

## **Typical Specification**

## JCM 412 Fabricated Tapping Sleeve – Shop Coat Primer, Alloy Hardware

Tapping Sleeves shall be the high strength type having a wide body, made of a minimum of ASTM 283 Grade C, ASTM 285 Grade C, ASTM A-36 Steel, or an equivalent, which conforms to and reinforces the pipe. The sleeves shall have as a minimum 7/8" wide recessed Buna-N gasket around the outlet, 3/4" corrosion resistant alloy bolts (per AWWA C-111, ANSI 21.11), a 3/4" forged steel test outlet and hydrostatic test pressure capability of 300 PSI in 12" and smaller outlet sizes. Flanged outlet shall be indexed per MSS-SP60. Tapping Sleeve shall be furnished with corrosion resistant shop coat paint primer

For outlet sizes 14" and larger, the gasket groove must be consistently positioned about throat of tapping waterway. Inside diameter of the gasket groove must be set back a minimum of 1" from the waterway to allow dispersal of forces generated by gasket compression. Gasket grooves machined in a circle and formed to an elliptical shape will not be an accepted equal.

Nominal pipe sizes 36" and larger shall be of the heavy duty type. Tapping Sleeves shall be JCM 412 or an approved equivalent.

JCM 400 Series Tapping Sleeves meet MSS-SP124 and ANSI/AWWA Standard C-223 as applicable.

JCM 400 Series Tapping Sleeves are ANSI/NSF Standard 61 Certified.



JCM 412 Tapping Sleeve Image reflects 6" x 6"

This typical specification, provided by JCM Industries, is a proposed guideline for use by specifying agencies to ensure significant design and material features of this product are included within the agencies' individual specifications.





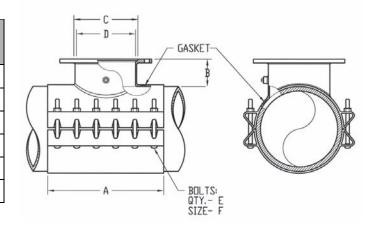
## **Material Specifications**

## JCM 412 Fabricated Tapping Sleeve

Service

- Body: ASTM 283 Grade C, ASTM 285 Grade C, ASTM A-36 Steel or an equivalent.
- Flange: AWWA C207 Class D, ANSI 150 lb. Drilling, recessed for tapping valve MSS-SP60. Optional flanges available upon request.
- Gasket: Nitrile Butadiene Rubber (NBR, Buna-N) per ASTM D2000. Molded virgin rubber with a pressure activated hydro mechanical design. Gasket is bonded into a cavity for internal and external retention. Gasket temperature range -40°F to 212°F (-40°C 100°C) Gasket suitable for water, salt solutions, mild acids, bases, and sewage.
  - Bolts: Corrosion resistant, high strength low alloy (AWWA C-111, ANSI A21.11). Optional stainless steel, 18-8 Type 304.
- Finish: Heavy coat of corrosion resistant shop coat primer. Optional epoxy coating, fusion applied per ANSI/AWWA C-213.
- Rating: 4" to 12" Outlets: 175 PSI. Higher service rating available for specific applications and sizes.

| Flange<br>Size* | A  | В     | С       | D      | E  | F   |
|-----------------|----|-------|---------|--------|----|-----|
| 3               | 12 | 5     | 4-1/32  | 3-1/2  | 6  | 3/4 |
| 4               | 12 | 5     | 5-1/32  | 4-1/2  | 6  | 3/4 |
| 6               | 12 | 5     | 7-1/32  | *6-1/2 | 6  | 3/4 |
| 8               | 16 | 5-1/8 | 9-1/32  | 8-1/8  | 8  | 3/4 |
| 10              | 20 | 5-1/2 | 11-1/16 | 10-1/4 | 10 | 3/4 |
| 12              | 24 | 5-3/4 | 13-1/16 | 12-1/4 | 12 | 3/4 |



\*On nominal pipe size 7.45 and smaller dimension D is 6-1/8"

