



411 Steel Couplings

06/04



411 Steel Couplings--Standard Length Sleeves 1/2" thru 12" Steel Pipe Sizes

Nom. Pipe Size Inches	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	.084	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
2	2.38	411-00023851-003	.120	5	5 11/16	2	5/8	8	5 1/2
2	2.38	411-00023861-003	.120	5	5 11/16	3	5/8	8	6 1/2
2	2.38	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	3.50	411-90035001-003	.180	5	8.03	3	5/8	6	11 1/2
3	3.50	411-00035051-003	.180	5	7.09	4	5/8	8	12 1/4
+3	3.50	411-90035002-003	.180	7	8.03	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	9.05	4	5/8	6	13
+4	4.50	411-90045002-003	.188	7	9.05	4	5/8	8	15 1/2
4 1/2-5	5.00	411-00050001-003	1/4	5	8 5/8	4	5/8	8	20 1/2
5	5.56	411-00055601-003	1/4	5	9 3/16	4	5/8	8	20 1/2
5	5.56	411-00055602-003	1/4	7	9 3/16	4	5/8	10 1/2	23 1/2
5	5.56	411-00055603-003	1/4	10	9 3/16	4	5/8	13 1/2	31 1/2
+6	6.63	411-90066301-003	1/4	5	11.50	6	5/8	6	22 3/4
+6	6.63	411-90066302-003	1/4	7	11.50	6	5/8	8	26
+6	6.63	411-90066303-003	1/4	10	11.50	6	5/8	10 1/2	34 1/4
+8	8.63	411-90086301-003	1/4	5	13.50	6	5/8	6	28
+8	8.63	411-90086302-003	1/4	7	13.50	6	5/8	8	32
+8	8.63	411-90086303-003	1/4	10	13.50	6	5/8	10 1/2	42
10	10.00	411-00100001-003	1/4	5	14 5/16	8	5/8	8	33
10	10.00	411-00100002-003	1/4	7	14 5/16	8	5/8	10 1/2	38
10	10.00	411-00100003-003	1/4	10	14 5/16	8	5/8	13 1/2	50
+10	10.75	411-90107501-003	1/4	5	15.61	8	5/8	6	34
+10	10.75	411-90107502-003	1/4	7	15.61	8	5/8	8	40
+10	10.75	411-90107507-003	3/8	7	15.61	8	5/8	8	49
+10	10.75	411-90107503-003	1/4	10	15.61	8	5/8	10 1/2	52
12	12.00	411-00120001-003	1/4	5	16 5/16	8	5/8	8	37
12	12.00	411-00120002-003	1/4	7	16 5/16	8	5/8	10 1/2	44
12	12.00	411-00120003-003	1/4	10	16 5/16	8	5/8	13 1/2	56
+12	12.75	411-90127501-003	1/4	5	17.61	8	5/8	6	39
+12	12.75	411-90127502-003	1/4	7	17.61	8	5/8	8	46
+12	12.75	411-90127507-003	3/8	7	17.61	8	5/8	8	56
+12	12.75	411-90127503-003	1/4	10	17.61	8	5/8	10 1/2	59

+ Indicates couplings furnished with steel "Z" section, High Strength, Low-Followers.

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 type, follower type and number of bolts. Consult Smith-Blair® regarding your specific coupling pressure requirements.

