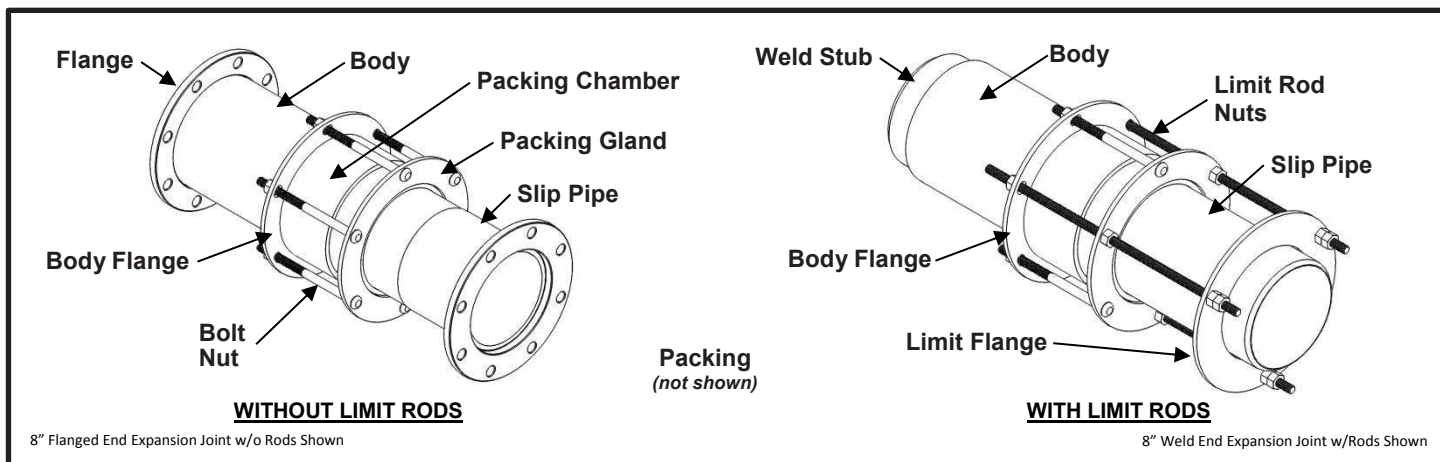


SPECIFICATION

EXPANSION JOINT – SINGLE END

MODEL 611



APPLICATIONS

- **Typical Uses**
 - Joining pipe while absorbing thermal expansion and contraction in pipelines due to ambient temperature changes or hot working conditions
 - Joining pipe while absorbing changes in horizontal or vertical pipe length due to differential movement of supporting structures such as buildings, docks, tanks, bridges, etc.
- **Standard Pipe Sizes**
 - 3" to 24" nominal
- **Standard End Configurations**
 - Butt-Weld Ends, Flanged Ends, Grooved Ends, Threaded Ends, Lock Coupling Ends, Mechanical Joint, Plain for Locking or Harnessed Ends
- **Type of Pipe**
 - Carbon Steel, Stainless Steel, Cast Iron
- **Working Pressure**
 - 150 psi (standard design)

MATERIALS

- **Body and Body Flange**
 - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
 - Flexi-Coat® fusion bonded epoxy finish
 - Flange incorporated with integral oval bolt head pocket for one wrench installation
- **Slip Pipe**
 - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
 - Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface
 - Hard chrome plate applied to machined surface to facilitate easy movement, protect against corrosion and pitting, resist scratching and scoring, while reducing friction and wear on packing rings
- **Packing Gland**
 - Carbon Steel per ASTM A283C, A53 or AISI C1015-20
 - Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface
 - Designed to compress packing for positive seal
 - Removable for future maintenance and packing adjustment

