

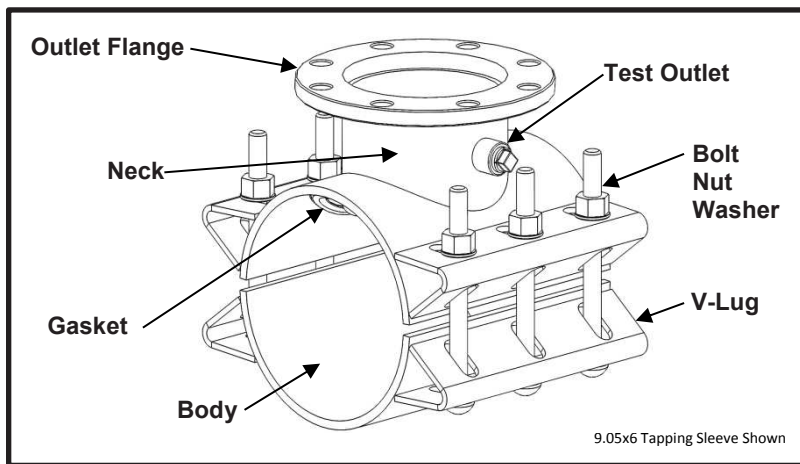


Smith-Blair  
a xylem brand

# SPECIFICATION

## TAPPING SLEEVE - FABRICATED STEEL

### MODEL 622



#### APPLICATIONS

- **Typical Uses**
  - Tapping size-on-size branch connections on new or existing pipe
  - Tapping reducing branch connections on new or existing pipe
  - Installing valves and other miscellaneous service equipment
- **Standard Pipe Sizes**
  - 4" to 30" nominal
- **Outlet Type and Size**
  - 4" to 12"
- **Type of Pipe (see notes)**
  - Carbon Steel, Stainless Steel, Cast Iron, Asbestos Cement, PVC, Ductile Iron, HDPE
- **Working Pressure / Test Pressure (see notes)**
  - 175 PSI / 262PSI

#### MATERIALS

- **Body**
  - Carbon Steel per ASTM A283 Grade C
  - Material thickness: 4" nominal pipe size(s) = 1/4" (top plate) 3/16" (bottom plate)  
6"-30" nominal pipe size(s) = 3/8" (both plates)
- **Neck**
  - Carbon Steel per ASTM A53 or A513
  - Furnished with 3/4" NPT test outlet
  - Accepts full size cutters except size-on-size taps which require a 1/2" undersize shell cutter
- **Outlet Flange**
  - Carbon Steel per ASTM A36
  - Type AWWA C207 Class D steel ring flat face
  - Compatible with ANSI 125# and 150# bolt hole patterns
  - Recessed for tapping valve alignment per MSS SP-60
- **V-Lug**
  - Carbon Steel per ASTM A283 Grade C
  - Material thickness: 4"-6" nominal pipe size(s) = 3/16"  
8"-30" nominal pipe size(s) = 1/4"



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- **Gasket**
  - Nitrile (Buna-N) per ASTM D2000
  - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20°F to +180°F
  - Gasket is fully cemented in machined recess
- **Bolts**
  - High Strength Low Alloy (HSLA) Steel per AWWA C111/A21.11 – with rolled threads
  - Size:           4”-6” nominal pipe size(s) = 5/8”-11UNC x 6” long, Oval Neck Track Head  
                  8”-24” nominal pipe size(s) = 3/4”-10UNC x 9” long, Oval Neck Track Head  
                  30” nominal pipe size(s) = 3/4”-10UNC x 11.25” long, Oval Neck Track Head
- **Nut**
  - HSLA Steel per AWWA C111/A21.11
  - Size:           4”-6” nominal pipe size(s) = 5/8”-11UNC Heavy Hex Semi-Finished  
                  8”-30” nominal pipe size(s) = 3/4”-10UNC Heavy Hex Semi-Finished
- **Washer**
  - Carbon Steel per ASTM F844
  - Fe/Zn coated per ASTM F1941-10
  - Size:           4”-6” nominal pipe size(s) = 5/8” Type A Plain  
                  8”-30” nominal pipe size(s) = 3/4” Type A Plain
- **Test Outlet**
  - Carbon Steel 3/4” FNPT half coupling per ASTM A865
  - Carbon Steel 3/4” MNPT square head test plug
- **Welding**
  - Welds accomplished using qualified welders
  - GMAW weld process utilized
- **Finish**
  - Flexi-Coat® fusion bonded epoxy

