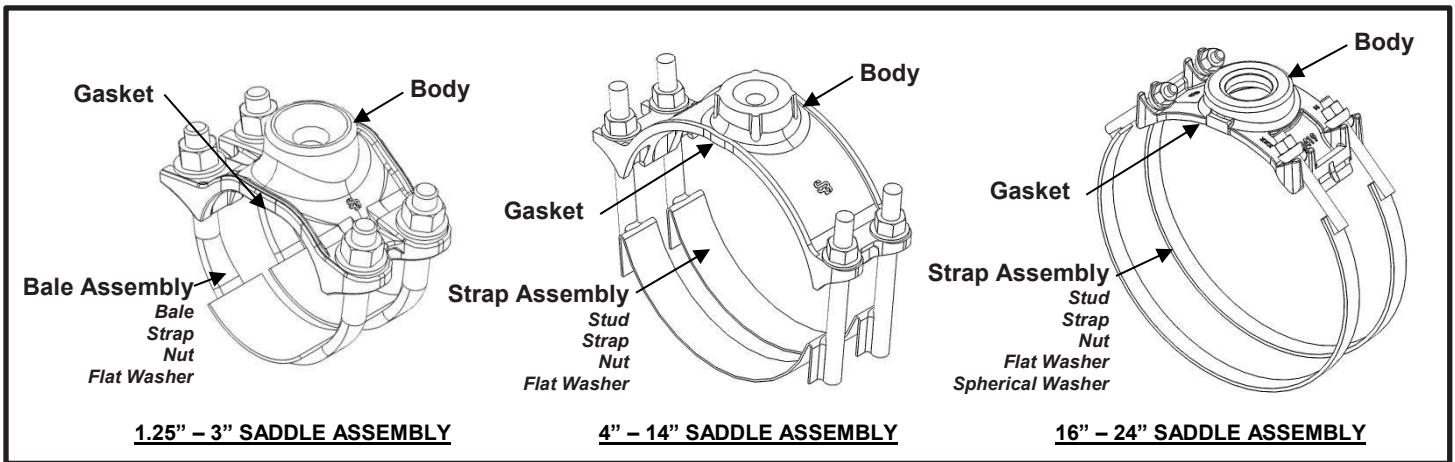


SPECIFICATION

SERVICE SADDLE DOUBLE STRAP

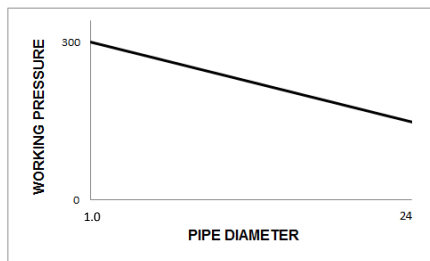
MODEL 317



APPLICATIONS

- **Typical Uses**
 - Tapping branch connections on new or existing pipe
 - Installing air/vacuum valves, pitot tubes, drain valves, or other miscellaneous service equipment
 - Installing pipe supports, hangers, or sign mounting brackets
- **Standard Pipe Sizes**
 - 1.25" to 24" nominal
- **Standard Taps**
 - NPT: 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 3" and 4"
 - CC/AWWA: 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2" and 2"
 - BSP: 1/2", 3/4", 1", 1-1/4", 1-1/2", 2", and 3"

See Smith-Blair catalog for available pipe diameter and tap size combinations as some combinations are not available
- **Type of Pipe**
 - PVC, Carbon Steel, Stainless Steel, Ductile Iron, HDPE DR17 or thicker (with use of spring washers), Asbestos Cement, Aluminum
- **Working Pressure**
 - Up to 300 psi depending on type of pipe, type of repair, pipe diameter, service conditions, and installation workmanship





