

JCM 422 Tapping Sleeves for PVC and Steel Pipe Sizes

Built-in benefits make JCM 422 Tapping Sleeves the ideal selection for tapping and branching IPS sized PVC, Steel, High Density Polyethylene Pipe and C-900 PVC. These sleeves are designed to reinforce the pipe and assure simple, safe installation - even under the most adverse field conditions. The extra wide reinforcement and exact fit of these sleeves provide reinforcement which strengthens the PVC pipe and prevents pipe stress at the branch.

Built-in Corrosion Resistance

JCM 422 Tapping Sleeves are furnished standard Fusion Epoxy Coated with Hot Dipped Galvanized Bolts.

Heavy Gasket Best for PVC Pipe

JCM 422 Tapping Sleeves utilize a broad, heavy gasket with hydro-mechanical lip to assure a positive seal on PVC pipe with its normal expansion-contraction characteristics.

Extra Wide for Support and Stability

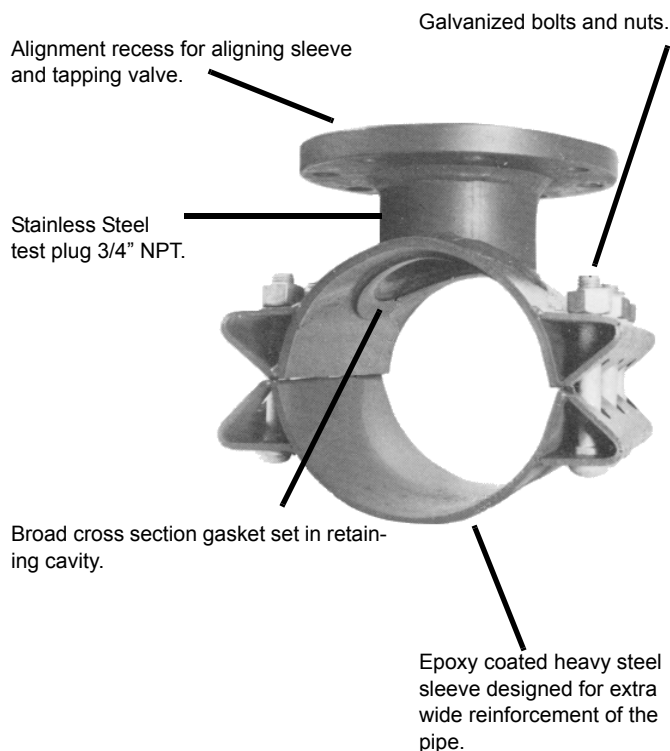
JCM Sleeves are designed extra wide for reinforcement to the main, to spread the load over a wider area and to provide stability during the tapping process.

Stronger - yet lighter than Cast Sleeves

Extra strength provides an extra margin of safety against damage to the sleeve in handling and installation, or due to concentrated stress. Reduced weight speeds installation and reduces the load placed on the pipe.

Ease Of Assembly Assures Proper Installation

Simplicity of design permits JCM Tapping Sleeves to be installed with minimum of crew, equipment, time and experience.



MATERIAL SPECIFICATIONS - JCM 422 Tapping Sleeve

BODY: ASTM 283 Grade C or ASTM A-36 Steel

BOLTS: High strength steel, hot dipped galvanized. Optional Stainless Steel 18-8 Type 304.

FLANGE: AWWA C207 Class D, ANSI 150lb. Drilling, recessed for tapping valve MSS-SP60.

GASKET: Buna-N Blend compounded for use with water, salt solutions, mild acids and bases.

FINISH: Fusion Epoxy Coated (AWWA C213). Service Rating - 3" to 12" outlets: 175 PSI.

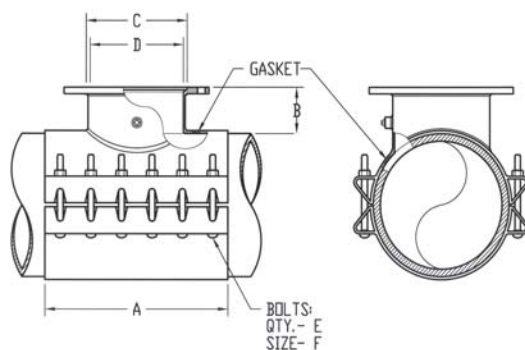
422 TAPPING SLEEVE DIMENSIONS

FLANGE SIZE	A	B	C	D	E	F
3	9*	5	4-1/32	3-1/2	6	5/8
4	9*	5	5-1/32	4	6	5/8
6	12	5	7-1/32	6-1/8	8	5/8
8	15	5-1/8	9-1/32	8-1/8	10	5/8
10	21	5-1/2	11-1/16	10-1/4	14	5/8
12	24	5-3/4	13-1/16	12-1/4	16	5/8

NOTE: 422 Tapping Sleeves require that a standard 1/2" undersize cutter be used.

*10" & 12" Nominal pipe sizes - dimension A is 12".

For All Stainless Steel, see JCM 432 and 452 All Stainless Steel Tapping Sleeve.



