for the full length of the strip length (to Cut B). For all cable types, clean exposed dielectric with clean, dry compressed air, as needed.
- Inspect and clean connector dielectric as needed, prior to installing the connector body onto the cable. Install the connector body over the dielectric (and foil - V76261), and and under the flared braids, until the tinned center conductor is located within the slot in the connector center contact (Fig. 3a). The center conductor should not extend past the edge of center contact (Fig. 3a). Solder the center conductor to the center contact (Fig. 3b). The solder must be well bonded to the contact and the conductor, without excess solder on the sides of the contact (Fig. 3b). Inspect the internal cavity of the connector for debris or flux, clean exposed dielectric as needed, using Isopropanol and compressed air.
- Smooth all braids down over the rear of the connector body, covering the knurl. Trim off any excess braids past the knurled rear body, trim even with the cube body (Fig. 4).
- Pull the crimp ferrule up over the braids. Secure the body while positioning the ferrule, to avoid strain on the center conductor. Trim any stray braids at the shoulder prior to seating the ferrule against the connector body.
- Crimp the ferrule with the M22520 / 5 -01 hex crimp tool, using the M22520/ 5-41 hex crimp die set, cavity B (.178" hex). Start crimp at the connector cube body (Fig. 5), do not crimp the end of ferrule with step (Fig. 5).
- Inspect and clean interior connector cavity as needed. Install the rear cap, start threads, apply small drop of Loctite 271 onto the threads, screw cap securely in place. Wipe off excess Loctite. Shrink the ATUM 8/2 dual wall shrink tube, starting at the cube body, over the ferrule, and onto the cable (Fig. 6).

Connector Length added to cable = +.155" nominal to end of cube body Connector Length added to cable = -.035" nominal to centerline of connector interface Dimensions in Inches (Not To Scale)

Figure 1 ferrule step .140 Cut A .480' Cut B Cut C .070"

Figure 2 tin center conductor

flair braids slightly





solder center contact

Figure 4

Lay braid flat. Trim even w/ cube body

Figure 5 crimp ferrule, start @ cube body

do not crimp end w/step