Revised 06/04

411 Steel Couplings--Standard Length Sleeves 14" thru 24" Steel Pipe Sizes

Nom. Pipe Size Inches	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)	
14	14.00	411-00140001-003	1/4	5	18 5/16	6	5/8	8	41
14	14.00	411-00140002-003	1/4	7	18 5/16	6	5/8	10 1/2	48
14	14.00	411-00140007-003	3/8	7	18 7/16	6	5/8	10 1/2	75
14	14.00	411-00140008-003	3/8	10	18 7/16	6	5/8	13 1/2	94
16	16.00	411-00160002-003	1/4	7	20 5/16	8	5/8	10 1/2	56
16	16.00	411-00160007-003	3/8	7	20 7/16	8	5/8	10 1/2	87
16	16.00	411-00160003-003	1/4	10	20 5/16	8	5/8	10 1/2	72
16	16.00	411-00160008-003	3/8	10	20 7/16	8	5/8	10 1/2	108
18	18.00	411-00180002-003	1/4	7	22 7/16	8	5/8	10 1/2	81
18	18.00	411-00180007-003	3/8	7	22 7/16	8	5/8	10 1/2	96
18	18.00	411-00180003-003	1/4	10	22 7/16	8	5/8	13 1/2	109
18	18.00	411-00180008-003	3/8	10	22 7/16	8	5/8	13 1/2	119
20	20.00	411-00200002-003	1/4	7	24 7/16	10	5/8	10 1/2	91
20	20.00	411-00200007-003	3/8	7	24 7/16	10	5/8	10 1/2	107
20	20.00	411-00200003-003	1/4	10	24 7/16	10	5/8	13 1/2	122
20	20.00	411-00200008-003	3/8	10	24 7/16	10	5/8	13 1/2	134
22	22.00	411-00220002-003	1/4	7	26 7/16	10	5/8	10 1/2	98
22	22.00	411-00220007-003	3/8	7	26 7/16	10	5/8	10 1/2	116
22	22.00	411-00220003-003	1/4	10	26 7/16	10	5/8	13 1/2	132
22	22.00	411-00220008-003	3/8	10	26 7/16	10	5/8	13 1/2	145
24	24.00	411-00240002-003	1/4	7	28 7/16	10	5/8	10 1/2	106
24	24.00	411-00240007-003	3/8	7	28 7/16	10	5/8	10 1/2	125
24	24.00	411-00240003-003	1/4	10	28 7/16	10	5/8	13 1/2	142
24	24.00	411-00240008-003	3/8	10	28 7/16	10	5/8	13 1/2	156

411 Steel Couplings--Long Length Sleeves 1/2" thru 24" Steel Pipe Sizes

Nom. Pipe Size Inches	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	.0840	411-00008410-003	.120	12	3 5/8	2	1/2	14	4
3/4	1.050	411-00010510-003	.120	12	3 7/8	2	1/2	14	4 1/2
1	1.315	411-00013210-003	.120	12	4 1/4	2	1/2	14	5 1/2
1 1/4	1.660	411-00016610-003	.120	12	4 9/16	2	1/2	14	7
1 1/2	1.990	411-00019010-003	.120	12	4 13/16	2	1/2	14	7 1/2
2	2.000	411-00020010-003	.120	12	4 13/16	2	1/2	14	7 1/2
2	2.375	411-00023810-003	.120	12	5 11/16	3	5/8	15	13
2 1/2	2.875	411-00028810-003	.203	12	6 1/2	3	5/8	15	17
+3	3.500	411-90035010-003	.180	12	8.03	3	5/8	15	20 1/2
3 1/2-4	4.000	411-00040010-003	.188	12	7 9/16	4	5/8	15	25
+4	4.500	411-90045010-003	.188	12	9.05	4	5/8	13 1/2	22
+4	4.500	411-60045011-003	.188	16	9.05	4	5/8	17	27 1/2
+4	4.500	411-90045012-003	.188	24	9.05	4	5/8	25	38 1/2
4 1/2-5	5.000	411-00050010-003	1/4	12	8 5/8	4	5/8	15	30
5	5.563	411-00055611-003	1/4	16	9 3/16	4	5/8	19 1/2	41
5	5.563	411-00055612-003	1/4	24	9 3/16	4	5/8	27 1/2	52
+6	6.625	411-90066311-003	1/4	16	11.50	6	5/8	17	46 1/2
+6	6.625	411-90066312-003	1/4	24	11.50	6	5/8	25	65
+8	8.625	411-90086311-000	1/4	16	13.50	6	5/8	17	57
+8	8.625	411-90086312-003	1/4	24	13.50	6	5/8	25	79
10	10.000	411-00100012-003	1/4	16	14 5/16	8	5/8	19 1/2	67
10	10.000	411-00100012-003	1/4	24	14 5/16	8	5/8	27 1/2	97
+10	10.750	411-90107511-003	1/4	16	15.61	8	5/8	17	71
+10	10.750	411-90107512-003	1/4	24	15.61	8	5/8	25	99
12	12.000	411-00120011-003	1/4	16	16 1/16	8	5/8	19 1/2	77
12	12.000	411-00120012-003	1/4	24	16 1/16	8	5/8	27 1/2	108
+12	12.750	411-90127511-003	1/4	16	17.61	8	5/8	17	81
+12	12.750	411-90127512-003	1/4	24	17.61	8	5/8	25	113
+12	12.750	411-90127516-003	3/8	24	17.61	8	5/8	25	148
14	14.000	411-00140015-003	3/8	16	18 7/16	6	5/8	19 1/2	126
14	14.000	411-00140016-003	3/8	24	18 7/16	6	5/8	27 1/2	171
16	16.000	411-00160015-003	3/8	16	20 7/16	8	5/8	19 1/2	146
16	16.000	411-00160016-003	3/8	24	20 7/16	8	5/8	27 1/2	197
18	18.000	411-00180015-003	3/8	16	22 7/16	8	5/8	19 1/2	160
18	18.000	411-00180016-003	3/8	24	22 7/16	8	5/8	27 1/2	219
20	20.000	411-00200015-003	3/8	16	24 7/16	10	5/8	19 1/2	180
20	20.000	411-00200016-003	3/8	24	24 7/16	10	5/8	27 1/2	245
22	22.000	411-00220015-003	3/8	16	26 7/16	10	5/8	19 1/2	196
22	22.000	411-00220016-003	3/8	24	26 7/16	10	5/8	27 1/2	265
24	24.000	411-00240015-003	3/8	16	28 7/16	10	5/8	19 1/2	210
24	24.000	411-00240016-003	3/8	24	28 7/16	10	5/8	27 1/2	286