JCM 422 Tapping Sleeves for PVC Pipe and Steel Pipe

TYPE AND CLASS OF PIPE	NOM. PIPE SIZE (IN.)	O.D. RANGE (IN.)	CATALOG NUMBER	ADD OUTLET SIZE	APPR. WT. EACH (LBS.)
PVC PIPE IPS SIZED SDR 26, 21 SCH. 40 CLASS 200, CLASS 160 STEEL PIPE IPS SIZES, SCHEDULE PIPE	3	3.50	422-0350	x 3	18
	4	4.50	422-0450	x 3 x 4	29 31
	5	5.56	422-0556	x 3 x 4	32 33
	6	6.63	422-0663	x 3 x 4 x 6	33 35 44
	8	8.63	422-0863	x 3 x 4 x 6 x 8	36 38 49 64
	10	10.75	422-1075	x 3 x 4 x 6 x 8 x10	90 92 96 125 168
	12	12.75	422-1275	x 3 x 4 x 6 x 8 x10 x 12	98 100 104 140 176 216
	3	3.96	422-0396	x 3	20
	4	4.80	422-0480	x 3 x 4	33 35
	6	6.90	422-0690	x 3 x 4 x 6	38 40 60
C-900 PVC ONLY AWWA C-900 ALL CLASSES	8	9.05	422-0905	x 3 x 4 x 6 x 8	43 45 56 71
	10	11.10	422-1110	x 3 x 4 x 6 x 8 x10	90 92 96 125 168
	12	13.20	422-1320	x 3 x 4 x 6 x 8 x10 x 12	98 100 104 140 176 216

422 Tapping Sleeves are furnished with test plugs unless otherwise specified.

422 Tapping Sleeves are furnished standard Fusion Epoxy Coated with Hot Dip Galvanized Low Alloy Bolts.

422 Tapping Sleeves require that a 1/2" undersized cutter be used.

How To Order - JCM 422 Tapping Sleeves

1. Determine O.D. of pipe.

2. Select proper Sleeve O.D. range.

3. Specify catalog number and outlet size. For 422 Epoxy is standard. Add (SS) for Stainless Bolts.

EXAMPLE:

For PVC pipe with 08.63 O.D. with 6" outlet, order: 422-0863 x 6. For stainless steel bolts, add (SS).



JCM 422 Fabricated Tapping Sleeve for PVC and Steel Pipe Typical Specifications

JCM 422 Fabricated Tapping Sleeve for PVC and Steel Pipe

Tapping sleeves for 4" through 12" PVC and steel pipe shall be the high strength type having a wide body, made of a minimum of 283 Grade C Steel, which conforms to and reinforces the pipe. The sleeve shall be sized to fit the exact dimension of the pipe and have 5/8" hot dip galvanized bolts on 3" centers. Optional stainless steel bolts (18-8 Type 304) are available. The sleeve shall be fusion epoxy coated and furnish with a 3/4" stainless steel (type 304) plug in the test outlet. Fusion applied epoxy coating, minimum 12 mils thickness, per AWWA C-213. The sleeves shall have a minimum 7/8" wide recessed Buna-N gasket around the outlet. Flanged outlets shall be indexed per MSS-SP60 to accept a tapping valve. Tapping Sleeves shall be JCM 422 or approved equal.

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



JCM 422 Fabricated Tapping Sleeve for PVC and Steel Pipe Material Specifications

JCM 422 Fabricated Tapping Sleeve for PVC and Steel Pipe

BODY:	ASTM 283 Grade C or ASTM A-36 Steel
BOLTS:	High strength steel, hot dipped galvanized. Optional stainless steel 18-8 Type 304.
FLANGE:	AWWA C207 Class D, ANSI 150 lb. Drilling, recessed for tapping valve MSS-SP60.
GASKET:	Buna-N Blend compounded for use with water, salt solutions, mild acids, bases and sewage.
FINISH:	Fusion applied epoxy coating, minimum 12 mils thickness per AWWA C-213.
SERVICE RATING:	4" to 12" Outlets: 175 PSI. Higher service rating available for specific applications and sizes.



JCM 422 Tapping Sleeve Installation Instructions

- * Thoroughly clean pipe surface.
- * Check the size and range of the tapping sleeve to verify correct size product.
- * Check surface where gasket will seat to make certain pipe is free of flaws, gouges and extreme irregularities.
- * Lubricate pipe and face of gasket with soap-water or gasket lubricating solution.
Do not use grease or pipe lubricant.
- * Position outlet half of body on pipe, making sure outlet is aligned with branch line to be connected. Never position so that rotation is required.
- * Position back half of body and install bolts.

NOTE: If you are pre-assembling valve to tapping sleeve prior to installing sleeve, **install center** bolts in size on size sleeves prior to installing the valve.

- * Tighten bolts evenly, alternating from one side to the other. Start with outside bolts and work toward center bolts. Tighten to the following torque levels:

Thin Wall, PVC (SDR21, 26) Pipe, Flexible Pipe - 50 - 55 ft. lbs. of torque

HDPE SDR 11, SDR 17, Steel Pipe - 55 - 60 ft. lbs. of torque

Steel and Rigid Wall Pipe - 75 ft. lbs. of torque minimum

- * Check inside of sleeve neck to make certain gasket is properly seated and not protruding where tapping cutter may damage it.
- * Install tapping valve. JCM recommends adherence to the AWWA M-44 Manual for proper valve installation, support and trenching.
- * Test assembly seals using test plug provided on sleeve or test connection on tapping machine. Note: No more than 10% above line pressure on HDPE or maximum pipe working pressure rating.
- * When assured that all seals are tight and test is completed, re-check bolt torques after 15 minutes and proceed with tapping operation.

Note: Size on size tapping cutter must not be larger than recommended by pipe manufacturer. Also, tapping operation must not force the pipe away from the gasket seal.