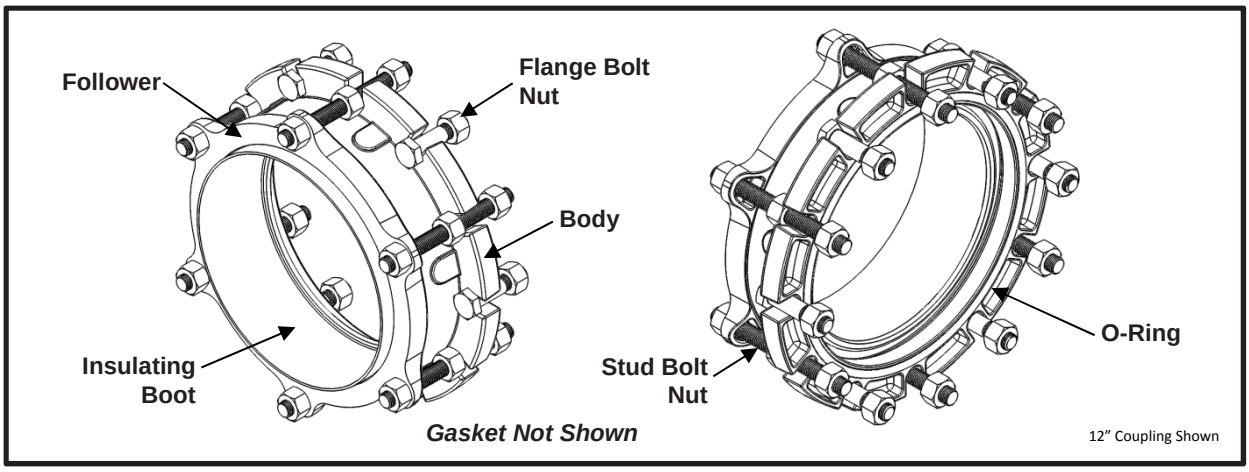
SPECIFICATION

OMNI™ CAST INSULATING FLANGED COUPLING ADAPTER

MODEL 942



APPLICATIONS

- **Typical Uses**
  - Joining and insulating plain-end pipe to flanged fittings, meters, valves, or other miscellaneous flanged service equipment
  - Replace cracked pipe or spooled flanges while insulating
- **Standard Pipe Sizes**
  - 3" to 12" nominal
- **Type of Pipe**
  - Carbon Steel, Stainless Steel, Ductile Iron, Cast Iron
- **Working Pressure**
  - Up to 175 psi

MATERIALS

- **Follower**
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish which meets application methods AWWA C213
  - Flanges color coded for rapid and correct installation: Red for iron pipe size, Blue for ductile, and Gray for asbestos cement
  - Permanently marked with part number and pipe size range for proper selection
- **Body**
  - Cast using Ductile Iron 65-45-12 per ASTM A536
  - Flexi-Coat® fusion bonded epoxy finish which meets application methods AWWA C213
  - Single body design for each nominal pipe size reducing inventory
  - Flange connection compatible with ANSI 125# and 150# bolt hole patterns
- **Gasket and O-ring**
  - Nitrile (Buna-N) per ASTM D2000
  - NSF/ANSI 61 and 372 certified
  - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20ºF to +180ºF
  - For ductile iron and asbestos cement pipe, the gaskets sealing surface has molded in ribs for maximum sealing on textured pipe
  - Gasket permanently marked with part number and pipe size range for proper selection

- **Insulating Boot**
  - Nitrile (Buna-N) per ASTM D2000
  - NSF/ANSI 61 and 372 certified
  - Compounded to resist water, oil, natural gas, acids, alkalies, most (aliphatic) hydrocarbon fluids, and many other chemicals
  - Temperature range: -20ºF to +180ºF
  - Positive stop molded into boot for pipe end
- **Flange Bolt**
  - Carbon Steel per ASTM A307
  - Fe/Zn coated per ASTM F1941-10
  - Size: 3”-4” nominal pipe size = 5/8”-11UNC Hex Head
6”-8” nominal pipe size = 3/4”-10UNC Hex Head
10”-12” nominal pipe size = 7/8”-09UNC Hex Head
  - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish
- **Nut**
  - Carbon Steel per ASTM A307
  - Fe/Zn coated per ASTM F1941-10
  - Size: 3”-4” nominal pipe size = 5/8” Heavy Hex Semi-Finished
6”-8” nominal pipe size = 3/4” Heavy Hex Semi-Finished
10”-12” nominal pipe size = 7/8” Heavy Hex Semi-Finished
- **Stud Bolt**
  - Carbon Steel per ASTM A193 grade B7
  - Fe/Zn coated per ASTM F1941-10
  - Size: 3”-4” nominal pipe size = 5/8”-11UNC x 7” long, All Thread
6”-8” nominal pipe size = 3/4”-10UNC x 8” long, All Thread
10”-12” nominal pipe size = 7/8”-09UNC x 9” long, All Thread
  - Rolled threads for improved physical characteristics, greater thread accuracy, and smooth surface finish

LISTINGS

- UL certified to NSF/ANSI 61 and 372
- Meets applicable AWWA C219 standards

OPTIONS

- 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.)
- Anode connector
- Anchor Studs (Pipe Restraint)
- Transition gasket for undersized pipe

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NOTES

- This product **does not** restrain the pipe from pulling out of the fitting unless optional anchor studs are specified
- These product specifications were correct at the time of publication and are subject to change without notice
- Omni™ 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



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.

