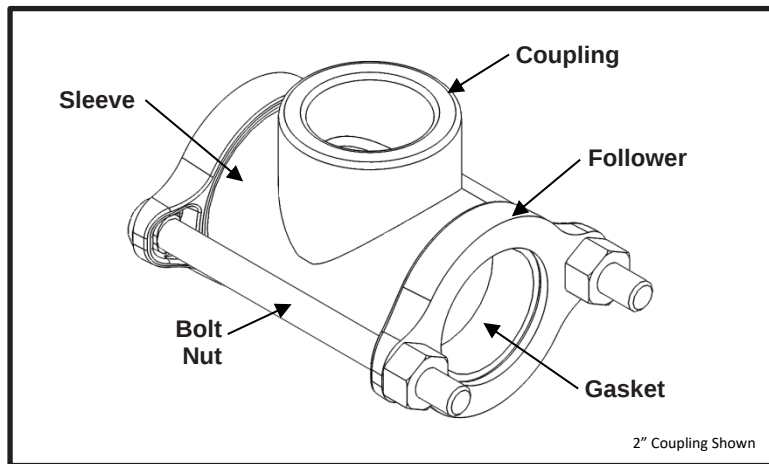


SPECIFICATION

TEE COUPLING

MODEL 418



APPLICATIONS

- **Typical Uses**
 - Joining plain-end pipe of same outside diameters
 - Tapping size-on-size branch connections on new or existing pipe
 - Installing valves and other miscellaneous service equipment
 - Repair leaks at broken or torn out service connections or branch lines
- **Standard Pipe Sizes**
 - 3/4" to 2" nominal
- **Type of Pipe**
 - Carbon Steel, Stainless Steel, PVC
(see notes for thin wall PVC & HDPE applications)
- **Working Pressure**
 - 150 psi (standard design)

MATERIALS

- **Follower**
 - Cast using Ductile Iron 65-45-12 per ASTM A536
 - Flexi-Coat® fusion bonded epoxy finish
 - Permanently marked with part number and pipe size range for proper selection
 - Integral bolt head pocket for one wrench installation
- **Sleeve**
 - Material: 3/4" – 1-1/2" nominal pipe size = Carbon Steel per ASTM A513
2" nominal pipe size = Carbon Steel per ASTM A53
 - Flexi-Coat® fusion bonded epoxy finish
- **Gasket**
 - Nitrile (Buna-N) per ASTM D2000
 - Compounded to resist water, oil, natural gas, acids, alkalis, most (aliphatic) hydrocarbon fluids, and many other chemicals
 - Temperature range: -20°F to +180°F
 - Permanently marked with part number and pipe size range for proper selection

SPECIFICATION

TEE COUPLING

MODEL 418

- **Outlet**
 - Carbon Steel FNPT coupling per ASTM A865
- **Bolts**
 - HSLA Steel per AWWA C111/A21.11
 - Size: 3/4" - 1-1/2 nominal pipe size = 1/2"-13UNC, Square Neck DRH
2" nominal pipe size = 5/8"-11UNC, Oval Neck Track Head
 - Fe/Zn coated thru 1-1/2" per ASTM F1941-10
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
- **Nut**
 - HSLA Steel per AWWA C111/A21.11
 - Size: 3/4" - 1-1/2 nominal = 1/2"-13UNC, Heavy Hex Semi-Finished
2" nominal = 5/8"-11UNC, Heavy Hex Semi-Finished
 - Fe/Zn coated thru 1-1/2" per ASTM F1941-10

LISTINGS

- Certified to NSF/ANSI 61 and NSF/ANSI 372
- Meets applicable portions of AWWA C219
- Flexi-Coat® Fusion-Bonded Epoxy Coating meets requirements of AWWA C213

OPTIONS

- Other materials of construction (e.g. 304SS, 316SS, etc.)
- Type 304 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Type 316 Stainless Steel hardware with fluoropolymer coated nuts to prevent galling
- Alternative gasket material (e.g. Viton, EPDM, etc.)
- Protected gasket (brass spring molded into leading edge)
- Anode connector
- Insulating boot(s)
- Higher working pressure design
- Custom sleeve length and thickness
- CC or BSP thread taps
- Angled sleeve design (for deflections exceeding straight coupling deflection ranges)
- Transition gasket for undersized pipe

NOTES

- Pipe stiffeners **are required** when this product is used on thin wall PVC pipe
- Flexi-Coat® is a registered trademark of Smith-Blair Inc.
- These product specifications were correct at the time of publication and are subject to change without notice
- See the Smith-Blair web site for part numbers and ordering information
- See the Smith-Blair web site for warranty information
- See the Smith-Blair web site for corrosion notice

SPECIFICATION

TEE COUPLING

MODEL 418

Recommended Pipe to Pipe Centerline Gaps

Sleeve Length	Optimum Gaps		Maximum Gap
	Straight Run	Deflected Joints	
5" to 6"	1/2"	1"	2"

Pipe gap to be centered in coupling sleeve.