SPECIFICATION

EXPANSION JOINT – SINGLE END

MODEL 611

- **Limit Flange**
 - Carbon Steel per ASTM A283C, A53, or AISI C1015-20
 - Flexi-Coat® fusion bonded epoxy finish applied to non-chrome plated surface
- **Packing**
 - Rubber
 - 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
 - Flax Packing
 - Braided Ramie Yarn, Paraffin Impregnated
 - Impregnated with paraffin and mineral oil
 - Rot and mildew resistant
 - Medium-hard square plait construction packing with extremely low frictional characteristics
 - Maximum temperature of 212°F
- **Bolts**
 - High Strength Low Alloy (HSLA) Steel per AWWA C111/A21.11
 - 5/8"-11UNC, 10.50" long, Oval Neck Track Head
 - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
- **Limit Rods**
 - HSLA Steel per AWWA C111/A21.11
 - 5/8"-11UNC, All Thread
 - 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
 - Double nuts provided on limit rods for locking/jam feature

LISTINGS

- Fusion-Bonded Epoxy Coating meets requirements of AWWA C213 and is certified to NSF/ANSI 61
- Meets applicable AWWA C221 standards

OPTIONS

- Alternative materials of construction (e.g. 304SS, 316SS, Monel, 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/packing material (e.g. Buna-N, EPDM, etc.)
- Anode connector
- Anchor studs
- Higher working pressure design
- Custom joint or expansion length
- Built-in anchor base
- Custom end configurations
- Pipe stops
- Packing lubrication features (e.g. alemite fitting, lantern ring, etc.)

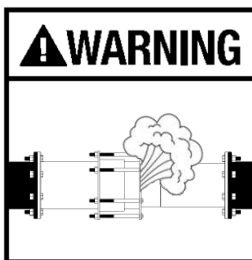
SPECIFICATION

EXPANSION JOINT – SINGLE END

MODEL 611

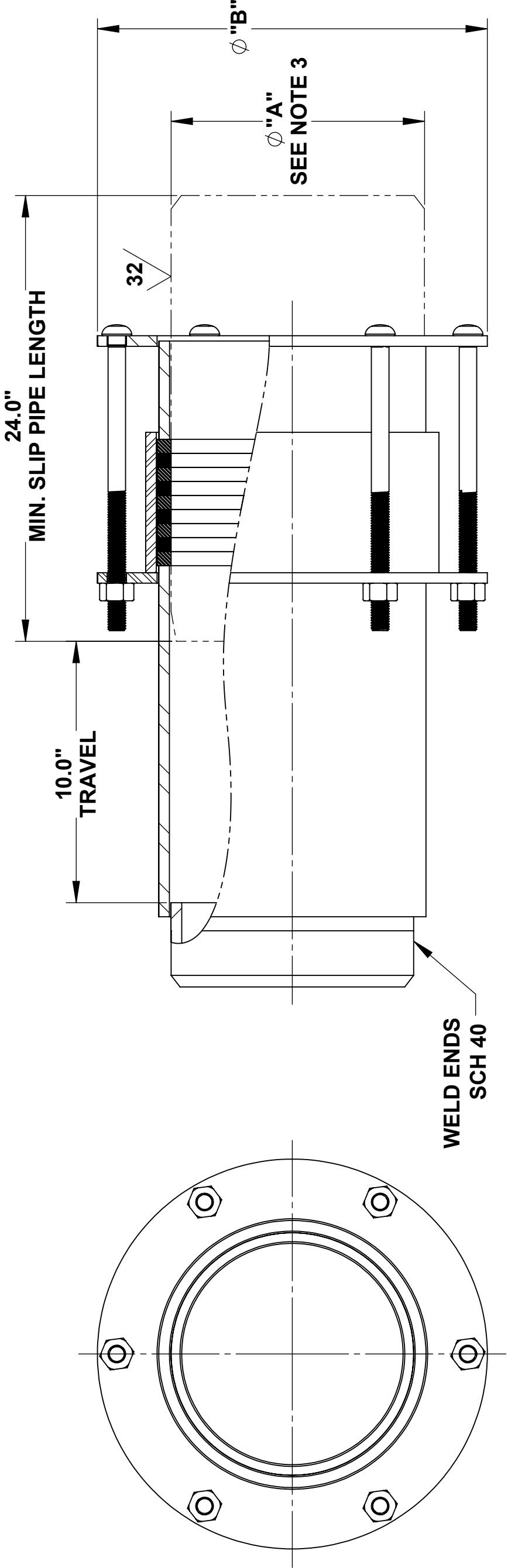
NOTES

- When one or more expansion joint is installed in a straight segment of pipe between anchors, they must have limit rods.
- Slip-type expansion joints must be installed in an accessible location for future maintenance and packing adjustment
- Fitting designed for axial pipe movement only (not for angular deflection)
- 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 website for part numbers and ordering information
- See the Smith-Blair website for warranty information
- See the Smith-Blair website for corrosion notice



THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT. Proper anchoring is required to prevent pipe pullout. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, or death. Read the product installation instructions prior to installing this product.

