

# Steel Fabricated Coupling

## Straight Connection

# 411



**Description:** A bolted sleeve type coupling for joining plain end pipe of the same diameters.

**Application:** Joining plain end pipe without the need for welding or special pipe fittings.

### Key Features:

- Meets applicable AWWA C219 Standards
- Allows for limited expansion and contraction
- Will dampen vibration to reduce pipe fatigue
- Easy to install, no special pipe end preparation required
- Available in a wide variety of pipe O.D. sizes and sleeve lengths
- Most sizes will accommodate anchor studs to restrain the joints
- Can be custom made to fit odd O.D.s or other unusual applications
- Provided with or without pipe stops to accommodate customer needs
- Has good deflection capabilities, allows change in piping direction without the need of elbows, bends
- Steel sizes built to specific O.D. and Ductile Iron sizes are built with range to accommodate the variances in Ductile Iron pipe O.D.s

### Materials Specifications (subject to change):

SLEEVE: ASTM A53, ASTM A512 or Carbon Steel having minimum yield of 30,000 PSI

FOLLOWERS: Ductile Iron ASTM A536, Steel AISI C 1020, or A715 Grade 80 HSLA Steel. Designed for a high strength-to-weight ratio. Follower thickness determined by coupling size

BOLTS & NUTS: High strength, low alloy Steel with heavy semi-finished hexagon nuts *Optional: Stainless Steel and Carbon Steel ASTM A307 electro-galvanized with di-chromate seal*

GASKET: Nitrile (Buna N) NSF 61 compounded to produce superior storage and performance characteristics while resisting water, acids, alkalis, most (aliphatic) hydrocarbon fluids, and other chemicals

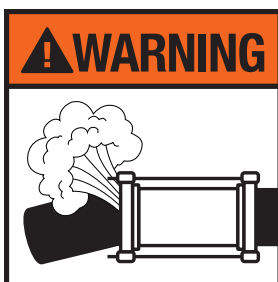
Temperature Range: -20°F to 180°F

FINISH: Flexi-Coat® Fusion Bonded Epoxy Finish

**Working Pressure:** Up to 150 PSI

**Pipe Applications:** All Types. HDPE requires use of stiffeners. Contact Smith-Blair Engineering for any questions.

**Sizes (in inches):** ½, ¾, 1, 1¼, 1½, 2, 2½, 3, 3-4, 4, 4-5, 6, 8, 10, 12, 12-14, 14, 16, 18, 20, 24, 30, 36, 42, 48, 54. NOTE: Larger sizes available upon request.



**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.

# Ti SALES

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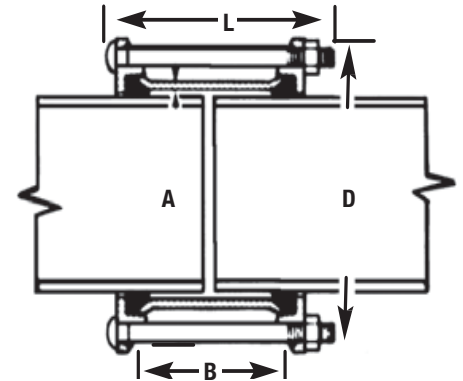
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### Total Angular Deflection Per Joint

FOR PIPE O.D. RANGES		SLEEVE LENGTH		
INCHES	MM	5" 127MM	7" 178MM	10" 250MM
0.84 thru 2.38	21 thru 60.5	7°	7°	7°
2.50 thru 13.50	63.5 thru 342.9	4°	4½°	4½°
13.60 thru 24.00	345.4 thru 610	2½°	4°	4½°
24.10 thru 36.00	612 thru 914	2°	3½°	4°
36.10 thru 42.00	917 thru 1067	-	3°	3½°
42.10 thru 60.00	1323 thru 1524	-	2½°	3°
60.10 thru 80.00	1527 thru 2032	-	-	2½°
80.10 thru 100.00	2035 thru 2540	-	-	2°