SPECIFICATION

SERVICE SADDLE DOUBLE STRAP

MODEL 317

MATERIALS

- **Body** *(used only on 1" - 14" nominal pipe size saddles)*
 - Cast using Ductile Iron 65-45-12 per ASTM A536
 - Flexi-Coat[®] fusion bonded epoxy finish
 - Closed ears holds nut and bale/strap in place allowing the assembly to hinge for ease of installation around pipe
 - Open ears provide easy slip on installation and removal of nuts are not required preventing lost hardware
 - Canted ears for maximum tangential tightening of bale or strap
 - Wraparound design provides maximum pipe support, reinforcement, and sealing pressure
 - Wide skirt and heavy tapping boss provides excellent stability on the pipe
- **Body** *(used only on 16" - 24" nominal pipe size saddles)*
 - Cast using Ductile Iron 65-45-12 per ASTM A536
 - Flexi-Coat[®] fusion bonded epoxy finish
 - Open ears provide easy slip on installation and removal of nuts are not required preventing lost hardware
 - Canted ears for maximum tangential tightening of bale or strap
 - Wraparound design provides maximum pipe support, reinforcement, and sealing pressure
 - Wide skirt and heavy tapping boss provides excellent stability on the pipe
- **Bale Assembly** *(used only on 1" - 3" nominal pipe size saddles)*
 - **Bale**
 - Type 304 Stainless Steel per ASTM A276
 - 1/2"-13UNC
 - Pipe contact surface flattened to provide a wider bearing surface against pipe
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - **Strap**
 - Type 304 Stainless Steel per ASTM A240
 - Formed using 14GA x 1.50" strip and welded to Bale
 - Strap distributes load across a larger surface area preventing damage to non-rigid pipe types
 - Relevant product information placed on strap i.e. O.D. range, part number, etc.
 - **Welding**
 - Welds accomplished using qualified welders
 - GMAW weld process utilized
 - Welds passivated to preserve corrosion resistance
 - **Nut**
 - Type 304 Stainless Steel GR. 8 per ASTM A194
 - Fluoropolymer coated to prevent galling
 - 1/2"-13UNC, Heavy Hex Semi-Finished
 - **Flat Washer**
 - Type 304 Stainless Steel per ASTM A240
 - 1/2" Type A Plain
 - Utilized to preserve corrosion resistance of epoxy coated surfaces and increase bearing surface



SPECIFICATION

SERVICE SADDLE DOUBLE STRAP

MODEL 317

-
- **Strap Assembly** *(used only on 4" – 24" nominal pipe size saddles)*
 - **Strap**
 - Material: 4" – 16" nominal pipe size(s) = Type 304 Stainless Steel per ASTM A240
18" – 24" nominal pipe size(s) = Type 304 Stainless Steel per ASTM A276
 - Sizes: 4" – 16" nominal pipe size(s) = Formed using 14GA x 1.50" strip
18" – 24" nominal pipe size(s) = Formed using 0.25" x 1.25" flat bar
 - Strap distributes load across a larger surface area preventing damage to non-rigid pipe types
 - Relevant product information placed on strap i.e. O.D. range, part number, etc.
 - **Stud**
 - Type 304 Stainless Steel per ASTM A276
 - Sizes: 4" – 6" nominal pipe size(s) = 5/8"-11UNC x 6.00" long, Stud welded to Strap
8" – 14" nominal pipe size(s) = 5/8"-11UNC x 7.00" long, Stud welded to Strap
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
 - **Welding**
 - Welds accomplished using qualified welders
 - GMAW weld process utilized
 - Welds passivated to preserve corrosion resistance
 - **Nut**
 - Type 304 Stainless Steel GR. 8 per ASTM A194
 - Fluoropolymer coated to prevent galling
 - 5/8"-11UNC, Heavy Hex Semi-Finished
 - **Flat Washer**
 - Type 304 Stainless Steel per ASTM A240
 - 5/8" Type A Plain
 - Utilized to preserve corrosion resistance of epoxy coated surfaces and increase bearing surface
 - **Spherical Washer** *(used only on 16" – 24" nominal pipe size saddles)*
 - Cast using Ductile Iron 65-45-12 per ASTM A536
 - Flexi-Coat[®] fusion bonded epoxy finish
 - Provide full bearing for the strap nuts and align the straps with the saddle body
 - Distributes load for better performance
 - **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
 - TaperSeal™ hydro-mechanical lip enables the saddle to hold higher pressures with minimal nut torque
 - Gasket is fully cemented in a cavity to hold it in place