+ Indicates couplings furnished with steel "Z" section, High Strength, Low-Followers.

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.



411 Steel Couplings for Cast and Ductile Iron Pipe Sizes Flexi-Coat™ Epoxy Coating and NSF®61 Buna N Gaskets 2" thru 14"

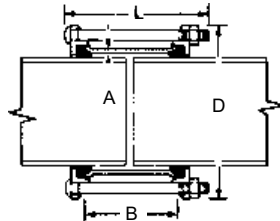
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Standard sleeve length couplings for cast iron, asbestos cement and steel pipe sizes.

The 411 Steel Coupling provides a means for connecting cast iron, steel, asbestos cement, plastic or other type of pipe with a coupling having a steel sleeve. The sleeve has a fusion bonded epoxy coating that provides protection from corrosive environments or line contents.

Dimensions

- A** Sleeve wall thickness-- shown in listing
- B** Sleeve length--shown in listing
- D** Overall coupling diameter-- shown in listing
- L** Overall coupling length



Material Specifications

SLEEVE: ASTM A-53, ASTM A512 or carbon steel having a minimum yield of 30,000 psi. Fusion bonded epoxy coating provides an average 12 mil protective coating and is suitable for potabewater systems according to FDA regulations.

FOLLOWERS: Ductile iron ASTM A-536 or steel AISI C1020. Designed for high strength/weight ratio. Follower thickness determined by coupling size.

BOLTS & NUTS: High-strength, low-alloy steel with heavy semi-finished hexagon nuts.

GASKETS: Nitrile (Buna N) NSF® 61 Compounded to produce superior storage and performance characteristics while resisting water, acids, alkalis, most (aliphatic) hydrocarbon's and many other chemicals. Temperatures range -20°F. to 180°F. consult manufacturer for specific applications or other service temperatures.

FINISH: Fusion bonded Flexi-Coat™ Epoxy.

Please Note: For all products, the Material Specifications are subject to change without notice.

