

## Material Specification – 9

### FABRICATED CARBON STEEL AND STAINLESS STEEL TAPPING SLEEVES

**1. GENERAL**

Fabricated carbon steel and stainless steel tapping sleeves shall be designed and manufactured in accordance with AWWA C223 with the following additional requirements or exceptions.

**2. SERVICE**

The tapping sleeves shall be installed on the following types of pipe: CI, DI, AC, and PVC. The working pressure for these water pipes is 150 psi. Components shall be suitable for exposure to chloraminated water.

**3. SIZES**

This Specification covers tapping sleeves in 4-inch through 20-inch nominal diameters.

**4. END CONNECTIONS**

Carbon steel flanges shall be fabricated from steel plate; dimensions shall be in accordance with AWWA C207, Class D. Stainless steel flanges shall be fabricated from steel plate; dimensions shall be in accordance with AWWA C228, Class SD. Flanges shall be machined to a flat surface with a serrated finish in accordance with AWWA C207 or AWWA C228 as applicable. The machined flange face shall also be recessed for tapping valves in accordance with MSS SP-60. Hollow-back flanges and segmented flanges are not acceptable.

**5. GASKETS**

Gaskets shall be compounded from new materials and the shape of the cross-section of the gasket shall provide an adequate seal for the working pressure. Gaskets shall be shop glued to the groove provided in the body section.

**6. TESTING OUTLET**

A 3/4-inch NPT threaded outlet shall be attached to the outlet nozzle of each tapping sleeve assembly complete with a 3/4-inch square head, threaded pipe plug.

**7. COATINGS**

Ferrous surfaces, except machined or bearing surfaces, shall be prepared in accordance with SSPC SP10. These surfaces shall then be coated with liquid epoxy in two or more uniform coats or with fusion-bonded epoxy to a minimum DFT of 10-mils in accordance with AWWA C550. Machined flange faces shall be shop-coated with a rust-preventive compound; they shall not be painted or coated with the same coating as the body.

**8. QUALITY CONTROL**

The Manufacturer shall submit a written statement that the inspection and all specified tests have been completed and that results comply with the requirements of these Standards. Components in contact with potable water shall be certified to comply with NSF/ANSI 61, and a copy of the NSF/ANSI 61 certification shall be provided to Denver Water, if requested.

**9. APPROVED MANUFACTURERS AND MODELS**

<b>Manufacturers</b>	<b>Models</b>	<b>Size (Inch)</b>	<b>Outlet Size (Inch)</b>
<b>Fabricated Steel – DI Pipe</b>			
The Ford Meter Box Company	FTSC	4 to 20	3 to 12
JCM Industries	412	6 to 20	3 to 12
Romac Industries	FTS 420	6 to 20	3 to 12
Smith-Blair	622	4 to 20	4 to 12
<b>Stainless Steel – CI, DI, AC, and PVC Pipe</b>			
Cascade	Style CST	4 to 20	4 to 12
The Ford Meter Box Company	FTSS	4 to 20	3 to 12
JCM Industries	JCM 432	4 to 16	3 to 12
	JCM 462	4 to 20	3 to 12
PowerSeal	3490	4 to 20	3 to 12
Romac Industries	Style SST	4 to 20	3 to 12
	STS 420	6 to 20	3 to 20

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