SPECIFICATION

SERVICE SADDLE DOUBLE STRAP

MODEL 317

LISTINGS

- Certified to NSF/ANSI 61 and NSF/ANSI 372
- Meets applicable AWWA C800 standards
- Certain sizes meet Uni-Bell PVC Pipe Associations “Handbook of PVC Pipe” and AWWA M23 Manual “PVC Pipe Design and Installation, when the fitting is ordered with the body properly sized to fit the PVC pipe.
- Fusion-Bonded Epoxy Coating meets requirements of AWWA C213

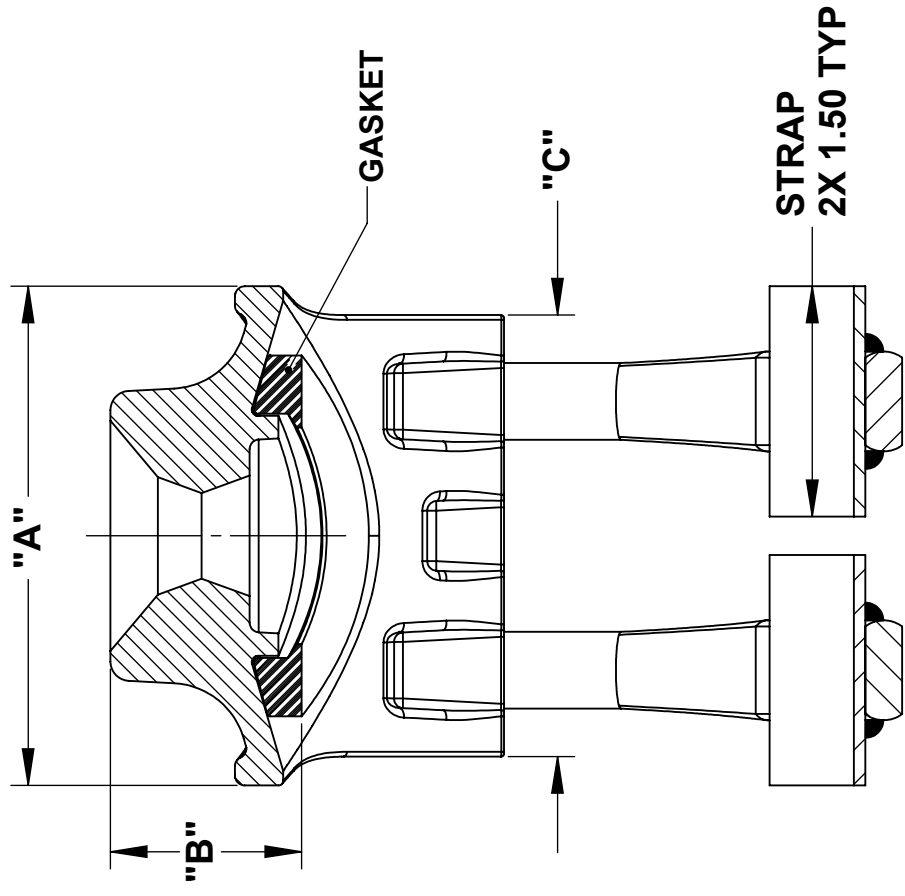
OPTIONS

- Type 316 Stainless Steel bale assembly with fluoropolymer coated nuts to prevent galling
- Type 316 Stainless Steel strap assembly with fluoropolymer coated nuts to prevent galling (*spherical washers remain D.I*)
- Alternative gasket material (e.g. Viton, EPDM, etc.)
- Anode connector
- Spring washers for use of clamp on HDPE pipe