### Standard Lengths for Steel Sizes

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	CATALOG NO. BUNA-N GASKET	SLEEVE THK. X LGTH. IN.		FLANGE O.D. INCHES (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
1/2	0.84	411-00008401-003	.120	4 1/2	3 5/8	2	1/2	7	2 1/4
3/4	1.05	411-00010501-003	.120	4 1/2	3 7/8	2	1/2	7	2 1/2
1	1.32	411-00013201-003	.120	5	4 1/4	2	1/2	7	3 1/4
1 1/4	1.66	411-00016601-003	.120	5	4 9/16	2	1/2	7	4
1 1/2	1.90	411-00019001-003	.120	5	4 13/16	2	1/2	7	4 1/4
2	2.00	411-00020001-003	.120	5	4 13/16	2	1/2	7	4 1/4
2	2.38	411-00023801-003	.120	5	5 5/16	2	1/2	7	4 3/4
		411-00023851-003	.120	5	5 11/16	2	5/8	8	5 1/2
		411-00023861-003	.120	5	5 11/16	3	5/8	8	6 1/2
		411-00023802-003	.120	7	5 11/16	3	5/8	10 1/2	9 1/2
2 1/2	2.88	411-00028801-003	.203	5	6 1/2	3	5/8	8	12 3/4
3	3.00	411-00030001-003	.203	5	6 9/16	3	5/8	8	12 3/4
	3.50	411-90035001-003	.180	5	8 3/100	3	5/8	6	11 1/2
		411-00035051-003	.180	5	7 9/100	4	5/8	8	12 1/4
		411-90035002-003	.180	7	8 3/100	3	5/8	10 1/2	14 1/2
3 1/2-4	4.00	411-00040001-003	.188	5	7 9/16	4	5/8	8 1/2	17 1/2
+4	4.50	411-90045001-003	.188	5	9 1/20	4	5/8	6	13
		411-90045002-003	.188	7	9 1/20	4	5/8	8	15 1/2
4 1/2-5	5.00	411-00050001-003	.250	5	8 5/8	4	5/8	8	20 1/2
5	5.56	411-00055601-003	.250	5	9 3/16	4	5/8	8	20 1/2
		411-00055602-003	.250	7	9 3/16	4	5/8	10 1/2	23 1/2
		411-00055603-003	.250	10	9 3/16	4	5/8	13 1/2	31 1/2

Standard Length Sleeves 1/2" thru 12" Steel Pipe Sizes. + Indicates couplings furnished with Steel "Z" section, High Strength Follower Flanges. The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Couplings working pressures depend on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. ConsultSmith-Blair® regarding your specific coupling pressure requirements.

## Standard Lengths for Steel Sizes, Continued

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	CATALOG NO. BUNA-N GASKET	SLEEVE THK. X LGTH. IN.		FLANGE O.D. INCHES (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
+6	6.63	411-90066301-003	.250	5	11 1/2	6	5/8	6	22 3/4
		411-90066302-003	.250	7	11 1/2	6	5/8	8	26
		411-90066303-003	.250	10	11 1/2	6	5/8	10 1/2	34 1/4
+8	8.63	411-90086301-003	.250	5	13 1/2	6	5/8	6	28
		411-90086302-003	.250	7	13 1/2	6	5/8	8	32
		411-90086303-003	.250	10	13 1/2	6	5/8	10 1/2	42
10	10.00	411-00100001-003	.250	5	14 5/16	8	5/8	8	33
		411-00100002-003	.250	7	14 5/16	8	5/8	10 1/2	38
		411-00100003-003	.250	10	14 5/16	8	5/8	13 1/2	50
+10	10.75	411-90107501-003	.250	5	15 36/59	8	5/8	6	34
		411-90107502-003	.250	7	15 36/59	8	5/8	8	40
		411-90107507-003	.375	7	15 36/59	8	5/8	8	49
		411-90107503-003	.250	10	15 36/59	8	5/8	10 1/2	52
12	12.00	411-00120001-003	.250	5	16 5/16	8	5/8	8	37
		411-00120002-003	.250	7	16 5/16	8	5/8	10 1/2	44
		411-00120003-003	.250	10	16 5/16	8	5/8	13 1/2	56
+12	12.75	411-90127501-003	.250	5	17 36/59	8	5/8	6	39
		411-90127502-003	.250	7	17 36/59	8	5/8	8	46
		411-90127507-003	.375	7	17 25/41	8	5/8	8	56
		411-90127503-003	.250	10	17 36/59	8	5/8	10 1/2	59
14	14.00	411-00140001-003	.250	5	18 5/16	6	5/8	8	41
		411-00140002-003	.250	7	18 5/16	6	5/8	10 1/2	48
		411-00140007-003	.375	7	18 7/16	6	5/8	10 1/2	75
		411-00140008-003	.375	10	18 7/16	6	5/8	13 1/2	94
16	16.00	411-00160002-003	.250	7	20 5/16	8	5/8	10 1/2	56
		411-00160007-003	.375	7	20 7/16	8	5/8	10 1/2	87
		411-00160003-003	.250	10	20 5/16	8	5/8	10 1/2	72
		411-00160008-003	.375	10	20 7/16	8	5/8	10 1/2	108
18	18.00	411-00180002-003	.250	7	22 7/16	8	5/8	10 1/2	81
		411-00180007-003	.375	7	22 7/16	8	5/8	10 1/2	96
		411-00180003-003	.250	10	22 7/16	8	5/8	10 1/2	109
		411-00180008-003	.375	10	22 7/16	8	5/8	13 1/2	119
20	20.00	411-00200002-003	.250	7	24 7/16	10	5/8	10 1/2	91
		411-00200007-003	.375	7	24 7/16	10	5/8	10 1/2	107
		411-00200003-003	.250	10	24 7/16	10	5/8	13 1/2	122
		411-00200008-003	.375	7	24 7/16	10	5/8	13 1/2	134