#### LISTINGS/STANDARDS

- Certified to NSF/ANSI 61 and NSF/ANSI 372
- Flexi-Coat® Fusion-Bonded Epoxy Coating meets requirements of AWWA C213
- Meets applicable portions of AWWA C223



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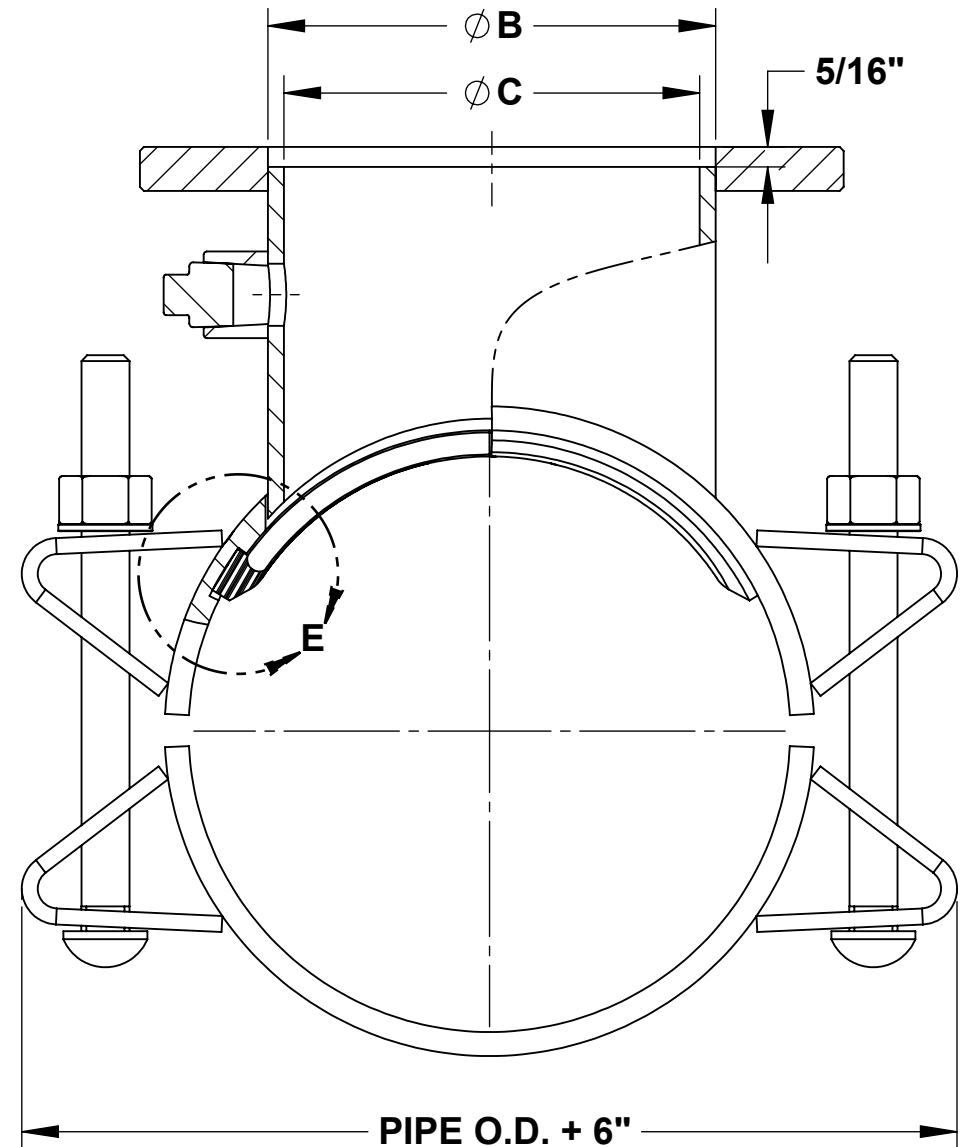
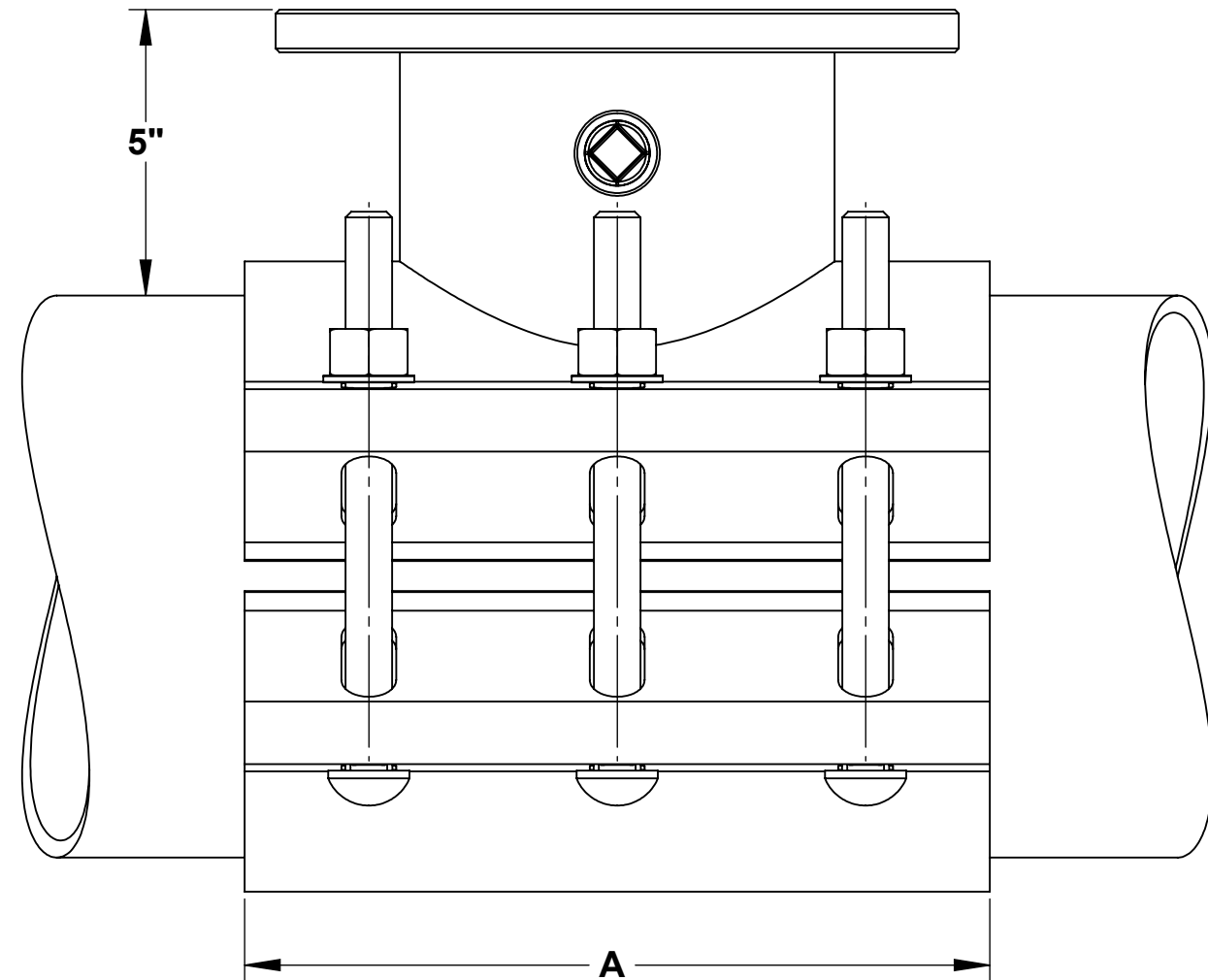
#### OPTIONS

- Type 304 Stainless Steel hardware with nylon washers and fluoropolymer coated nuts to prevent galling
- Type 304 Stainless Steel tapping sleeve construction
- Cross configuration
- Angled (Wye) pattern configuration
- Alternative gasket material (e.g. Viton, EPDM, etc.)
- High pressure flange types
- Anode connector
- Threaded outlet 3/4" to 6" NPT
- MJ outlet 4" to 12"
- Linestop outlet
- Coupling outlet (4")
- Any industry standard flange
- Higher working pressure design
- Larger diameter body and/or outlet

