#### **JCM 418 Threaded Outlet Tapping Sleeve**



## For taps and connections on larger pipe, thin wall pipe and pipe requiring extra reinforcement.

The JCM 418 and 438 Threaded Outlet Tapping Sleeve is especially recommended for service connections, air relief valve connections, taps on larger A/C, Cast Iron, Ductile Iron, PVC and Reinforced Concrete Pipe. The heavy gasket section and full sleeve support of this fitting offer much more stability, pipe reinforcement and strength than a strapped saddle, yet they are competitively priced. Readily available for pipe 4" and larger requiring IPS outlets of 3/4" through 4", these sleeves are furnished with shop coat and alloy bolts. Epoxy coating and stainless steel bolts are available at an additional charge.

#### 418 Fabricated Threaded Outlet Tapping Sleeve (IPS Outlet)

NOM. PIPE SIZE (IN.)	SLEEVE O.D. RANGE (IN.)	FABRICATED STEEL SLEEVE NUMBER X OUTLET SIZE	APPR. WT. EACH (LBS.)
4	4.50	418-0450 X	21
	4.80	418-0480 X	21
6	6.63	418-0663 X	23
	6.90	418-0690 X	23
8	8.63	418-0863 X	31
	9.05	418-0905 X	33
10	10.75	418-1075 X	38
	11.10	418-1110 X	40
12	12.75	418-1275 X	48
	13.20	418-1320 X	51
14	14.59 - 15.08	418-1475 X	54
	15.23 - 15.80	418-1530 X	57
	16.30 - 16.73	418-1650 X	60
16	17.33 - 17.87	418-1740 X	64
	18.62 - 19.19	418-1875 X	68
18	19.41 - 20.01	418-1950 X	72
	20.93 - 21.57	418-2130 X	77
20	21.51 - 22.15	418-2160 X	80
	23.46 - 24.16	418-2400 X	87
24	25.71 - 26.41	418-2580 X	95
	28.14 - 28.84	418-2834 X	104
30	31.62 - 32.22	418-3200 X	115
36	38.10 - 38.75	418-3830 X	139
42	44.10 - 44.70	418-4450 X	160
48	50.40 - 51.00	418-5080 X	183
54	56.60 - 57.25	418-5710 X	205

OUTLET SIZE	ORDER CODE IP		
3/4"	06		
1"	08		
1-1/4"	10		
1-1/2"	12		
2"	14		
2-1/2"	16		
3	17		
4	18		

### HOW TO ORDER - JCM 418 Threaded Outlet Tapping Sleeve

### 1. Determine O.D. of pipe and outlet size.

Check listing to determine order number. If size is not listed, order by pipe O.D. size.

#### EXAMPLE:

For 24" Cast Iron with 25.80 O.D. with 3"IP outlet, order: 418-2580 x 17IP.

For All Stainless Steel Fabrication, order: 438-2580 x 17IP.

OTHER SIZES AVAILABLE UPON REQUEST

#### MATERIAL SPECIFICATIONS - JCM 418 Threaded Outlet Tapping Sleeve

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

BOLTS: Corrosion Resistant, high strength low alloy (AWWA C-111, ANSI A21.11). Optional Stainless Steel 18-8 Type 304.

**GASKET:** Compounded for use with water, salt solutions, mild acids and bases.

**FINISH:** Heavy coat of corrosion resistant metal primer. Optional Fusion Epoxy Coating available.

**OUTLET:** IP Female Threads. Optional CC Threads available.

For All Stainless Steel, see JCM 438 All Stainless Steel Threaded Outlet Tapping Sleeve.



# JCM 418 Fabricated Threaded Outlet Tapping Sleeve Typical Specifications

#### **JCM 418 Fabricated Threaded Outlet Tapping Sleeve**

Service fittings shall be the high strength type fabricated of a minimum of ASTM 283 Grade C Steel, which conforms to and reinforces the pipe. Sleeve shall be minimum 8" wide and be sized to fit and reinforce the pipe circumference.

Sleeve outlet shall have a minimum 3/4" wide Buna-N gasket recessed in a machined groove around the threaded outlet.

Service fitting shall be furnished with a corrosion resistant shop coat paint primer with high strength, low alloy corrosion resistant bolts and nuts (AWWA C-111, ANSI 21.11). Optional Fusion applied epoxy coating (AWWA C-213) and stainless steel bolts and nuts available.

Service fittings shall be JCM 418 Threaded Outlet Tapping Sleeve or approved equal.

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



# JCM 418 Fabricated Threaded Outlet Tapping Sleeve Material Specifications

#### **JCM 418 Threaded Outlet Tapping Sleeve**

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

BOLTS: Corrosion resistant, high strength low alloy (AWWA C-111, ANSI 21.11).

Optional stainless steel 18-8 Type 304.

GASKET: Compounded for use with water, salt solutions, mild acids, bases and sewage.

Suitable for temperatures through 212° F.

FINISH: Heavy coat of corrosion resistant metal primer. Optional fusion epoxy coating

available.

**SERVICE** 

RATING: 3/4" - 4" outlets: 250 PSI. Higher service rating available for specific applica-

tions and sizes.



## JCM 418 Threaded Outlet 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.
- Tighten outside bolts first, working toward the center.
- \* Tighten bolts evenly. Alternate from one side of sleeve to the other. Tighten bolts to the following toque levels:

Pipe sizes 6" - 12" - 100 ft. lbs. of torque Pipe sizes 14" & larger - 125 ft. lbs. of torque

**NOTE:** For test and working pressure above 250 PSI bolts must be tightened to 150 - 170 ft. lbs. of torque. (Contact JCM for proper application.)

On Thin Wall, PVC (SDR21, 26), and Flexible Pipe

HDPE SDR11, SDR17 - 6" - 12"

HDPE SDR11, SDR17 - 14" and Larger

50 - 55 ft. lbs. minimum

60 ft. lbs. minimum

90 ft. lbs. minimum

- \* Check inside of sleeve neck to make certain gasket is properly seated and not protruding where tapping cutter may damage it.
- \* 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 and proceed with tapping operation.

Note: Tapping operation must not force the pipe away from the gasket seal.