## Standard Length Sleeves 1/2" thru 12" Steel Pipe Sizes

+ Indicates couplings furnished with Steel "Z" section, High Strength Follower Flanges.

The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Couplings working pressures depend on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair® regarding your specific coupling pressure requirements.

## Standard Length Sleeves 14" thru 24" Steel Pipe Sizes

The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Couplings working pressures depend on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair® regarding your specific coupling pressure requirements.

## Standard Lengths for Steel Sizes, Continued

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	CATALOG NO. BUNA-N GASKET	SLEEVE THK. X LGTH. IN.		FLANGE O.D. INCHES (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
22	22.00	411-00220002-003	.250	7	26 7/16	10	5/8	10 1/2	98
		411-00220007-003	.375	7	26 7/16	10	5/8	10 1/2	116
		411-00220003-003	.250	10	26 7/16	10	5/8	13 1/2	132
		411-00220008-003	.375	10	26 7/16	10	5/8	13 1/2	145
24	24.00	411-00240002-003	.250	7	28 7/16	10	5/8	10 1/2	106
		411-00240007-003	.375	7	28 7/16	10	5/8	10 1/2	125
		411-00240003-003	.250	10	28 7/16	10	5/8	13 1/2	142
		411-00240008-003	.375	10	28 7/16	10	5/8	13 1/2	156

## Standard Length Sleeves 14" thru 24" Steel Pipe Sizes

The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Couplings working pressures depend on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair® regarding your specific coupling pressure requirements.

## Standard Lengths for Ductile Iron and Cast Iron Sizes

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	CATALOG NO.	SLEEVE THK. X LGTH. IN.		OVERALL DIA. (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
2	2.34-2.56	411-00025002-003	.216	7	6.3/16	2	5/8	10 1/2	13.5
		411-00025003-003	.216	10	6.3/16	2	5/8	13 1/2	16.3
2 1/2	2.75-2.88	411-00027502-003	.203	7	6.3/16	3	5/8	11	14.8
		411-00027503-003	.203	10	6.3/16	3	5/8	14	17.8
3	3.75-3.86	411-00038002-003	.237	7	7 13/16	3	5/8	10 1/2	20.3
		411-00038003-003	.237	10	7 13/16	3	5/8	13 1/2	24.6
3-4	3.87-4.04	411-00039602-003	.188	7	7 11/32	4	5/8	11	21.4
		411-00039603-003	.188	10	7 11/32	4	5/8	14	25.7
4	4.07-4.19	411-00041302-003	.188	7	8 3/32	4	5/8	11	22.3
		411-00041303-003	.188	10	8 3/32	4	5/8	14	26.8
4	4.74-5.06	411-00050002-003	.250	7	8 19/32	4	5/8	11	27
		411-00050003-003	.250	10	8 19/32	4	5/8	14	32.5
4-5	5.00-5.16	411-00051002-003	.250	7	9 5/32	4	5/8	11	27.5
		411-00051003-003	.250	10	9 5/32	4	5/8	14	33.1
6	6.84-6.96	411-00069002-003	.250	7	10 9/16	5	5/8	11	37.2
		411-00069003-003	.250	10	10 9/16	5	5/8	14	44.8
6	7.04-7.16	411-00071002-003	.250	7	10 9/16	5	5/8	11	38.3
		411-00071003-003	.250	10	10 9/16	5	5/8	14	46.1
6	7.14-7.26	411-00072002-003	.250	7	11 5/16	5	5/8	11	38.8
		411-00072003-003	.250	10	11 5/16	5	5/8	14	46.8
8	8.91-9.30	411-00090502-003	.250	7	12 13/16	6	5/8	11	48.8
		411-00090503-003	.250	10	12 13/16	6	5/8	14	58.8
8	9.30-9.50	411-00094202-003	.250	7	13 23/32	6	5/8	11	50.8
		411-00094203-003	.250	10	13 23/32	6	5/8	14	61.2
10	11.04-11.16	411-00111002-003	.250	7	15 1/8	7	5/8	11	59.9
		411-00111003-003	.250	10	15 1/8	7	5/8	14	72.1
10	11.34-11.46	411-00114002-003	.250	7	15 1/8	7	5/8	11	61.5
		411-00114003-003	.250	10	15 1/8	7	5/8	14	74.1
10	11.84-12.00	411-00119502-003	.250	7	16	8	5/8	11	64.5
		411-00119503-003	.250	10	16	8	5/8	14	77.7