#### NOTES

- These product specifications were correct at the time of publication and are subject to change without notice
- Xylem, Smith-Blair, SB stylized, and Flexi-Coat are registered trademarks of Xylem, Inc., or one of its subsidiaries
- See the Smith-Blair website for part numbers and ordering information
- See the Smith-Blair website for warranty information
- See the Smith-Blair website for corrosion notice
- The working pressure of a tapping sleeve decreases as pipe diameter increases (regardless of manufacturer). For a particular installation, the allowable working pressure will be determined by the **pipe size**, type of pipe, type of clamp, type and extent of damage, service conditions, environmental conditions, and installation workmanship.
- Smith-Blair has the following recommendations for using its tapping sleeves on HDPE pipe:
  1. Due to the relaxation of the HDPE pipe when cut, a cutter of 2" smaller than the nominal outlet size should be used.
  2. To support the tapping sleeve gasket on the tangent line, a hole not larger than 2/3 the pipe outside diameter should be used.
  3. To reduce the thermal elongation of the piping and its associated chaffing of the tapping sleeve gasket, only underground applications should be used.
  4. The tapping sleeve gasket requires pipe support to seal, therefore pipe wall thickness of SDR 17 or greater is suggested.
  5. The operating pressure shall not exceed the pressure rating of the pipe or the maximum pressure rating of the fitting; whichever is less.
  6. The piping systems should be designed to compensate for pipe movement to prevent the fittings from moving or rotating on the pipe.
  7. Consult the HDPE pipe manufacturer concerning the long term suitability of mechanical type sealing fittings over the lifetime of their HDPE pipe.
- Use of this fitting on PVC pipe is limited to wall thicknesses DR 25 or thicker. Consult the PVC pipe manufacturer concerning the long term suitability of mechanical type sealing fittings over the lifetime of their PVC pipe.

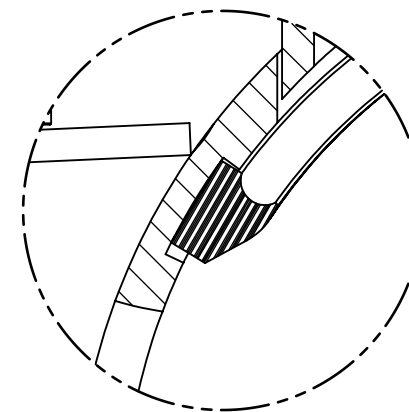
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**NOTES:**

- 1. SEE SMITH-BLAIR CATALOG FOR SIZES NOT SHOWN
- 2. 9.05" X 6" TAPPING SLEEVE SHOWN OTHER SIZES SIMILAR

OUTLET SIZE	NOMINAL PIPE SIZE	(O.A.L.) A	MSS SP-60 RECESS		HARDWARE		
			B	C	QTY.	SIZE	SOCKET
4	4	9	5.06	4.03	6	5/8"	1-1/16"
	6	12	5.06	4.59	8	5/8"	1-1/16"
	8-30				6	3/4"	1-1/4"
6	6	12	7.06	6.13	8	5/8"	1-1/16"
	8-30			6.50	6	3/4"	1-1/4"
8	8	16	9.06	8.13	8	3/4"	1-1/4"
	10-30			8.50			
10	10	20	11.09	10.25	10	3/4"	1-1/4"
	12-30			10.5			
12	12	20	13.09	12.25	10	3/4"	1-1/4"
	14-24			10			
	30	24	12.50	12	3/4"	1-1/4"	



**DETAIL E**

TOLERANCES U.N.O. .XX = ±.03 .XXX = ±.015 FRACTIONS = ANGLES = ±1° MACH. FIN =	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.	APP'D	DATE
		CK'D	DATE
SCALE: N/A	DRN	CHD	DATE 7/28/15
<b>TITLE SPECIFICATION</b> <b>TAPPING SLEEVE - FABRICATED STEEL</b> <b>MODEL 622</b>			
<b>SMITH-BLAIR</b> TEXARKANA, ARKANSAS		P/N N/A	
DWG. NO. <b>SPEC_622.DRW</b>		4 OF 4 SHEET 7/17/18 REV.	