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



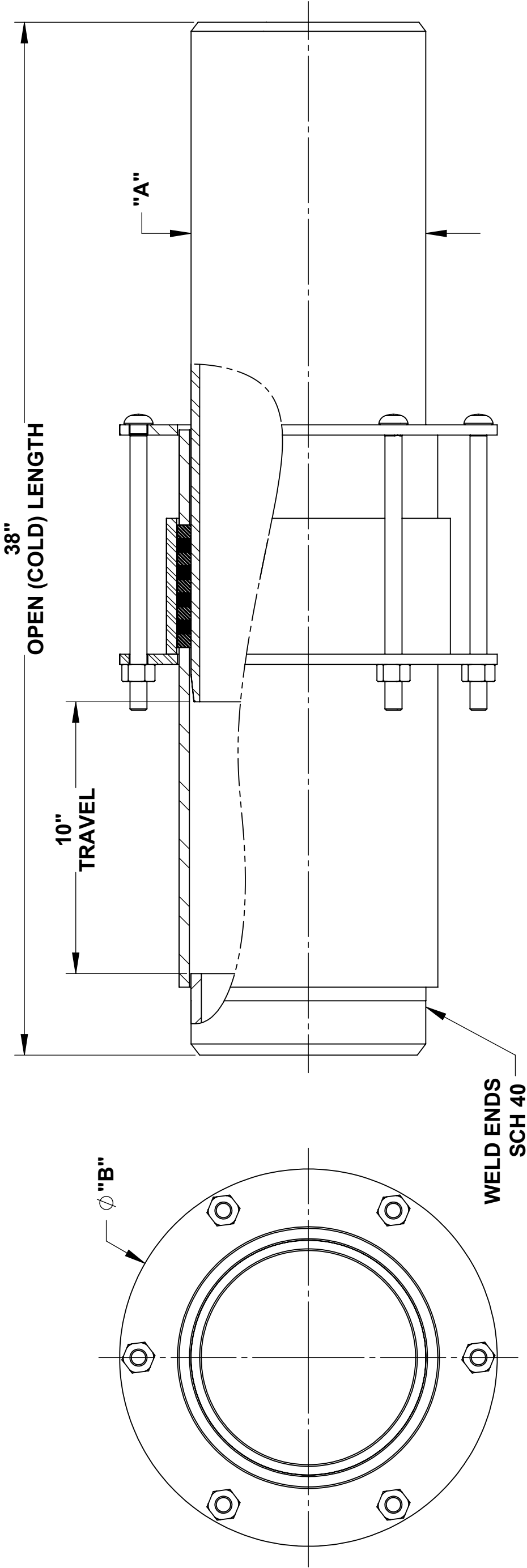
WELD END WITHOUT SLIP PIPE - WITHOUT LIMIT RODS

NOM. PIPE SIZE	SLIP PIPE O.D. "A"	MAX O.D. "B"	APPROX. WEIGHT (LBS)
3	3.50	8.38	50
4	4.50	9.63	65
6	6.63	11.88	90
8	8.63	13.88	125
10	10.75	16.00	165
12	12.75	18.00	195
14	14.00	19.25	220
16	16.00	21.25	250
18	18.00	23.25	280
20	20.00	25.25	310
22	22.00	27.25	340
24	24.00	29.31	370

- NOTES:
- SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
 - 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
 - CUSTOMER FURNISHED SLIP PIPE MUST HAVE A PREPARED END AT LEAST 24IN IN LENGTH THAT IS ROUND, SURFACE ROUGHNESS OF 32μIN OR BETTER 18IN MIN. FROM STAB END, AND NO GREATER THAN +.030" OR -.010" FROM NOMINAL SIZE.
 - ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

