

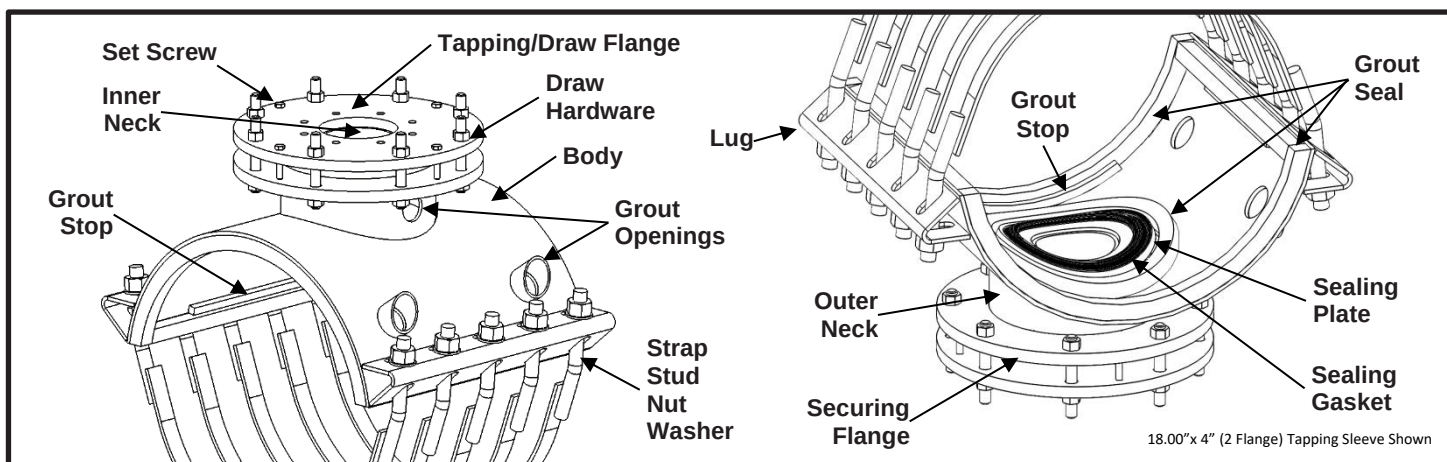


Smith-Blair
a xylem brand

SPECIFICATION

CONCRETE STEEL CYLINDER TAPPING SLEEVE

MODEL 625



APPLICATIONS

- **Typical Uses**
 - Tapping branch connections on new or existing pipe
 - Installing valves and other miscellaneous service equipment
- **Standard Pipe Sizes**
 - 12" nominal and larger
- **Standard Outlet Type and Size**
 - 4" thru 42"
- **Type of Pipe**
 - Concrete Steel Cylinder
- **Working Pressure**
 - Up to 150 psi depending on the type of flange, pipe diameter, service conditions, and installation workmanship

MATERIALS

- **Body**
 - Carbon Steel per ASTM A283 Grade C
 - Material thickness: 1/4"
 - Body contour oversized for approximately 1" thick grout seal thus stripping of the concrete finish is eliminated except in the area of the outlet
- **Securing Flange**
 - Carbon Steel per ASTM A36
 - Material thickness:
 - 4" - 6" = 0.75"
 - 8" - 12" = 1.00"
 - 14" - 42" = 1.25"
 - Tapped to integrate with tapping/draw flange on two flange design and draw flange on three flange design
- **V-Lug**
 - Carbon Steel per ASTM A283 Grade C
 - Material thickness: 1/4"
 - Designed for drop in bolts that are easily replaceable (*solid bottom sleeve half option only*)