411 Steel Couplings--Standard Length Sleeves 2" thru 14" pipe 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		2	5/8	13 1/2	16.3
2 1/2	2.60-2.80	411-00027502-003	.203	7	6.3/16	3	5/8	11	14.8
		411-00027503-003	.203	10		3	5/8	14	17.8
3	3.75-3.88	411-00038002-003	.237	7	7 13/16	3	5/8	10 1/2	20.3
		411-00038003-003	.237	10		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		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		4	5/8	14	26.8
4	4.74-5.06	411-00050002-003	1/4	7	8 19/32	4	5/8	11	27
		411-00050003-003	1/4	10		4	5/8	14	32.5
4-5	5.04-5.16	411-00051002-003	1/4	7	9 5/32	4	5/8	11	27.5
		411-00051003-003	1/4	10		4	5/8	14	33.1
6	6.84-6.96	411-00069002-003	1/4	7	10 9/16	5	5/8	11	37.2
		411-00069003-003	1/4	10		5	5/8	14	44.8
6	7.04-7.16	411-00071002-003	1/4	7	10 9/16	5	5/8	11	38.3
		411-00071003-003	1/4	10		5	5/8	14	46.1
6	7.14-7.26	411-00072002-003	1/4	7	11 5/16	5	5/8	11	38.8
		411-00072003-003	1/4	10		5	5/8	14	46.8
8	8.98-9.20	411-00090502-003	1/4	7	12 13/16	6	5/8	11	48.8
		411-00090503-003	1/4	10		6	5/8	14	58.8
8	9.10-9.22	411-00091502-003	1/4	7	12 13/16	6	5/8	11	49.4
		411-00091503-003	1/4	10		6	5/8	14	59.5
8	9.30-9.50	411-00094202-003	1/4	7	13 23/32	6	5/8	11	50.8
		411-00094203-003	1/4	10		6	5/8	14	61.2
10	11.04-11.18	411-00111002-003	1/4	7	15 1/8	7	5/8	11	59.9
		411-00111003-003	1/4	10		7	5/8	14	72.1
10	11.34-11.46	411-00114002-003	1/4	7	15 1/8	7	5/8	11	61.5
		411-00114003-003	1/4	10		7	5/8	14	74.1
10	11.84-11.96	411-00119502-003	1/4	7	16	8	5/8	11	64.5
		411-00119503-003	1/4	10		8	5/8	14	77.7
12	13.12-13.28	411-00132007-003	3/8	7	17 5/8	8	5/8	11	71.3
		411-00132008-003	3/8	10		8	5/8	14	85.8
12	13.41-13.58	411-00135007-003	3/8	7	17 7/8	8	5/8	11	72.9
		411-00135008-003	3/8	10		8	5/8	14	87.8
12-14	13.86-14.10	411-00139207-003	3/8	7	18 15/16	6	5/8	11	75.2
		411-00139208-003	3/8	10		6	5/8	14	90.5



411 Steel Couplings--Standard and Long Length Sleeves 14" thru 24" Cast Iron Pipe Sizes

Nom. Pipe Size In.	Pipe O.D. Inches	Catalog No.	Sleeve Thk. X Lgth. In.		Flange O.D. Inches (D)	Bolts			Approx. Ship Wt. Lbs.
			(A)	(B)		No.	Dia. In.	Lgth. In. (L)	
14	15.30	411-00153007-003	3/8	7	19 7/8	8	5/8	11	86
14	15.30	411-00153008-003	3/8	10	19 7/8	8	5/8	14	107
14	15.30	411-00153015-003	3/8	16	19 7/8	8	5/8	20	144
14	15.30	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
14	15.65	411-00156508-003	3/8	10	20 3/16	8	5/8	14	109
14	15.65	411-00156515-003	3/8	16	20 3/16	8	5/8	20	146
14	15.65	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
16	17.40	411-00174008-003	3/8	10	21 15/16	8	5/8	14	119
16	17.40	411-00174015-003	3/8	16	21 15/16	8	5/8	20	160
16	17.40	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
16	17.80	411-00178008-003	3/8	10	22 3/8	8	5/8	14	120
16	17.80	411-00178015-003	3/8	16	22 3/8	8	5/8	20	162
16	17.80	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
18	19.50	411-00195007-003	3/8	10	24 1/16	10	5/8	14	133
18	19.50	411-00195015-003	3/8	16	24 1/16	10	5/8	20	179
18	19.50	411-00195016-003	3/8	24	24 1/16	10	5/8	28	245
18	19.92	411-00200007-003	3/8	7	24 1/2	10	5/8	11	109
18	19.92	411-00200008-003	3/8	10	24 1/2	10	5/8	14	135
18	19.92	411-00200015-003	3/8	16	24 1/2	10	5/8	20	182
18	19.92	411-00200016-003	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
20	21.60	411-00216008-003	3/8	10	26 1/8	10	5/8	14	145
20	21.60	411-00216015-003	3/8	16	26 1/8	10	5/8	20	195
20	21.60	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
20	22.06	411-00220608-003	3/8	10	26 5/8	10	5/8	14	148
20	22.06	411-00220615-003	3/8	16	26 5/8	10	5/8	20	200
20	22.06	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
24	25.80	411-00258008-003	3/8	10	30 3/8	12	5/8	14	171
24	25.80	411-00258015-003	3/8	16	30 3/8	12	5/8	20	231
24	25.80	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
24	26.32	411-00263208-003	3/8	10	30 7/8	12	5/8	14	174
24	26.32	411-00263215-003	3/8	16	30 7/8	12	5/8	20	235
24	26.32	411-00263216-003	3/8	24	30 7/8	12	5/8	28	321