Minimum 3" pipe insertion required

Total Maximum Allowable Axial Pipe Movement per Coupling

Coupling Size	Allowable Movement
3/4" to 2"	1/16"
2-1/2" to 10"	1/8"
10-3/4" and Larger	3/16"

Pipe End Tolerances

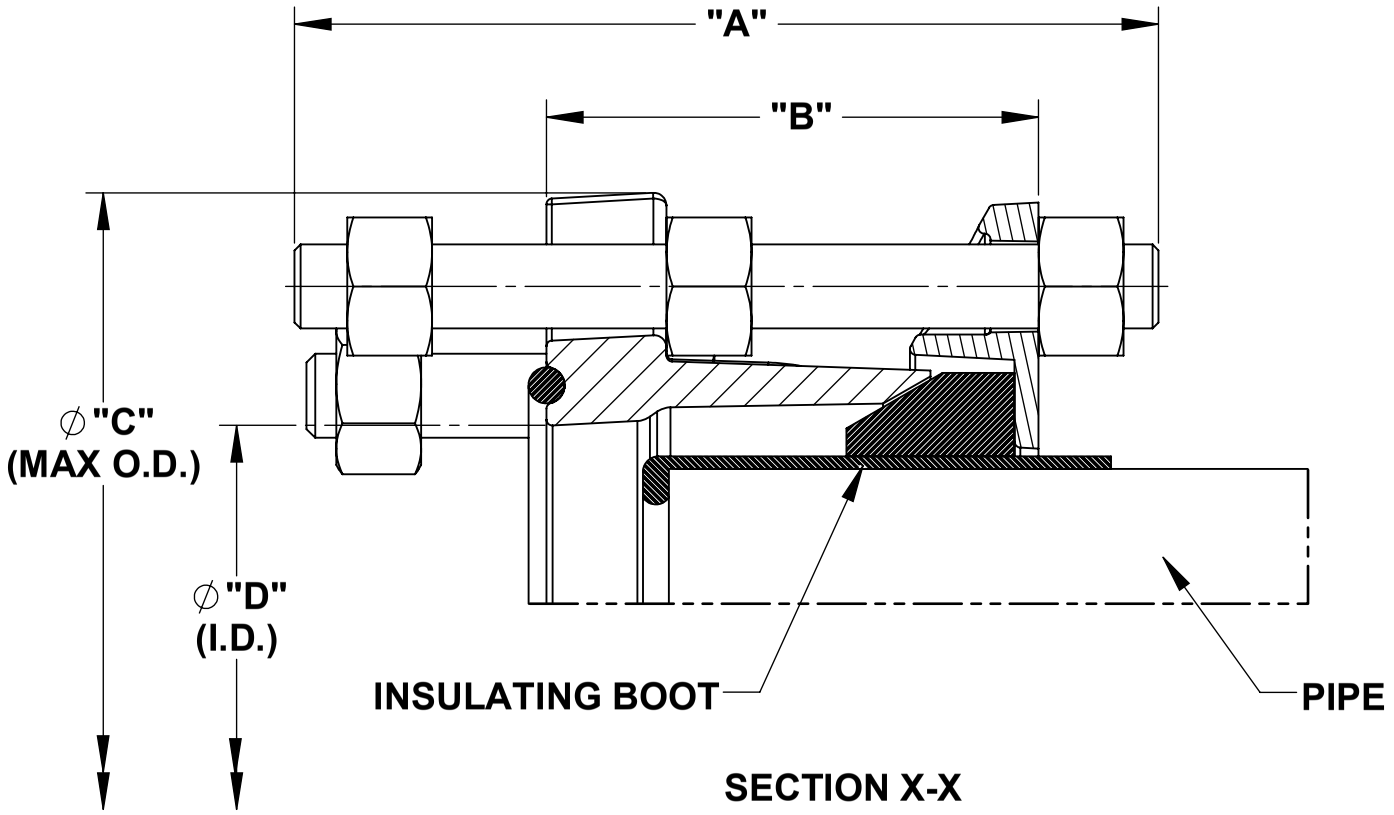
Pipe OD	Minus Tolerance	Plus Tolerance
1/2" up to 16"	-0.06	+0.06
>16" up to 24"	-0.08	+0.08
>24" up to 42"	-0.10	+0.10
>42"	-0.06	+0.12