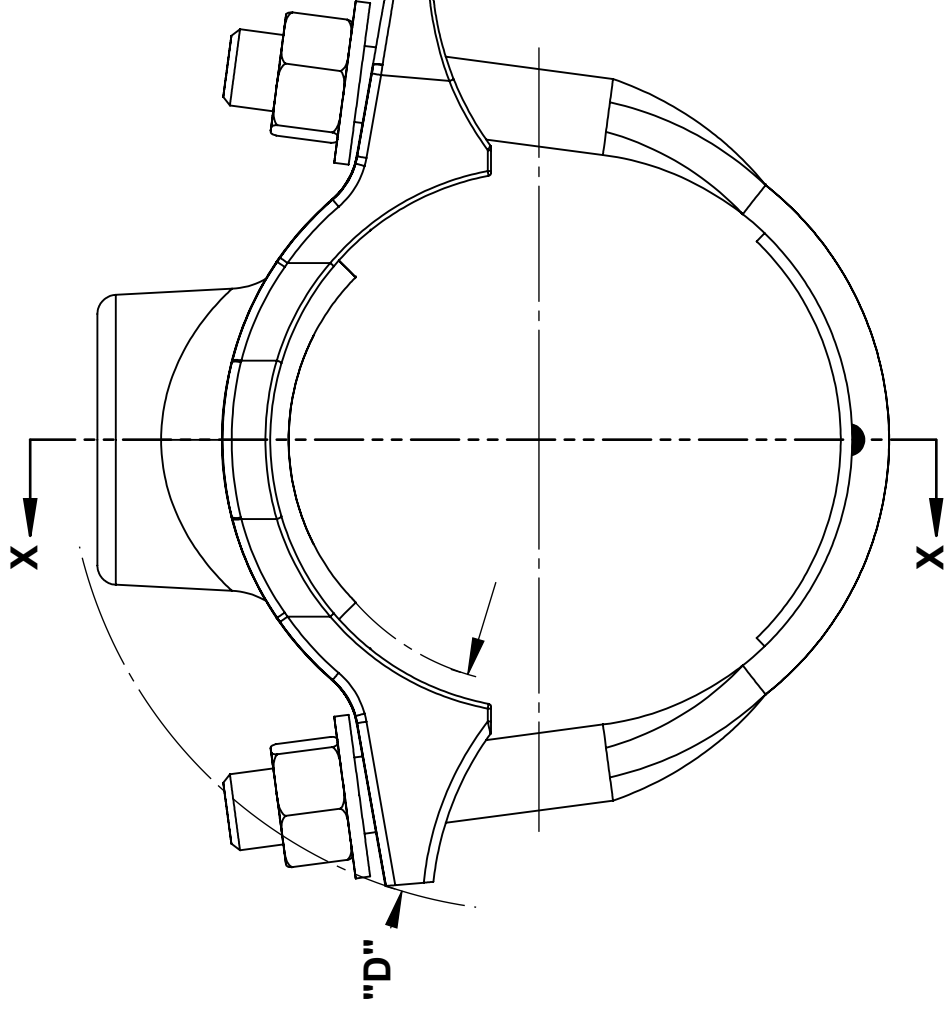
NOTES

- Spring washers **are required** when this product is used on DR17 or thicker HDPE pipe
- These product specifications were correct at the time of publication and are subject to change without notice
- Flexi-Coat® is a registered trademark of Smith-Blair, Inc.
- Taperseal™ is a trademark of Smith-Blair, Inc.
- 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