## Standard and Long Length Sleeves 14" thru 24" CAST IRON

The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling.

NOTE: Coupling working pressures depend on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair regarding your specific coupling pressure requirements.

\*\*\*The last three numbers of the catalog number indicate the type of gasket. (Buna N) gaskets are furnished as standard.

BUNA-N-003, BUNA-N Protected -015 (with brass spring molded into leading edge)

## Standard Lengths for Ductile Iron and Cast Iron Sizes, Continued

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	CATALOG NO.	SLEEVE THK. X LGTH. IN.		OVERALL DIA. (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
12	13.14-13.26	411-00132007-003	.375	7	17 5/8	8	5/8	11	71.3
		411-00132008-003	.375	10	17 5/8	8	5/8	14	85.8
12	13.44-13.56	411-00135007-003	.375	7	17 7/8	8	5/8	11	72.9
		411-00135008-003	.375	10	17 7/8	8	5/8	14	87.8
12-14	13.88-14.06	411-00139207-003	.375	7	18 15/16	6	5/8	11	75.2
		411-00139208-003	.375	10	18 15/16	6	5/8	14	90.5
14	15.30	411-00153007-003	3/8	7	19 7/8	8	5/8	11	86
		411-00153008-003	3/8	10	19 7/8	8	5/8	14	107
		411-00153015-003	3/8	16	19 7/8	8	5/8	20	144
		411-00153016-003	3/8	24	19 7/8	8	5/8	28	196
14	15.65	411-00156507-003	3/8	7	20 3/16	8	5/8	11	88
		411-00156508-003	3/8	10	20 3/16	8	5/8	14	109
		411-00156515-003	3/8	16	20 3/16	8	5/8	20	146
		411-00156516-003	3/8	24	20 3/16	8	5/8	28	200
16	17.40	411-00174007-003	3/8	7	21 15/16	8	5/8	11	92
		411-00174008-003	3/8	10	21 15/16	8	5/8	14	119
		411-00174015-003	3/8	16	21 15/16	8	5/8	20	160
		411-00174016-003	3/8	24	21 15/16	8	5/8	28	218
16	17.80	411-00178007-003	3/8	7	22 3/8	8	5/8	11	93
		411-00178008-003	3/8	10	22 3/8	8	5/8	14	120
		411-00178015-003	3/8	16	22 3/8	8	5/8	20	162
		411-00178016-003	3/8	24	22 3/8	8	5/8	28	221
18	19.50	411-00195007-003	3/8	7	24 1/16	10	5/8	11	107
		411-00195008-003	3/8	10	24 1/16	10	5/8	14	133
		411-00195015-003	3/8	16	24 1/16	10	5/8	20	179
		411-00195016-003	3/8	24	24 1/16	10	5/8	28	245
18	19.92	411-00199207-003	3/8	7	24 1/2	10	5/8	11	109
		411-00199208-003	3/8	10	24 1/2	10	5/8	14	135
		411-00199215-003	3/8	16	24 1/2	10	5/8	20	182
		411-00199216-003	3/8	24	24 1/2	10	5/8	28	249
20	21.60	411-00216007-003	3/8	7	26 1/8	10	5/8	11	117
		411-00216008-003	3/8	10	26 1/8	10	5/8	14	145
		411-00216015-003	3/8	16	26 1/8	10	5/8	20	195
		411-00216016-003	3/8	24	26 1/8	10	5/8	28	266
20	22.06	411-00220607-003	3/8	7	26 5/8	10	5/8	11	119
		411-00220608-003	3/8	10	26 5/8	10	5/8	14	148
		411-00220615-003	3/8	16	26 5/8	10	5/8	20	200
		411-00220616-003	3/8	24	26 5/8	10	5/8	28	271
24	25.80	411-00258007-003	3/8	7	30 3/8	12	5/8	11	138
		411-00258008-003	3/8	10	30 3/8	12	5/8	14	171
		411-00258015-003	3/8	16	30 3/8	12	5/8	20	231
		411-00258016-003	3/8	24	30 3/8	12	5/8	28	315
24	26.32	411-00263207-003	3/8	7	30 7/8	12	5/8	11	140
		411-00263208-003	3/8	10	30 7/8	12	5/8	14	174
		411-00263215-003	3/8	16	30 7/8	12	5/8	20	235
		411-00263216-003	3/8	24	30 7/8	12	5/8	28	321