TOLERANCES U.N.O. XX= +.03 XXX= +.015 FRACTIONS= ANGLES=+1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALEDWG.	APP'D	DATE
		CK'D	DATE
	SCALE: N/A	DRN	DATE
ALL DIMENSIONS ARE IN INCHES.		CHD	12/17/15
TITLE SPECIFICATION EXPANSION JOINT MODEL 611			
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N	N/A
SPEC_611.DRW		1 OF 5 SHEET	8/26/16 REV.

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



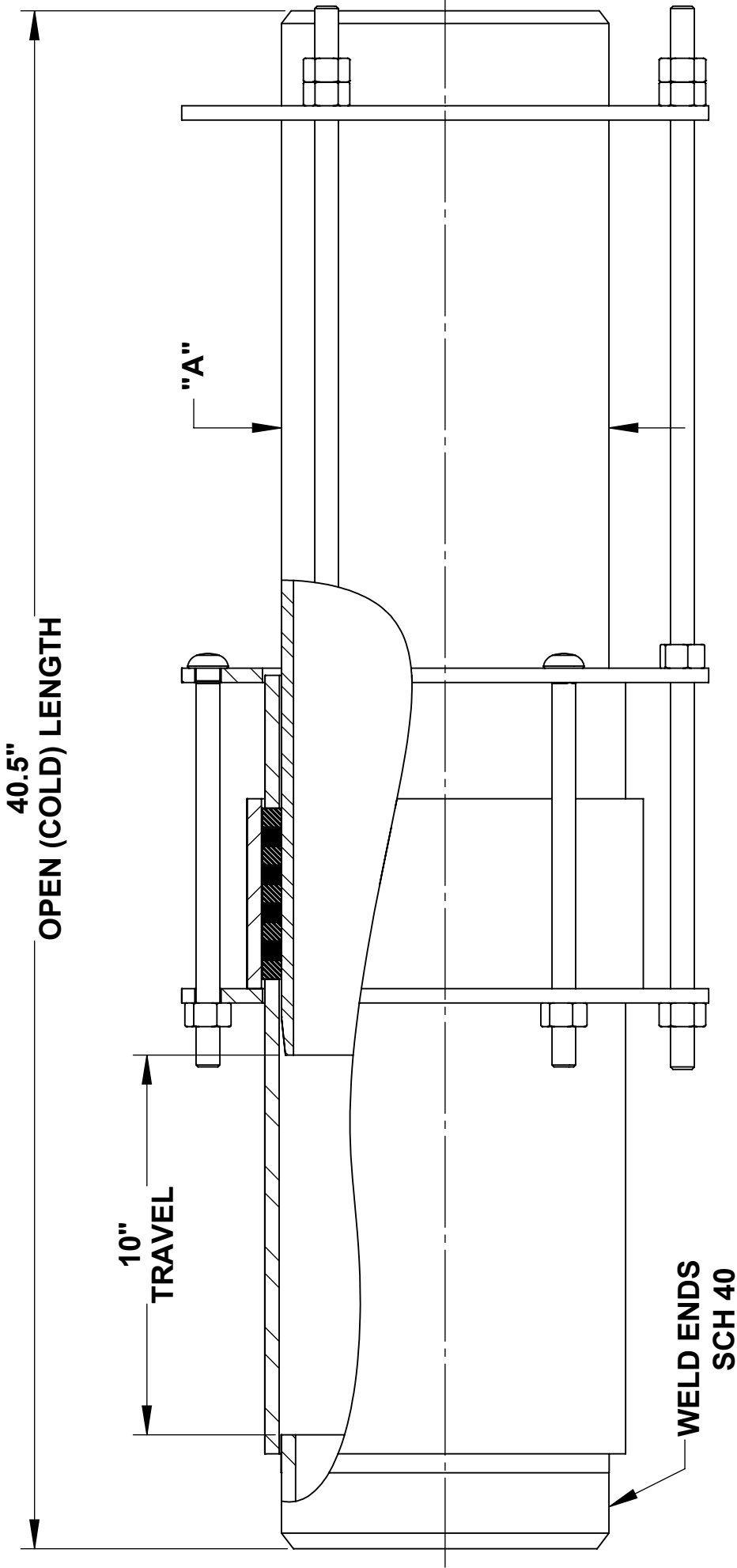
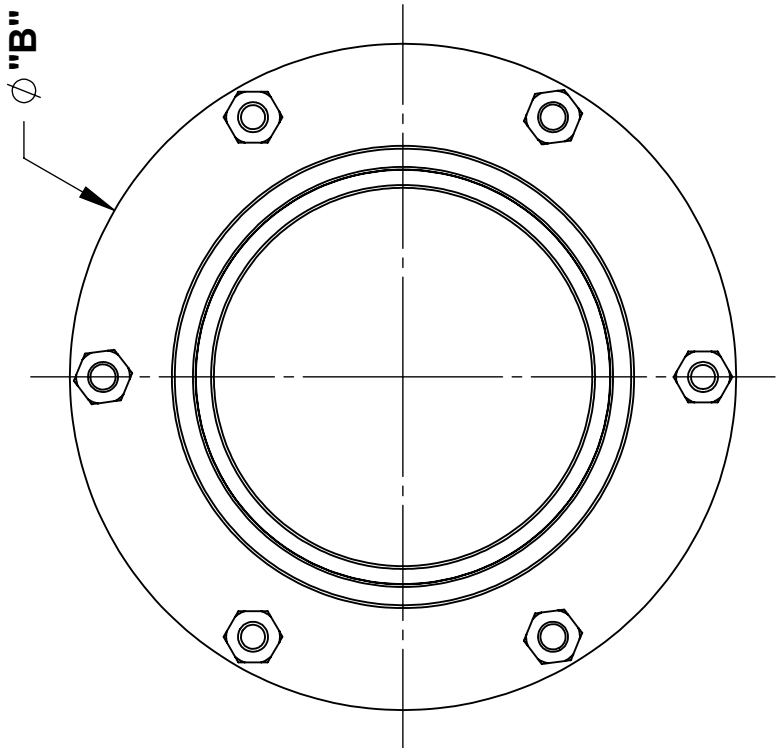
WELD ENDS WITH SLIP PIPE - WITHOUT LIMIT RODS

