Water TI-001



# Installation Instructions 912-90 & 912-91 Flanged Coupling Adapter (FCA)

#### <u>STEP 1</u>

Inspect the shipment to ensure no damage has occurred during transit or storage and no hardware is missing.

## STEP 2

Clean approximately 12" of the outside surface of the end of the pipe. Remove any scale, dirt, or debris that could affect the gasket seal.

## STEP 3

Check the pipe diameters to ensure the correct FCA size is being installed.

#### NOTE:

- 1. The recommended gap between the pipe end and companion flange is ½" 1".
- 2. The maximum allowable pipe deflection =  $2^{\circ}$  with  $3^{\circ}$  of pipe engagement.
- 3. Pipe stiffeners are required when using this product on polyethylene (PE) pipe.

## STEP 4

Lubricate the pipe and gasket with a non-detergent soap solution. Ensure the lubricant does not freeze.

#### STEP 5

Place the follower flange, gasket, and adapter body (in that order) on the spigot end of the pipe.

## STEP 6

Bolt the adapter body to the companion flange. Alternate bolt holes. Torque nuts per job specifications.

#### STEP 7

Install the remaining hardware for mounting the follower flange to the adapter body.

- 1. For 912-90 models (Figure 1) install all-thread rods through the remaining holes on the adapter body/companion flange assembly. Leave enough all-thread to attach the follower flange.
- 2. For 912-91 models (Figure 2) install cross bolts through the remaining holes on the adapter body/companion flange assembly. The cross bolts should engage the adapter body bolt slots.

#### STEP 8

Slide the gasket against the adapter body, then slide the follower flange over the gasket and all-thread rods or cross bolts. Thread nuts onto ends.

#### STEP 9

Torque the nuts on the companion flange per job specifications. Then, torque the nuts on the follower flange to the recommended torque listed in Table 1.

FCA SIZE	<b>TORQUE VALUE*</b>
3" & 4"	70 ft-lbs
6" & 8"	80 ft-lbs
10" & 12"	90 ft-lbs

\*Use of a calibrated torque wrench is recommended

Table 1: Torque

#### **STEP 10**

Re-torque after fluid pressure is applied.

# Optional Anchor Studs Installation (Pipe cannot be moved after anchor studs are installed)

**NOTE:** Pipe must be inserted a minimum of 1" past the anchor stud boss.

#### STEP 1

Thread a standard ½" or 1" NPT pipe nipple (depending on anchor stud size) into the anchor stud boss.

## STEP 2

Using the pipe nipple as a drill guide, drill a 41/64" (for 5%" anchor studs) or 1-3/64" (for 1" anchor studs) diameter hole completely through the pipe wall.

#### STEP 3

Remove the pipe nipple, and using a suitable pipe thread sealant such as Teflon tape, pipe dope, or anaerobic thread locker, install the anchor stud.

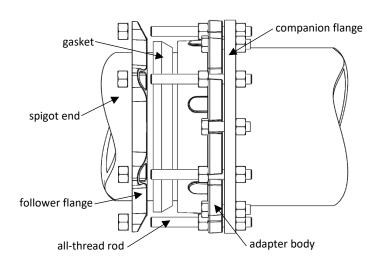
## STEP 4

Repeat procedures for each anchor stud.

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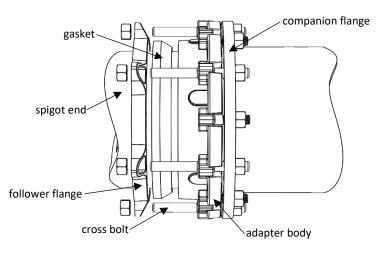


Figure 1: 912-90 FCA

Figure 2: 912-91 FCA



THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT. Anchor studs are required to prevent pipe movement. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, or death. Read the product installation instructions prior to installing this product.

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