## Standard and Long Length Sleeves 14" thru 24" CAST IRON

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\*\*\*The last three numbers of the catalog number indicate the type of gasket. (Buna N) gaskets are furnished as standard.

BUNA-N-003, BUNA-N Protected -015 (with brass spring molded into leading edge)

## Large Diameter Standard Lengths

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	SLEEVE THK. X LGTH (A) (B) INCHES	FOLLOWER FLANGE O.D. INCHES	BOLTS		CATALOG NUMBER	APPROX. SHIP WT. LBS.
				NO.	DIA. X LGTH (L)		
30	30.00	1/4 x 7	34 7/16	12	5/8 x 11	411-00300002-003	132
		1/4 x 10	34 7/16	12	5/8 x 14	411-00300003-003	152
		3/8 x 7	34 7/16	12	5/8 x 11	411-00300007-003	155
		3/8 x 10	34 7/16	12	5/8 x 14	411-00300008-003	187
		1/2 x 10	34 7/16	12	5/8 x 14	411-00300009-003	221
30	30.50	1/4 x 7	34 15/16	12	5/8 x 11	411-00305002-003	133
		1/4 x 10	34 15/16	12	5/8 x 14	411-00305003-003	154
		3/8 x 7	34 15/16	12	5/8 x 11	411-00305007-003	157
		3/8 x 10	34 15/16	12	5/8 x 14	411-00305008-003	189
		1/2 x 10	34 15/16	12	5/8 x 14	411-00305009-003	224
30	31.74	1/4 x 7	36 3/16	14	5/8 x 11	411-00317402-003	139
		1/4 x 10	36 3/16	14	5/8 x 14	411-00317403-003	163
		3/8 x 7	36 3/16	14	5/8 x 11	411-00317407-003	164
		3/8 x 10	36 3/16	14	5/8 x 14	411-00317408-003	198
		1/2 x 10	36 3/16	14	5/8 x 14	411-00317409-003	235
30	32.00	1/4 x 7	36 7/16	14	5/8 x 11	411-00320002-003	140
		1/4 x 10	36 7/16	14	5/8 x 14	411-00320003-003	164
		3/8 x 7	36 7/16	14	5/8 x 11	411-00320007-003	166
		3/8 x 10	36 7/16	14	5/8 x 14	411-00320008-003	201
		1/2 x 10	36 7/16	14	5/8 x 14	411-00320009-003	237
30	34.00	1/4 x 7	38 7/16	14	5/8 x 11	411-00340002-003	148
		1/4 x 10	38 7/16	14	5/8 x 14	411-00340003-003	173
		3/8 x 7	38 7/16	14	5/8 x 11	411-00340007-003	175
		3/8 x 10	38 7/16	14	5/8 x 14	411-00340008-003	211
		1/2 x 10	38 7/16	14	5/8 x 14	411-00340009-003	250
36	36.00	1/4 x 7	40 7/16	16	5/8 x 11	411-00360002-003	158
		1/4 x 10	40 7/16	16	5/8 x 14	411-00360003-003	184
		3/8 x 7	40 7/16	16	5/8 x 11	411-00360007-003	183
		3/8 x 10	40 7/16	16	5/8 x 14	411-00360008-003	225
		1/2 x 10	40 7/16	16	5/8 x 14	411-00360009-003	266
36	36.50	1/4 x 7	40 15/16	16	5/8 x 11	411-00365002-003	159
		1/4 x 10	40 15/16	16	5/8 x 14	411-00365003-003	186
		3/8 x 7	40 15/16	16	5/8 x 11	411-00365007-003	188
		3/8 x 10	40 15/16	16	5/8 x 14	411-00365008-003	227
		1/2 x 10	40 15/16	16	5/8 x 14	411-00365009-003	269
36	36.63	1/4 x 7	41 1/16	16	5/8 x 11	411-00366302-003	160
		1/4 x 10	41 1/16	16	5/8 x 14	411-00366303-003	187
		3/8 x 7	41 1/16	16	5/8 x 11	411-00366307-003	189
		3/8 x 10	41 1/16	16	5/8 x 14	411-00366308-003	228
		1/2 x 10	41 1/16	16	5/8 x 14	411-00366309-003	270