NOM. PIPE SIZE	SLIP PIPE O.D. "A"	MAX O.D. "B"	APPROX. WEIGHT (LBS)
3	3.50	8.38	75
4	4.50	9.63	90
6	6.63	11.88	125
8	8.63	13.88	200
10	10.75	16.00	270
12	12.75	18.00	300
14	14.00	19.25	335
16	16.00	21.25	385
18	18.00	23.25	475
20	20.00	25.25	520
22	22.00	27.25	560
24	24.00	29.31	625

- NOTES:
- SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
 - 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
 - ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

TOLERANCES U.N.O. XX= +.03 XXX= +.015 FRACTIONS= ANGLES=+1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALEDWG.	APP'D	DATE
		CK'D	DATE
	SCALE: N/A	DRN	CHD
ALL DIMENSIONS ARE IN INCHES.		DATE	12/17/15
TITLE SPECIFICATION EXPANSION JOINT MODEL 611			
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N N/A	
		SPEC_611.DRW	2 OF 5 SHEET
		DWG. NO.	REV. 8/26/16

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



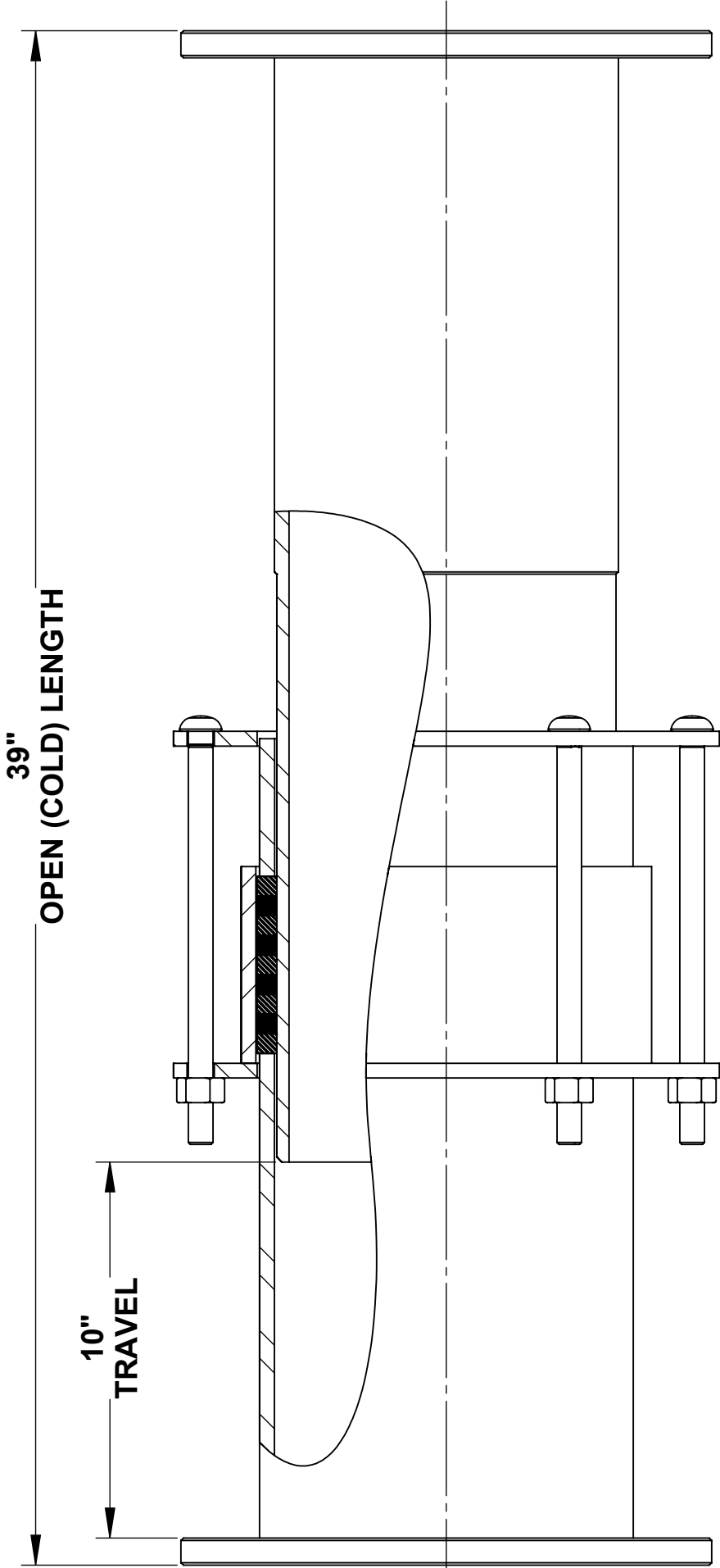
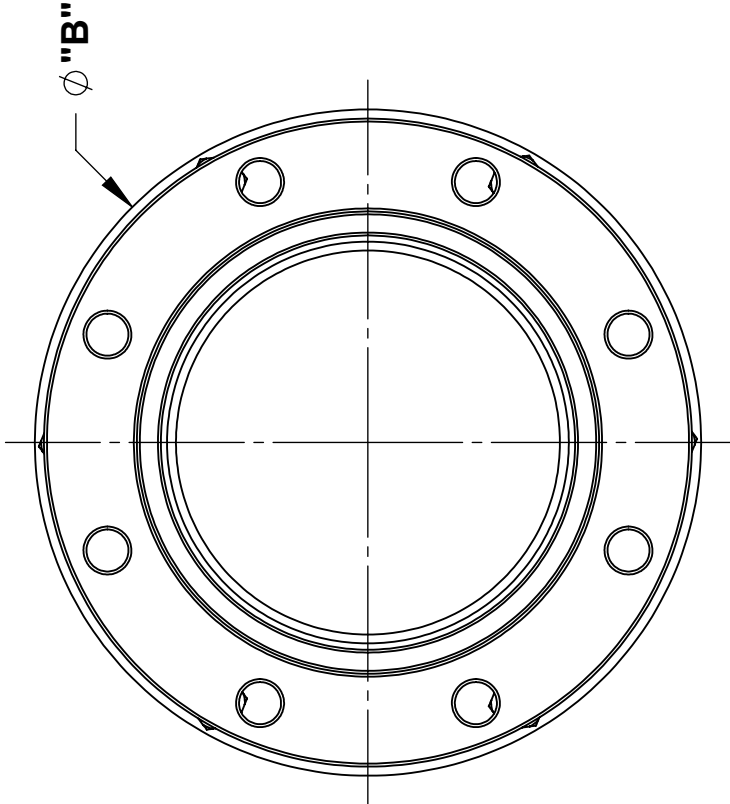
WELD ENDS WITH SLIP PIPE & LIMIT RODS

