# **PRODUCT MANUAL**

SERIES 2800 TAPPING SLEEVES



# AMERICAN FLOW CONTROL

THE RIGHT WAY

## **SERIES 2800 - FEATURES AND SPECIFICATIONS**



## Features

AMERICAN Flow Control offers ductile iron tapping sleeves in sizes 4 in. x 4 in. - 24 in. x 24 in.

AMERICAN Flow Control tapping sleeves are designed to provide a safe, efficient means of connecting branch piping to existing lines.

# **Tapping Sleeves**

The Series 2800 Compact Ductile Iron Tapping Sleeves are available in sizes 4 in. x 4 in. - 24 in. x 24 in. with mechanical joint ends for use on ductile iron pipe and 4 in. x 4 in. - 12 in. x 12 in. for use on Asbestos Cement (A-C) pipe.

The Series 2800 sleeves feature full length, heavy duty, ductile iron construction. Their compact construction makes them lighter and easier to handle. Since they are made of ductile iron, they have twice the strength of gray iron sleeves.

# **Specifications**

Tapping sleeves shall be of ductile iron construction meeting ASTM A536. Side flange seals shall be O-ring type of either round, oval or rectangular cross-sectional shape.

All sleeves to include the end joint accessories and split glands necessary to assemble sleeve to pipe.

No special tools are required other than a standard socket wrench.

Flange end pilot dimensions to be in compliance with MSS-SP-60.

# SERIES 2800 - INSTALLATION Installation



- 1. Clean the pipe surface thoroughly to permit a good seal under the end gaskets.
- 2. Measure pipe O.D. or circumference to be sure of proper gasket size. See tables below:

### Iron Pipe Size Ranges

Nominal Pipe Size	3/4" Thick Gasket				5/8" Thick Gasket			
	Diameter		Circumference		Diameter		Circumference	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
4"	4.74	4.86	14.88	15.25	4.86	5.06	15.25	15.88
6"	6.84	6.96	21.50	21.88	6.96	7.16	21.88	22.50
8"	8.99	9.11	28.25	28.62	9.11	9.37	28.62	29.44
10"	11.04	11.16	34.69	35.06	11.16	11.44	35.06	35.31
12"	13.14	13.26	41.31	41.69	13.26	13.53	41.69	42.50
14"	15.24	15.36	47.88	48.25	-	-	-	-
16"	17.34	17.46	54.50	54.88	17.46	17.87	54.88	56.12
18"	19.44	19.56	61.07	61.45	-	-	-	-
20"	21.54	21.66	67.67	68.05	-	-	-	-
24"	25.74	25.86	80.86	81.24	-	-	-	-

#### Asbestos-Cement (A-C) Pipe Size Ranges

Nominal	3/4" Thick Duck Tip Gasket				5/8" Thick Plain Gasket			
Pipe Size	Diameter		Circumference		Diameter		Circumference	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
4"	4.97	5.30	15.62	16.62	5.30	5.57	16.62	17.50
6"	7.05	7.29	22.12	22.94	7.29	7.60	22.94	23.88
8"	9.22	9.54	29.00	30.00	9.54	9.77	30.00	30.62
10"	11.40	11.90	35.81	37.38	11.90	12.10	37.38	38.06
12"	13.90	14.25	43.69	44.75	14.25	14.50	44.75	45.56

3. Bolt the sleeve together on the pipe, making sure the inside surfaces of the MJ bell line up at the split line. Tighten the side bolts evenly, working from the center to the ends. After the side bolts are tightened, trim the protruding ends of the side gaskets so they are flush or protruding up to 1/16 in. past the iron surface.

4. Rotate sleeve to desired position.

- 5. Insert correct end gaskets and check to make sure the beveled ends are lapped together evenly and fit inside the MJ bell. End gasket joint should be located away from the split line of the sleeve. No trimming of end gaskets should be necessary. Lubricate the socket, gasket and pipe O.D. with soapy water or an approved pipe lubricant meeting requirements of AWWA C111.
- 6. Bolt split glands together, position against gaskets and install bolts. Tighten the bolts alternately (opposite sides) until all are evenly tight. For best results, 90 ft-lbs of bolt torque is recommended.
- 7. AMERICAN recommends the use of AMERICAN Flow Control Series 2500 tapping valves. Please refer to Section 5A of the AMERICAN Valve and Hydrant Manual for tapping valve installation instructions. In cases where other tapping valve manufacturers are used, please contact that manufacturer for specific tapping valve installation and testing instructions. Applicable tapping sleeve dimensions should be in compliance with the Standard Practice as defined in MSS SP-60. AMERICAN will not be responsible for claims, errors or omissions in documentation provided by other manufacturers.
- 8. Place the gasket on the tapping valve and bolt the valve to the sleeve. After the valve is bolted securely in place, open the valve fully and observe that the resilient wedge is clear of the waterway. Close the valve completely.
- 9. Install proper blocking under the valve and behind the sleeve to carry the pipe thrust.
- 10. Prior to making the tap, test the tapping valve and sleeve as a complete unit by connecting the test pressure to the tap located on the back of the tapping sleeve. **Always test with water.** Test pressure must not exceed the rated working pressure (Series 2800-C: 250 psig and Series 2800-A: 200 psig) of the sleeve and tapping valve. This will point out any leaks or other problems if the sleeve has not been properly installed. Any leaks or other problems must be remedied before the pipe is drilled out. If the sleeve has no test plug, test the sleeve and valve assembly through the test plug in the valve bonnet with the wedge in the open position.

### **SERIES 2800 - INSTALLATION**



### WARNING: USE ONLY WATER TO TEST TAPPING SLEEVE AND TAPPING VALVE ASSEMBLY. UNDER NO CIRCUMSTANCES SHOULD AIR EVER BE USED TO CONDUCT THIS TEST. TESTING WITH AIR MAY RESULT IN SERIOUS INJURY OR DEATH.

- 11. Attach the tapping machine to the valve, making sure the machine is centered and square with the end of the valve to assure straight travel of the cutter through the valve. With the tapping machine attached and the cutter fully retracted, check to be sure the valve can be closed completely, then open the valve fully.
- 12. Final check before boring: Open the valve fully. Make sure the cutter does not damage the gate or seats of the valve (or touch any interior surface of the resilient wedge tapping valve). If any resistance is felt when hand feeding the cutter into position, stop and correct before making the tap.