# AJ Aquacon contact installation/how to order

# CONTACT INSTALLATION

#### Wire and Cable Preparation

1. Cut wire or cable to desired length. Strip insulation from end of wire in accordance with the following table. Hot wire stripping methods are recommended. Avoid nicking or cutting wire strands.

#### Wire Strip Length in Inches

Contact	Contact Size							
Туре	22M	22D	22	20	16	12		
Solder	1/8	-	1/8	5/32	5/32			
Crimp	1/8 - 5/32			7/32 – 1/4				

#### **Solder Contact Termination**

- 1. Clean conductors and pre-tin with a good grade 60/40 tin-lead solder to 1/16 inch.
- 2 Pre-tin contact solder well.
- 3. With connector in a suitable holding device, solder wells facing operator, and the cutaway portion of the wells up, insert pretinned conductor into contact well. Apply heat to closed side of wire well to make joint. Remove heat and allow joint to cool.
- 4. A resistance soldering unit of approximately 125 watts is recommended. If a soldering iron is used, do not exceed 20 watts for size 22M, 22D and 22 contacts; 80 watts for size 20; and 150 watts for size 16 and 12 contacts.
- 5. Wipe or brush excess flux from terminations.

#### **Crimp Contact Termination**

- 1. Select proper crimping tool and positioner from Application Tooling table on page 11.
- 2. Position wire in wire well. Wire must be visible in the inspection hole provided.
- 3. With the wire in place, insert the contact fully into the crimping tool. Squeeze the crimping tool handles to the full extent of their travel. The recommended crimping tools are the "full cycling" type and will not release until a complete crimp is made. Release pressure on handles and remove the completed crimped contact/wire assembly.

#### **Contact Insertion**

- 1. Select proper insertion tool from Application Tooling table on page 11.
- With contact/wire assembly properly positioned in the insertion tool, push forward, directly in line with the grommet hole, until the contact is felt to snap into place.
- 3. Remove insertion tool.

All unused contact positions must be filled with uncrimped contacts. In addition, sealing plugs (see Application Tooling table) should be inserted in all unused grommet holes.

# **Contact Removal**

- 1. Select proper removal tool from Application Tooling table.
- 2. Carefully insert removal tool until contact to be removed is released. AJ contacts are rear release, rear removable.
- 3. Remove contact.

# HOW TO ORDER AQUACON CONNECTORS

To more easily illustrate ordering procedure, part number AJ6R-20-41SA ( ) is shown as follows:

Α	J	6	R	-20	-41	S	А	(445)
1	2	3	4	5	6	7	8	9

#### See code below:

- 1. Type Designator
  - A designates Aquacon
- 2. Family Designator
  - J designates hard dielectric inserts
- 3. Shell Style
  - 0 square flange receptacle
  - 6 straight plug
  - 7 jam nut receptacle

# 4. Contact Type

- C non-removable solder terminations (plug only)
- R removable crimp termination
- H hermetic (glass seal) solder termination

# 5. Shell Size

Aquacon shell sizes available from 8 through 24. See insert availability, page 3.

## 6. Insert Arrangement

Refer to insert availability on page 3.

## 7. Contact Configuration

- P designates pin contacts
- S designates socket contacts

#### 8. Insert Rotation

Refer to alternate positions, page 2. No letter required for normal (no rotation) position.

#### 9. Special Variations

Consult Amphenol, Sidney, NY for options and special variations available.

- (168) designates rear accessory threads
- (445) designates hex coupling and rear accessory threads

#### How to Order Protection Caps

Part number 10-377664-20 is shown as follows:

10-377664	- 20		
1		2	

1. Protection cap style

10-377664-XX (Receptacle) 10-399623-XX (Plug)

2. Cap Size

Cap size is determined by shell size of connectors to be protected.

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