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- **Sealing 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
 - Fully cemented in machined recess
 - Exclusive self-energizing concave wedge design for superior sealing and roll resistant
 - Generous cross section for optimal sealing on rough pipe
- **Grout Stop**
 - Buna-N Elastomer per ASTM D2000
 - Material thickness: 1/2" square
 - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
 - Temperature range: -20°F to +180°F
 - Fully cemented to body against foam rubber
 - Maintains minimum space between body of securing top sleeve and O.D. of concrete cylinder
- **Grout Seal**
 - Foam Rubber
 - Material thickness: 1" square
 - Fully cemented to body for 360° grout seal around pipe and tapping area
- **Tapping Neck**
 - Carbon Steel per ASTM A53 or A513
 - Furnished with 3/4" NPT test outlet (*three flange design only*)
 - Accepts full size cutters except size-on-size taps which require a 1/2" undersize shell cutter
- **Tapping/Draw 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
 - Oversized to integrated with securing flange on two flange design
- **Sealing Plate**
 - Carbon Steel per ASTM A283 Grade C
 - Material thickness: 0.50"
 - Machined recess on sealing surface for gasket
 - Inside diameter of the gasket recess set back a minimum of 1/2" from the tapping neck to allow dispersal of forces generated by gasket compression
- **Grout Pipes**
 - Carbon Steel per ASTM A53 Grade B
 - 2.00" standard pipe
- **Set Screw**
 - Type 304 Stainless Steel per ASTM F593
 - 3/8"-16UNC x 4.00" long, Hex Head
 - Utilized to permanently set tapping/draw flange against securing flange thus protecting the neck seal integrity

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- **Draw Hardware**
 - Stud
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC x 5.0" long, Stud
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - Nuts
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC, Heavy Hex Semi-Finished
- **Strap Assembly**
 - Strap
 - Carbon Steel per ASTM A36
 - Formed using 0.25" x 1.75" flat bar
 - Provides continuous circumferential support of the pipe for better performance in the tapped area
 - Stud
 - HSLA Steel per AWWA C111/A21.11
 - 3/4"-10UNC x 9" long, Stud welded to Strap
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - Washer
 - Carbon Steel per ASTM F844
 - 3/4" Type A Plain
 - Utilized to preserve corrosion resistance of epoxy coated surfaces and increase bearing surface
- **Test Outlet** *(only available on three flange design)*
 - Carbon Steel 3/4" FNPT 3000# 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
- Meets applicable portions of AWWA C302
- Meets applicable portions of AWWA C303
- Meets applicable portions of MSS-SP124
- Manufactured in accordance with AWWA Manual M-9



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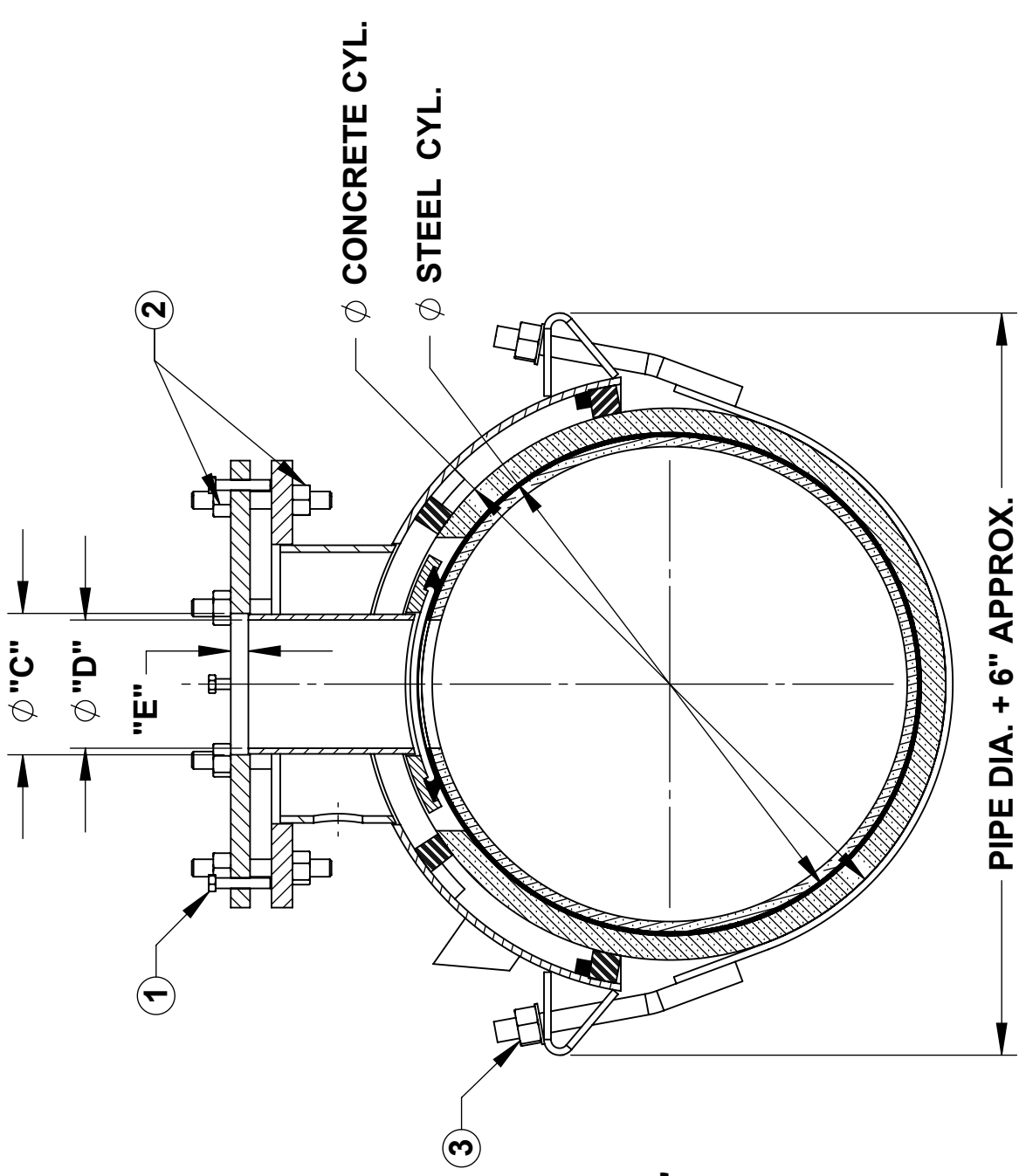
OPTIONS