Total Maximum Allowable Axial Pipe Movement per Coupling

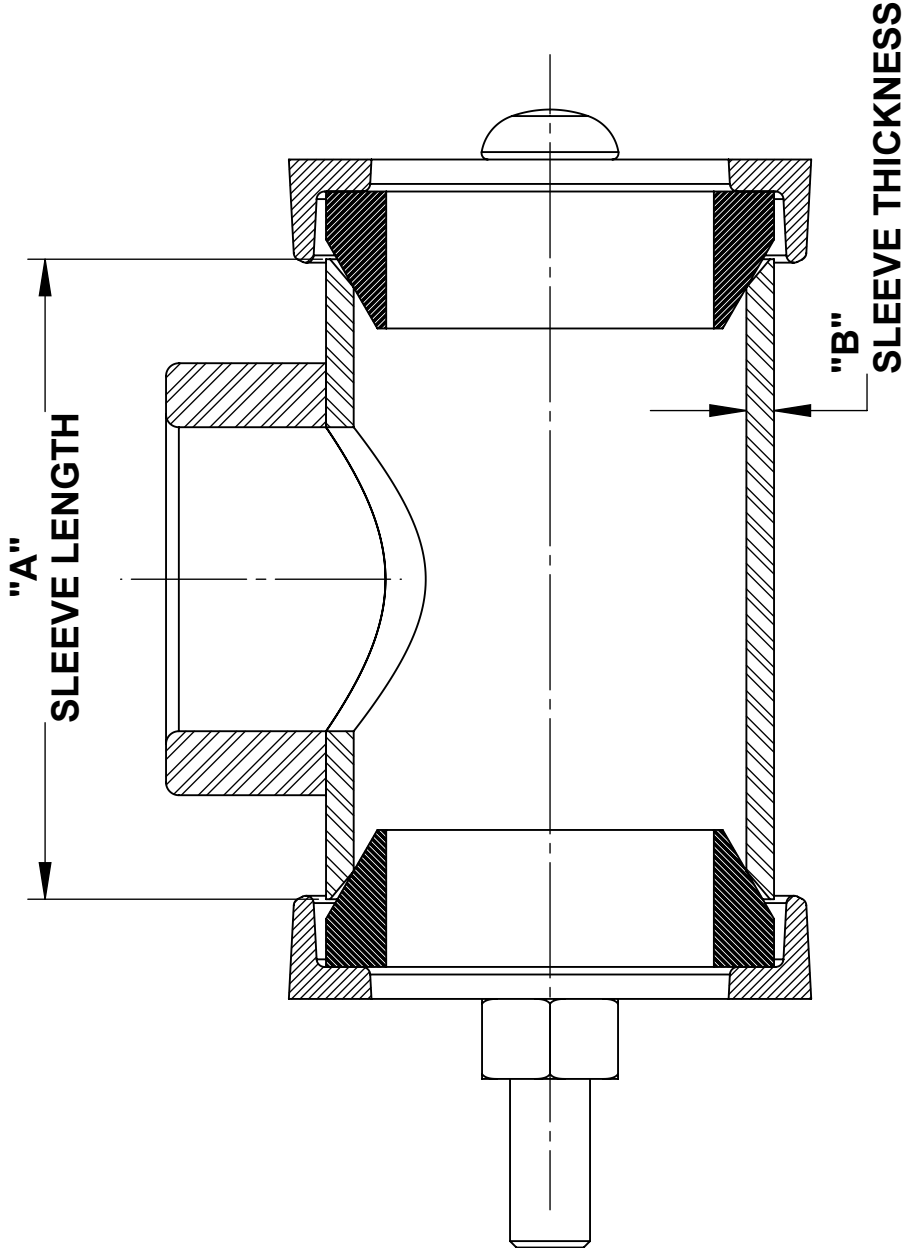
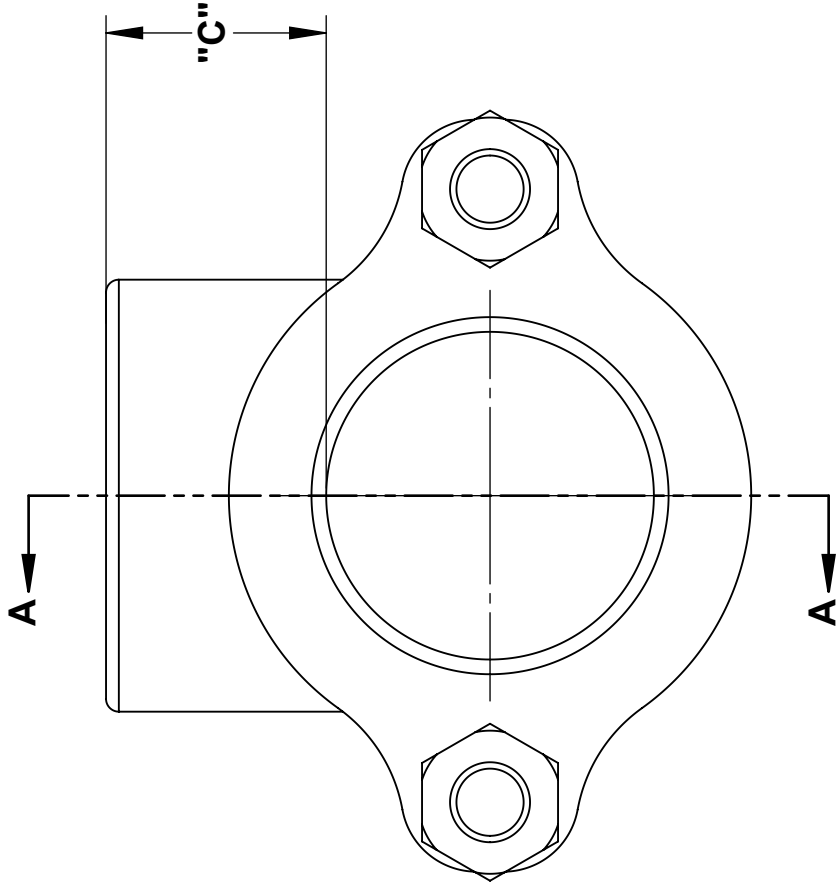
Nominal Pipe Size	Allowable Movement
3/4" to ≤ 2"	1/8"