The basic design of bolted compression couplings does not provide for anchoring the pipes against pullout. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Coupling working pressure depends on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair regarding your specific coupling pressure requirements.

## Large Diameter Standard Lengths Continued

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	SLEEVE THK. X LGTH (A) (B) INCHES	FOLLOWER FLANGE O.D. INCHES	BOLTS		CATALOG NUMBER	APPROX. SHIP WT. LBS.
				NO.	DIA. X LGTH (L)		
36	37.96	1/4 x 7	42 13/32	16	5/8 x 11	411-00379602-003	162
		1/4 x 10	42 13/32	16	5/8 x 14	411-00379603-003	189
		3/8 x 7	42 13/32	16	5/8 x 11	411-00379607-003	191
		3/8 x 10	42 13/32	16	5/8 x 14	411-00379608-003	230
		1/2 x 10	42 13/32	16	5/8 x 14	411-00379609-003	272

The basic design of bolted compression couplings does not provide for anchoring the pipes against pullout. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Coupling working pressure depends on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair regarding your specific coupling pressure requirements.

## For Large Diameter Steel and Cast Iron Sizes Standard Lengths

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	SLEEVE THK. X LGTH (A) (B) INCHES	FOLLOWER FLANGE O.D. INCHES	BOLTS		CATALOG NUMBER	APPROX. SHIP WEIGHT LBS.
				NO.	DIA. X LGTH (L)		
36	38.30	1/4 x 7	42 3/4	16	5/8 x 11	411-00383002-003	166
		1/4 x 10	42 3/4	16	5/8 x 14	411-00383003-003	194
		3/8 x 7	42 3/4	16	5/8 x 11	411-00383007-003	196
		3/8 x 10	42 3/4	16	5/8 x 14	411-00383008-003	237
		1/2 x 10	42 3/4	16	5/8 x 14	411-00383009-003	281
42	42.00	1/4 x 7	46 1/2	18	5/8 x 11	411-00420002-003	123
		1/4 x 10	46 1/2	18	5/8 x 14	411-00420003-003	214
		3/8 x 7	46 1/2	18	5/8 x 11	411-00420007-003	216
		3/8 x 10	46 1/2	18	5/8 x 14	411-00420008-003	262
		1/2 x 10	46 1/2	18	5/8 x 14	411-00420009-003	310
42	42.50	1/4 x 7	47	18	5/8 x 11	411-00425002-003	186
		1/4 x 10	47	18	5/8 x 14	411-00425003-003	215
		3/8 x 7	47	18	5/8 x 11	411-00425007-003	220
		3/8 x 10	47	18	5/8 x 14	411-00425008-003	263
		1/2 x 10	47	18	5/8 x 14	411-00425009-003	312
42	42.75	1/4 x 7	47 1/4	18	5/8 x 11	411-00427502-003	187
		1/4 x 10	47 1/4	18	5/8 x 14	411-00427503-003	216
		3/8 x 7	47 1/4	18	5/8 x 11	411-00427507-003	221
		3/8 x 10	47 1/4	18	5/8 x 14	411-00427508-003	264
		1/2 x 10	47 1/4	18	5/8 x 14	411-00427509-003	315
42	44.20	1/4 x 7	48 11/16	18	5/8 x 11	411-00442002-003	190
		1/4 x 10	48 11/16	18	5/8 x 14	411-00442003-003	225
		3/8 x 7	48 11/16	18	5/8 x 11	411-00442007-003	225
		3/8 x 10	48 11/16	18	5/8 x 14	411-00442008-003	275
		1/2 x 10	48 11/16	18	5/8 x 14	411-00442009-003	325
42	44.50	1/4 x 7	49	18	5/8 x 11	411-00445002-003	193
		1/4 x 10	49	18	5/8 x 14	411-00445003-003	228
		3/8 x 7	49	18	5/8 x 11	411-00445007-003	228
		3/8 x 10	49	18	5/8 x 14	411-00445008-003	278
		1/2 x 10	49	18	5/8 x 14	411-00445009-003	329