NOM. PIPE SIZE	SLIP PIPE O.D. "A"	MAX O.D. "B"	APPROX. WEIGHT (LBS)
3	3.50	8.38	80
4	4.50	9.63	100
6	6.63	11.88	150
8	8.63	13.88	200
10	10.75	16.00	265
12	12.75	18.00	330
14	14.00	19.25	380
16	16.00	21.25	430
18	18.00	23.25	480
20	20.00	25.25	540
22	22.00	27.25	595
24	24.00	29.31	650

- NOTES:
- SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
 - 8" WELD END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
 - ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

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
ALL DIMENSIONS ARE IN INCHES.		DATE	12/17/15
TITLE SPECIFICATION EXPANSION JOINT MODEL 611			
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N N/A	
		SPEC_611.DRW	3 OF 5 SHEET
		DWG. NO.	REV. 8/26/16

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



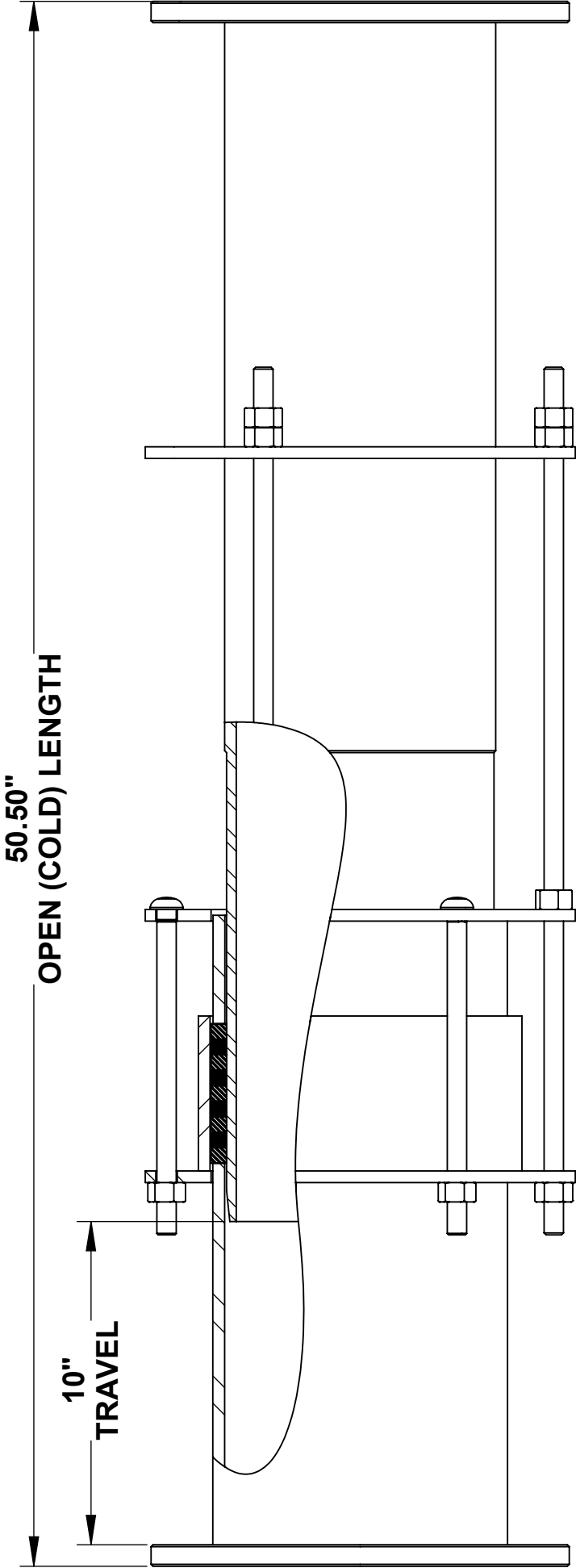
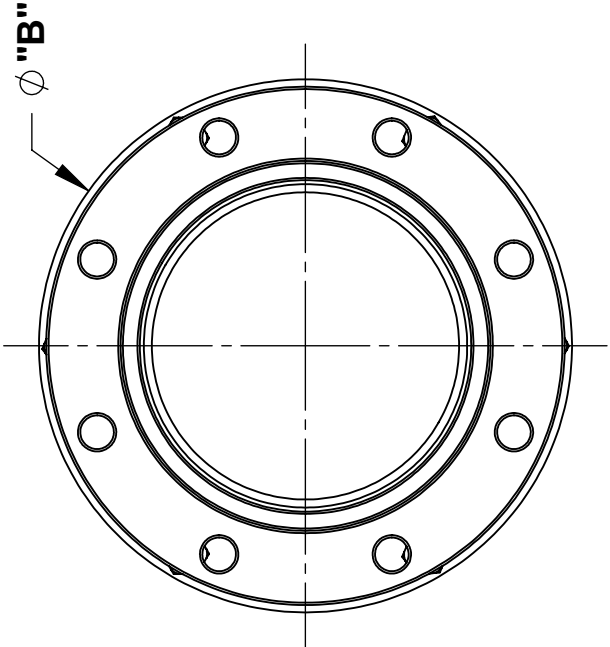
FLANGED ENDS WITH SLIP PIPE - WITHOUT LIMIT RODS