- Type 304 Stainless Steel strap assemblies with fluoropolymer coated nuts to prevent galling
- Type 304 Stainless Steel tapping sleeve construction
- Cross configuration
- Alternative gasket material (e.g. Viton, EPDM, etc.)
- Anode connector
- Threaded outlet 3/4" to 6" NPT
- MJ outlet
- Linestop outlet
- Coupling outlet (4")
- Any industry standard flange
- Higher working pressure design
- Larger diameter body and/or outlet
- Solid bottom sleeve half with HSLA bolting hardware

NOTES

- Xylem, Smith-Blair, SB stylized, Flexi-Coat, Top Bolt and Maxi-Grip are registered trademarks and Flange-Lock is a trademark of Xylem, Inc., or one of its subsidiaries.
- These product specifications were correct at the time of publication and are subject to change without notice
- 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

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Ph: 870-773-5127 • Fax: 870-773-5212
Toll-Free Numbers: Ph: 800-643-9705 • Fax: 800-648-6792



TWO FLANGE DESIGN

OUTLET SIZE	A	B	MSS SP-60 RECESS			F
			C	D	E	
4	24	4.63	5.06	4.59	0.31	6
6		4.63	7.06	6.50		
8		4.88	9.06	8.50		
10		5.13	11.09	10.50		
12	32	5.25	13.09	12.50	0.31	8
14		5.38	15.56			
16	36	5.50	17.44		0.31	9
18		5.63	19.56		0.38	
20	40	5.75	22.56		0.44	10
24	48	6.13	26.06		0.44	12
30	60	7.63	30.13		0.44	15
36	68	7.75	36.19		0.44	17
42	72	8.00	42.19		0.44	18

NOTES:

1. SEE SMITH-BLAIR CATALOG FOR SIZES NOT SHOWN
2. 19.75" O.D. CONCRETE CYLINDER WITH 18.00" O.D. STEEL CYLINDER TAPPING SLEEVE W/STRAPS SHOWN OTHER SIZES SIMILAR