The basic design of bolted compression couplings does not provide for anchoring the pipes against pullout. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Coupling working pressure depends on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair regarding your specific coupling pressure requirements.

## For Large Diameter Steel and Cast Iron Sizes Standard Lengths, Continued

NOM. PIPE SIZE IN.	PIPE O.D. INCHES	SLEEVE THK. X LGTH (A) (B) INCHES	FOLLOWER	BOLTS		CATALOG NUMBER	APPROX. SHIP WEIGHT LBS.
			FLANGE O.D. INCHES	NO.	DIA. X LGTH (L)		
48	48.00	1/4 x 7	52 1/2	20	5/8 x 11	411-00480002-003	208
		1/4 x 10	52 1/2	20	5/8 x 14	411-00480003-003	245
		3/8 x 7	52 1/2	20	5/8 x 11	411-00480007-003	246
		3/8 x 10	52 1/2	20	5/8 x 14	411-00480008-003	299
		1/2 x 10	52 1/2	20	5/8 x 14	411-00480009-003	354
48	48.75	1/4 x 7	53 1/4	20	5/8 x 11	411-00487502-003	212
		1/4 x 10	53 1/4	20	5/8 x 14	411-00487503-003	249
		3/8 x 7	53 1/4	20	5/8 x 11	411-00487507-003	246
		3/8 x 10	53 1/4	20	5/8 x 14	411-00487508-003	303
		1/2 x 10	53 1/4	20	5/8 x 14	411-00487509-003	358
48	50.50	1/4 x 7	55	20	5/8 x 11	411-00505002-003	217
		1/4 x 10	55	20	5/8 x 14	411-00505003-003	255
		3/8 x 7	55	20	5/8 x 11	411-00505007-003	258
		3/8 x 10	55	20	5/8 x 14	411-00505008-003	312
		1/2 x 10	55	20	5/8 x 14	411-00505009-003	372
48	50.80	1/4 x 7	55 5/16	20	5/8 x 11	411-00508002-003	220
		1/4 x 10	55 5/16	20	5/8 x 14	411-00508003-003	260
		3/8 x 7	55 5/16	20	5/8 x 11	411-00508007-003	261
		3/8 x 10	55 5/16	20	5/8 x 14	411-00508008-003	317
		1/2 x 10	55 5/16	20	5/8 x 14	411-00508009-003	375
54	57.10	1/4 x 7	61 19/32	24	5/8 x 11	411-00571002-003	238
		1/4 x 10	61 19/32	24	5/8 x 14	411-00571003-003	286
		3/8 x 7	61 19/32	24	5/8 x 11	411-00571007-003	292
		3/8 x 10	61 19/32	24	5/8 x 14	411-00571008-003	349
		1/2 x 10	61 19/32	24	5/8 x 14	411-00571009-003	414

The basic design of bolted compression couplings does not provide for anchoring the pipes against pullout. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling. NOTE: Coupling working pressure depends on many variables such as pipe type, pipe diameter, sleeve thickness, sleeve material, gasket cross section, follower type and number of bolts. Consult Smith-Blair regarding your specific coupling pressure requirements.