Maximum Angular Deflection per Coupling

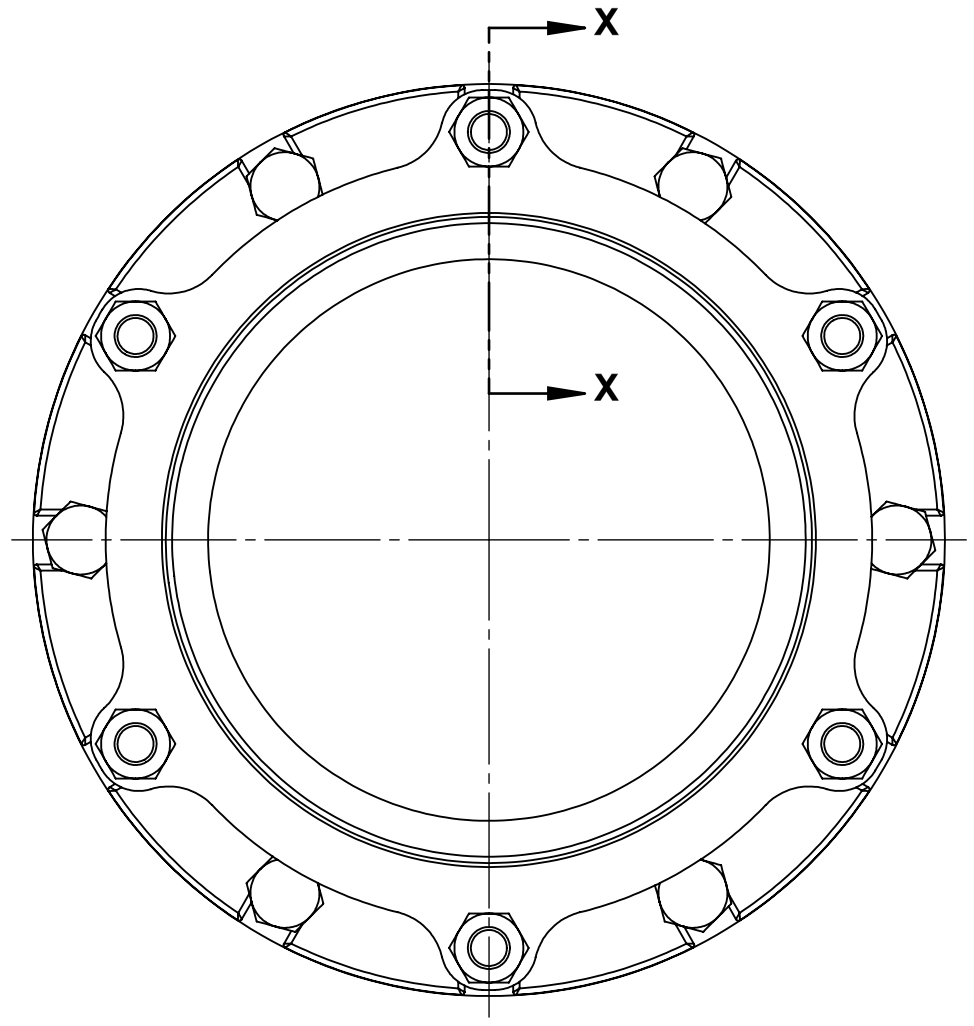
Nominal Pipe Size	Center Sleeve Length		
	5"	7"	10" and Larger
1/2" up to 2"	3-1/2°	3-1/2°	3-1/2°
>2" up to 12"	2°	2-1/4°	2-1/4°
>12" up to 24"	3/4°	1°	1-1/8°
>24" up to 36"	-	1-3/4°	2°
>36" up to 42"	-	1-1/2°	1-3/4°
>42" up to 60"	-	1-1/4°	1-1/2°
>60" up to 80"	-	-	1-1/4°
>80" up to 100"	-	-	1°
>100"	-	-	-

30 Globe Ave, Texarkana, AR 71854
Ph: 870-773-5127 • Fax: 870-773-5212
Toll-Free Numbers: Ph: 800-643-9705 • Fax: 800-648-6792

WRENCH SIZE CHART	
NUT	SIZE
5/8"-11UNC HH	1-1/16"
3/4"-10UNC HH	1-1/4"
7/8"-09UNC HH	1-7/16"



SECTION X-X



CERTIFIED TO NSF/ANSI 61-G & 372

NOTES:
1. SEE SMITH-BLAIR CATALOG FOR ADDITIONAL DETAILS
2. 12" COUPLING SHOWN OTHER SIZES SIMILAR
3. MATING FLANGE NOT SHOWN

NOMINAL SIZE	A	B	C	D	STUD BOLT		FLANGE BOLT		APPROX. WT. (LB)
					QTY.	SIZE	QTY.	SIZE	
3	7	3.00	7.75	3.88	4	5/8" X 7"	-	-	17
4			9.03	5.24			4	5/8"	22
6	8	3.50	10.88	7.25	4	3/4" X 8"	4	3/4"	29
8			13.38	9.41					40
10	9	4.00	15.88	11.63	6	7/8" X 9"	6	7/8"	60
12			18.75	14.00					80

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	1/13/16

TITLE

SPECIFICATION

OMNI™ CAST INSULATING FLANGED COUPLING ADAPTER MODEL 942

SMITH-BLAIR, Inc.
TEXARKANA, ARKANSAS

P/N N/A

DWG. NO. SPEC_932.DRW

SHEET 1 OF 1

REV. 7/1/16