



Installation Instructions 400 Series Couplings

Pipe stiffeners are required when using these products on polyethylene (P.E. pipe).

Step 1

Clean working area of pipe ends.

Step 2

Place coupling flanges on pipe ends.

Step 3

Clean gaskets and install with lubricant suitable for potable water systems. Beveled edge of gasket should face pipe ends.

Step 4

Center coupling sleeve over pipe ends while maintaining recommended gap below. Slide gaskets against sleeve followed by flanges.

Step 5

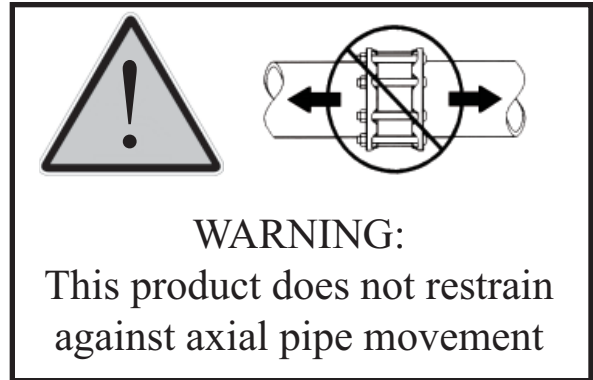
Install the bolts and hand-tighten the nuts. If carriage bolts are furnished, alternate direction of the bolts.

Step 6

Gradually tighten nuts to proper torque values listed below, alternating between opposite sides of the coupling and keeping all parts centered about pipe. Tighten both nuts if studs are used.

Step 7

Recheck torque after line pressurization.



Pipe forces due to internal pressure, thermal contraction, earth shifting, etc., can cause the pipe to pull out of the product and/or axial product movement unless the pipe and/or product is properly restrained from movement.

Suitable anchorage devices, such as anchor studs, harness rods, joint restrainers, thrust blocks, etc., must be installed prior to filling pipes or applying pressure to prevent pipe pull out. Restraint may also be required to prevent axial product movement.

This product must be installed in accordance with Smith-Blair, Inc. recommended procedures.

Recommended Gap Between Pipe Ends	
5" Sleeve	1/4" to 1/2" Gap
7" Sleeve	1/2" to 3/4" Gap
10" Sleeve	1/2" to 1 1/4" Gap

Recommended Bolt Torque	
7/16" Bolts	20 to 23 ft. lbs.
1/2" Bolts	30 to 35 ft. lbs.
5/8" Bolts	60 to 70 ft. lbs.
3/4" Bolts	85 to 95 ft. lbs.

Maximum Angular Deflection Between Pipes			
Pipe Size Inches	5" Sleeve Length	7" Sleeve Length	10" Sleeve Length
0.84 to 2.38	7°	7°	7°
2.50 to 13.50	4°	4 1/2°	4 1/2°
13.60 to 24.00	2 1/2°	4°	4 1/2°
24.10 to 36.00	1 1/2°	3 1/2°	4°
36.10 to 42.00	-	3°	3 1/2°
42.10 to 60.00	2 1/2°	3°	-
60.10 to 100.00	-	-	2 1/4°