30 Globe Ave, Texarkana, AR 71854
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SECTION X-X

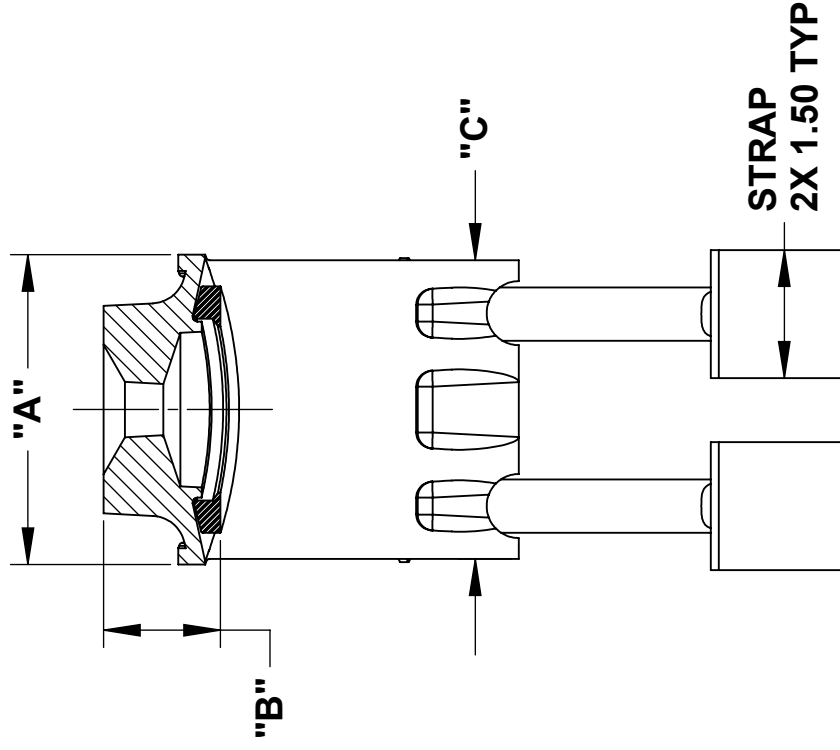


NOMINAL SIZE	APPROX. WT. (LB)	TAP CODE	A	B	C	D	SOCKET SIZE
1.25 - 1.50	3	ST	3.40	1.35	2.88	1.53	7/8"
	-	LT	-	-	-	-	
2	3	ST	3.40	1.35	2.88	1.53	
	-	LT	-	-	-	-	
2.25 - 2.50	3	ST	3.40	1.35	2.88	1.53	
	-	LT	-	-	-	-	
3	4	ST	3.40	1.40	3.00	1.70	
	5	LT	4.40	1.40	3.60	1.65	

NOTES:

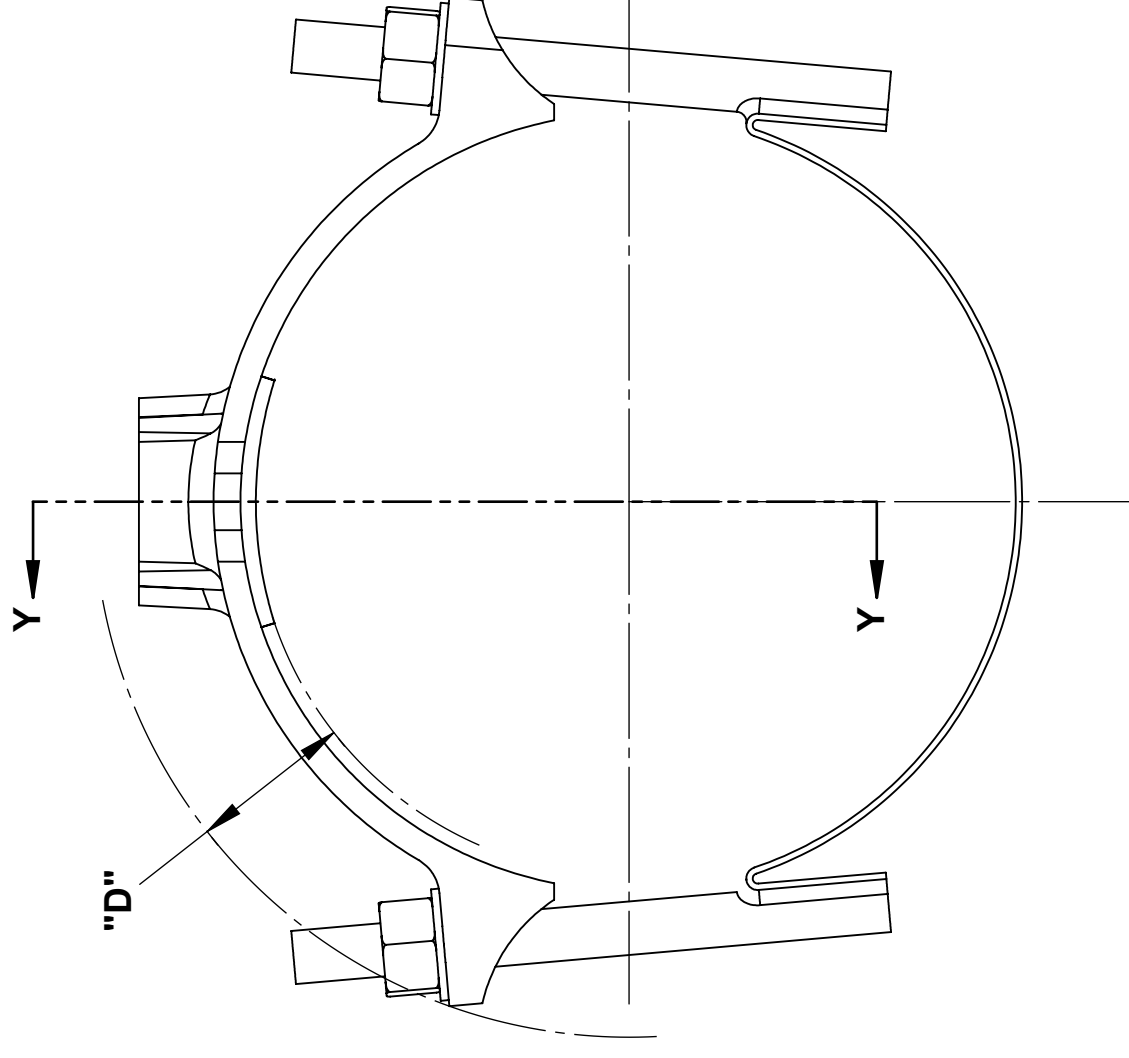
- SEE SMITH-BLAIR CATALOG FOR AVAILABLE PIPE DIAMETER AND TAP SIZE COMBINATIONS AS SOME COMBINATIONS ARE NOT AVAILABLE
- 3.54" SADDLE SHOWN OTHER SIZES SIMILAR
- ABBREVIATIONS:
 ST = SMALL TAP SIZES 1/2" THRU 1-1/2"
 LT = LARGE TAP SIZES 1-1/2" THRU 2-1/2"
 XLT = EXTRA-LARGE TAP SIZES 3" AND 4"

TOLERANCES U.N.O. XX= ±.03 XXX= ±.015 FRACTIONS= ±.015 ANGLES= ±1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.	APP'D	DATE
SCALE: N/A		CK'D	DATE
ALL DIMENSIONS ARE IN INCHES.		DRN	DATE
TITLE SPECIFICATION SERVICE SADDLE DOUBLE STRAP MODEL 317		CHD	DATE
P/N		DATE	
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		N/A	
DWG. NO. SPEC_317.DRW		6/18/15	
REV. 1		8/17/16	
SHEET 3		REV.	