Pipe End Tolerances

Nominal Pipe Size	Minus Tolerance	Plus Tolerance
3/4" to ≤ 2"	-0.06	+0.06

Maximum Angular Deflection per Coupling 4° (Pipe to Pipe) 2° (Pipe to Sleeve)

WRENCH SIZE CHART	
NUT	SIZE
1/2"-13UNC HH	7/8"
5/8"-11UNC HH	1-1/16"



SECTION A-A

- NOTES:**
- SEE SMITH-BLAIR CATALOG FOR AVAILABLE PIPE DIAMETER AND TAP SIZE COMBINATIONS AS SOME COMBINATIONS ARE NOT AVAILABLE
 - 2" BOLTED TEE COUPLING SHOWN OTHER SIZES SIMILAR

NOM. PIPE SIZE	PIPE O.D.	A	B	HARDWARE		APPROX WEIGHT (LBS)
				QTY.	SIZE	
0.75	1.02 TO 1.08	5	0.12	2	1/2" X 7.00"	4
1	1.26 TO 1.38					5
1.25	1.60 TO 1.72					7
1.50	1.84 TO 1.96	6	0.12	2	1/2" X 7.00"	7
2	2.32 TO 2.44	6	0.22	6	5/8" X 8.00"	10
	2.44 TO 2.56					

TAP CHART					
C	SIZE	NPT	CC	BSP	
1.30	1/2"	03	04	59	
	5/8"	-	05	-	
	3/4"	06	07	50	
	1"	08	09	51	
1.50	1-1/4"	10	11	54	
	1-1/2"	12	13	52	
	2"	14	-	53	

CERTIFIED TO NSF/ANSI 61-G & 372

TOLERANCES U.N.O. XX=+.03 XXX=+.015 FRACTIONS= ANGLES=+1° MACH. FIN= ALL DIMENSIONS ARE IN INCHES.	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.		APP'D		DATE
			CK'D		DATE
	SCALE: N/A		DRN	CHD	DATE
TITLE					
SPECIFICATION					
TEE COUPLING					
MODEL 418					
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS			P/N		
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