NOM. PIPE SIZE	MAX O.D. "B"	APPROX. WEIGHT (LBS)
3	8.38	90
4	9.63	115
6	11.88	165
8	13.88	260
10	16.00	355
12	18.00	425
14	19.25	515
16	21.25	580
18	23.25	735
20	25.25	850
22	27.25	930
24	29.31	1065

- NOTES:
- SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
 - 8" FLANGED END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
 - ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

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	12/17/15
TITLE SPECIFICATION EXPANSION JOINT MODEL 611			
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N N/A	
		SPEC_611.DRW	4 OF 5 SHEET
		DWG. NO.	REV.
			8/26/16

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



FLANGED ENDS WITH SLIP PIPE & LIMIT RODS

NOM. PIPE SIZE	MAX O.D. "B"	APPROX. WEIGHT (LBS)
3	8.38	95
4	9.63	125
6	11.88	185
8	13.88	260
10	16.00	350
12	18.00	460
14	19.25	560
16	21.25	684
18	23.25	740
20	25.25	870
22	27.25	965
24	29.31	1090

- NOTES:
- SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
 - 8" FLANGED END EXPANSION JOINT SHOWN OTHER SIZES SIMILAR
 - ENGINEERED FOR AXIAL PIPE MOVEMENT ONLY

TOLERANCES U.N.O. XX= +.03 XXX= +.015 FRACTIONS= ANGLES=+1° MACH. FIN=	NOTES: REMOVE BURRS AND SHARP EDGES DO NOT SCALEDWG.	APP'D	DATE
		CK'D	DATE
	SCALE: N/A	DRN	CHD
	ALL DIMENSIONS ARE IN INCHES.		DATE
TITLE SPECIFICATION EXPANSION JOINT MODEL 611			
SMITH-BLAIR, Inc. TEXARKANA, ARKANSAS		P/N N/A	
		SPEC_611.DRW	5 OF 5 SHEET
		DWG. NO.	8/26/16 REV.