SECTION Y-Y

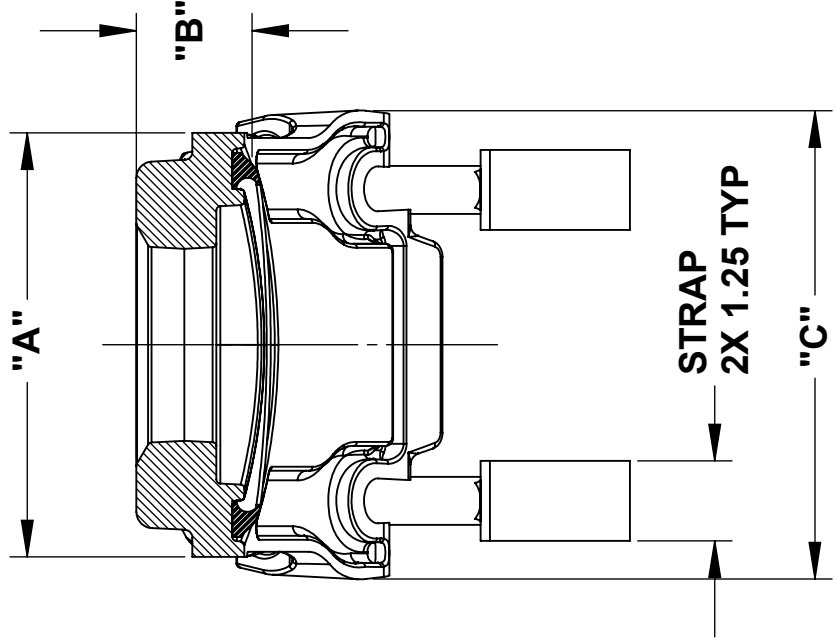
NOMINAL SIZE	APPROX. WT. (LB)	TAP CODE	A	B	C	D	SOCKET SIZE
4	6	ST	3.70	1.40	3.50	1.60	1-1/16"
	6	LT	5.50	1.75	3.65	1.75	
5	6	ST	3.70	1.40	3.60	1.75	
	9	LT	5.50	1.75	3.65	1.70	
6	7	ST	3.75	1.40	3.60	1.75	
	7	LT	5.50	1.75	3.65	1.78	
8	13	XLT	6.05	1.93	4.20	1.83	
	8	ST	3.75	1.40	3.60	1.87	
10	11	LT	5.50	1.75	3.65	1.90	
	15	XLT	6.05	1.85	4.10	1.90	
12	10	ST	3.75	1.40	3.60	1.90	
	11	LT	5.50	1.75	3.60	1.90	
14	14	XLT	7.20	2.00	4.20	1.85	
	14	ST	3.75	1.45	3.60	2.00	
15-16	15	LT	5.50	1.75	3.60	1.95	
	18	XLT	7.20	2.00	4.20	1.85	
14	18	ST	4.45	1.40	2.85	1.90	
	18	LT	4.45	1.40	3.60	1.90	
	28	XLT	7.20	2.00	4.20	1.85	
15-16	19	ST	4.45	1.80	5.00	2.15	
	19	LT	4.45	1.80	5.00	2.15	
	29	XLT	6.90	1.95	7.35	2.30	



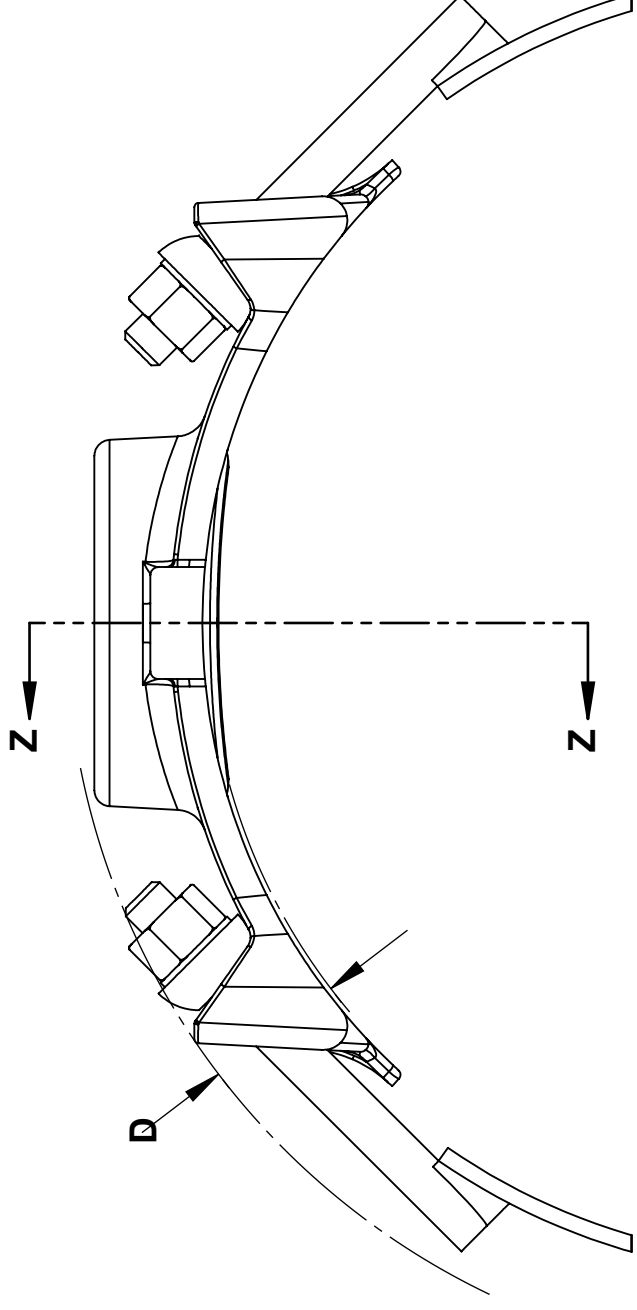
NOTES:

- SEE SMITH-BLAIR CATALOG FOR AVAILABLE PIPE DIAMETER AND TAP SIZE COMBINATIONS AS SOME COMBINATIONS ARE NOT AVAILABLE
- 9.05" SADDLE SHOWN OTHER SIZES SIMILAR
- ABBREVIATIONS:
ST = SMALL TAP SIZES 1/2" THRU 1-1/2"
LT = LARGE TAP SIZES 1-1/2" THRU 2-1/2"
XLT = EXTRA-LARGE TAP SIZES 3" AND 4"

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
SCALE: N/A	DRN	CHD	DATE
TITLE SERVICE SADDLE DOUBLE STRAP MODEL 317		DATE	6/18/15
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N	N/A
SPEC_317.DRW		DWG. NO.	REV.
2 OF 3 SHEET		8/17/16	



SECTION Z-Z



NOMINAL SIZE	APPROX. WT. (LB)	TAP CODE	A	B	C	D	SOCKET SIZE
18	20	ST	4.45	1.85	4.95	2.15	1-1/16"
	20	LT	6.90	1.85	7.25	2.15	
	30	XLT	3.90	1.85	7.25	2.15	
20	20	ST	4.45	1.85	5.00	2.30	1-1/16"
	20	LT	4.46	1.90	5.00	2.10	
	-	XLT	-	-	-	-	
24	20	ST	4.45	1.85	5.00	2.30	1-1/16"
	20	LT	4.45	1.85	5.00	2.30	
	-	XLT	-	-	-	-	

NOTES:

- SEE SMITH-BLAIR CATALOG FOR AVAILABLE PIPE DIAMETER AND TAP SIZE COMBINATIONS AS SOME COMBINATIONS ARE NOT AVAILABLE
- 19.50" XLT SADDLE SHOWN OTHER SIZES SIMILAR
- ABREVIATIONS:
 ST = SMALL TAP SIZES 1/2" THRU 1-1/2"
 LT = LARGE TAP SIZES 1-1/2" THRU 2-1/2"
 XLT = EXTRA-LARGE TAP SIZES 3" AND 4"

TOLERANCES U.N.O. XX= ±.03 XXX= ±.015 FRACTIONS= ±.1 ANGLES= ±1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALE DWG.	APP'D	DATE
ALL DIMENSIONS ARE IN INCHES.	SCALE: N/A	CK'D	DATE
		DRN	DATE
TITLE SERVICE SADDLE DOUBLE STRAP MODEL 317		CHD	6/18/15
P/N		N/A	
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		SPEC_317.DRW	
DWG. NO.		3 OF 3 SHEET	
		8/17/16 REV.	