## Long Lengths 1/2" through 24" Steel Pipe

NOM. PIPE SIZE IN.	PIPE OD INCHES	CATALOG NO. BUNA-N GASKET	SLEEVE THK. X LGTH. IN.		FLANGE O.D. INCHES (D)	BOLTS			APPROX. SHIP WT. LBS.
			(A)	(B)		NO.	DIA. IN.	LGTH. IN. (L)	
1/2	0.084	411-00008410-003	0.120	12	3 5/8	2	1/2	14	4
3/4	1.05	411-00010510-003	0.120	12	3 7/8	2	1/2	14	4 1/2
1	1.32	411-00013210-003	0.120	12	4 1/2	2	1/2	14	5 1/2
1 1/4	1.66	411-00016610-003	0.120	12	4 9/16	2	1/2	14	7
1 1/2	1.90	411-00019010-003	0.120	12	4 13/16	2	1/2	14	7 1/2
2	2.00	411-00020010-003	0.120	12	4 13/16	2	1/2	14	7 1/2
	2.38	411-00023810-003	0.120	12	5 11/16	3	5/8	15	13
2 1/2	2.88	411-00028810-003	0.203	12	6 1/2	3	5/8	15	17
+3	3.50	411-90035010-003	0.180	12	8.03	3	5/8	15	20 1/2
3 1/2-4	4.00	411-00040010-003	0.180	12	7 9/16	4	5/8	15	25
+4	4.50	411-90045010-003	0.188	12	9.05	4	5/8	13 1/2	22
		411-90045011-003	0.188	16	9.05	4	5/8	17	27 1/2
		411-90045012-003	0.188	24	9.05	4	5/8	25	38 1/2
4 1/2-5	5.00	411-00050010-003	0.250	12	8 5/8	4	5/8	15	30
5	5.56	411-00055611-003	0.250	16	9 3/16	4	5/8	19 1/2	41
		411-00055612-003	0.250	24	9 3/16	4	5/8	27 1/2	52
+6	6.63	411-90066311-003	0.250	16	11 1/2	6	5/8	17	46 1/2
		411-90066312-003	0.250	24	11 1/2	6	5/8	25	65
+8	8.63	411-90086311-000	0.250	16	13 1/2	6	5/8	17	57
		411-90086312-003	0.250	24	13 1/2	6	5/8	25	79
10	10.00	411-00100012-003	0.250	16	14 5/16	8	5/8	19 1/2	67
		411-00100012-003	0.250	24	14 5/16	8	5/8	27 1/2	97
+10	10.75	411-90107511-003	0.250	16	15.61	8	5/8	17	71
		411-90107512-003	0.250	24	15.61	8	5/8	25	99
12	12.00	411-00120011-003	0.250	16	16 1/16	8	5/8	19 1/2	77
		411-00120012-003	0.250	24	16 1/16	8	5/8	27 1/2	108
+12	12.75	411-90127511-003	0.250	16	17.61	8	5/8	17	81
		411-90127512-003	0.250	24	17.61	8	5/8	25	113
		411-90127516-003	0.375	24	17.61	8	5/8	25	148
14	14.00	411-00140015-003	0.375	16	18 7/16	6	5/8	19 1/2	126
		411-00140016-003	0.375	24	18 7/16	6	5/8	27 1/2	171
16	16.00	411-00160015-003	0.375	16	20 7/16	8	5/8	19 1/2	146
		411-00160016-003	0.375	24	20 7/16	8	5/8	27 1/2	197
18	18.00	411-00180015-003	0.375	16	22 7/16	8	5/8	19 1/2	160
		411-00180016-003	0.375	24	22 7/16	8	5/8	27 1/2	219
20	20.00	411-00200015-003	0.375	16	24 7/16	10	5/8	19 1/2	180
		411-00200016-003	0.375	24	24 7/16	10	5/8	27 1/2	245
22	22.00	411-00220015-003	0.375	16	26 7/16	10	5/8	19 1/2	196
		411-00220016-003	0.375	24	26 7/16	10	5/8	27 1/2	265
24	24.00	411-00240015-003	0.375	16	28 7/16	10	5/8	19 1/2	210
		411-00240016-003	0.375	24	28 7/16	10	5/8	27 1/2	286

+ Indicates couplings furnished with Steel "Z" section, High Strength Follower Flanges.

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