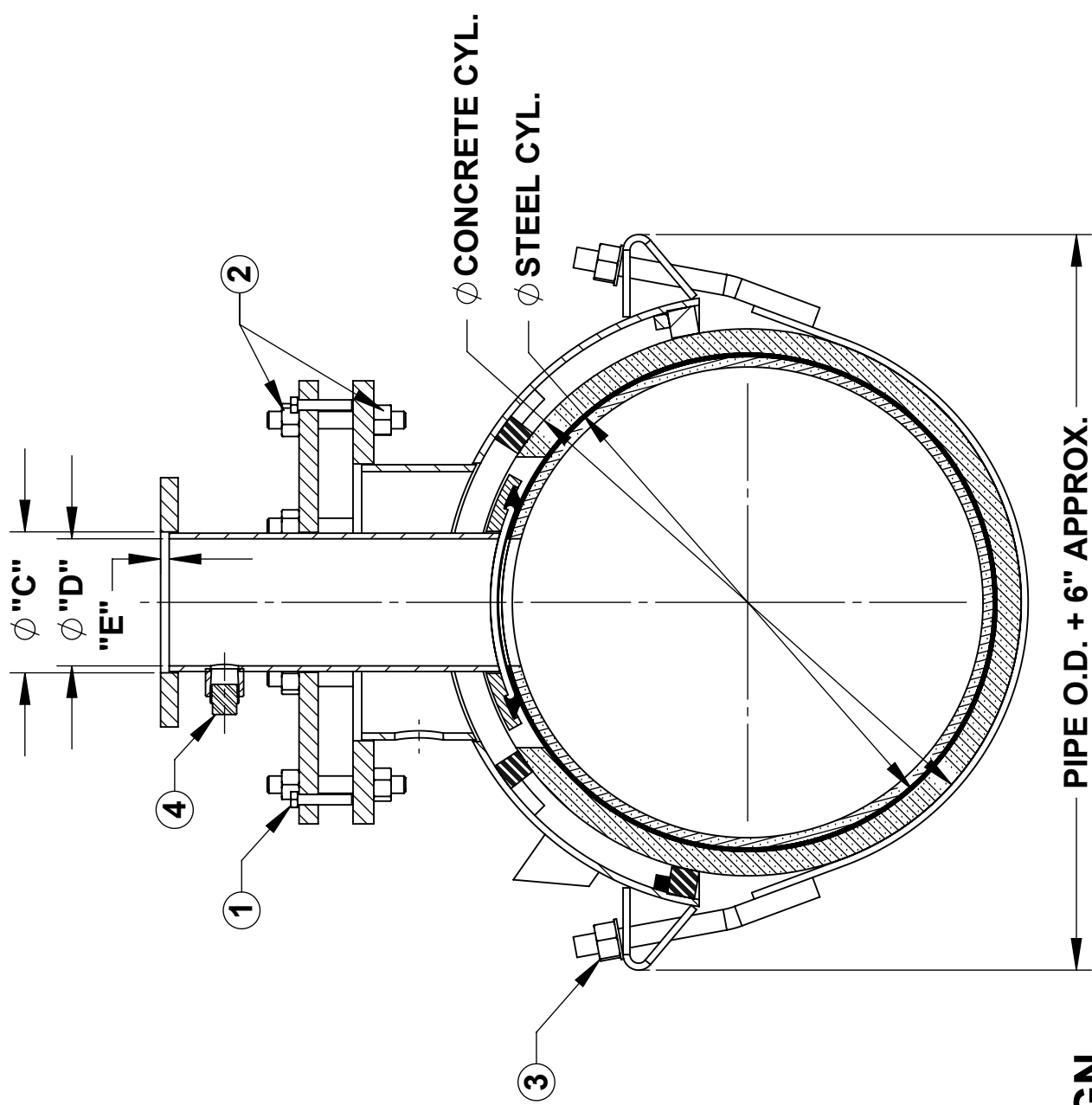
WRENCH SIZE CHART		
ITEM	HEAVY HEX NUT	SIZE
1	3/8"-16UNC	9/16"
2	5/8"-11UNC	1-1/16"
3	3/4"-10UNC	1-1/4"

TOLERANCES U.N.O. XX±.03 XX±.015 FRACTIONS=1/16 ANGLES=1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.	APP'D	DATE
		CK'D	DATE
SCALE: ALL DIMENSIONS ARE IN INCHES.	N/A	DRN	CHD 8/1715

TITLE	SPECIFICATION
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SMITH-BLAIR TEXARKANA, ARKANSAS	P/N	N/A	1 of 2		8/17/20
			SPEC_625.DRW	SHEET	REV.
			DWG. NO.		



THREE FLANGE DESIGN

SECTION Y-Y

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