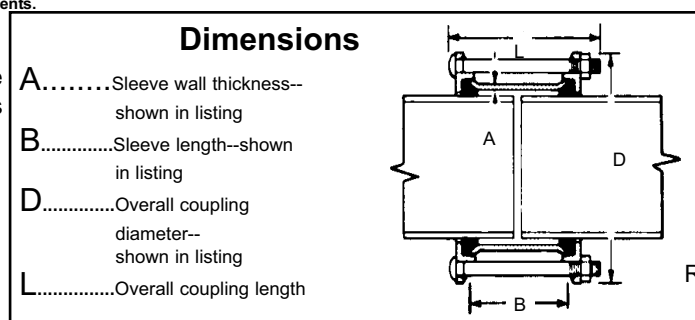
The basic design of bolted compression couplings does not provide for anchoring the pipes against pull-out. Suitable anchorage must be provided when excessive pipe movement could cause the pipe to move out of the coupling.

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.

*****Catalog Numbers**

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 Couplings

Large steel couplings provide a method of simplifying many pipe fitting problems and protecting pipelines from various environmental conditions. They are also cost effective against flanged or welded joints.

Consult Smith-Blair® engineers for assistance in selecting couplings for large pipelines or special applications.

411 Steel Couplings for Large Diameter Pipe-Standard Length Sleeves

Nom. Pipe Size Inches	Pipe O.D. Inches	Sleeve Thk. X Lgth (A) (B) Inches	Follower Flange O.D. Inches	Bolts		Catalog Number	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			5/8 x 14	411-00300003-003	152
		3/8 x 7			5/8 x 11	411-00300007-003	155
		3/8 x 10			5/8 x 14	411-00300008-003	187
		1/2 x 10			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			5/8 x 14	411-00305003-003	154
		3/8 x 7			5/8 x 11	411-00305007-003	157
		3/8 x 10			5/8 x 14	411-00305008-003	189
		1/2 x 10			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			5/8 x 14	411-00317403-003	163
		3/8 x 7			5/8 x 11	411-00317407-003	164
		3/8 x 10			5/8 x 14	411-00317408-003	198
		1/2 x 10			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			5/8 x 14	411-00320003-003	164
		3/8 x 7			5/8 x 11	411-00320007-003	166
		3/8 x 10			5/8 x 14	411-00320008-003	201
		1/2 x 10			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			5/8 x 14	411-00340003-003	173
		3/8 x 7			5/8 x 11	411-00340007-003	175
		3/8 x 10			5/8 x 14	411-00340008-003	211
		1/2 x 10			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			5/8 x 14	411-00360003-003	184
		3/8 x 7			5/8 x 11	411-00360007-003	183
		3/8 x 10			5/8 x 14	411-00360008-003	225
		1/2 x 10			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			5/8 x 14	411-00365003-003	186
		3/8 x 7			5/8 x 11	411-00365007-003	188
		3/8 x 10			5/8 x 14	411-00365008-003	227
		1/2 x 10			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			5/8 x 14	411-00366303-003	187
		3/8 x 7			5/8 x 11	411-00366307-003	189
		3/8 x 10			5/8 x 14	411-00366308-003	228
		1/2 x 10			5/8 x 14	411-00366309-003	270
36	37.96	1/4 x 7	42 13/32	16	5/8 x 11	411-00379602-003	162
		1/4 x 10			5/8 x 14	411-00379603-003	189
		3/8 x 7			5/8 x 11	411-00379607-003	191
		3/8 x 10			5/8 x 14	411-00379608-003	230
		1/2 x 10			5/8 x 14	411-00379609-003	272

411 Steel Couplings for Large Diameter Steel and Cast Iron Pipe--Standard Length Sleeves

Nom. Pipe Size Inches	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	38.30	1/4 x 7	42 3/4	16	5/8 x 11	411-00383002-003	166
		1/4 x 10			5/8 x 14	411-00383003-003	194
		3/8 x 7			5/8 x 11	411-00383007-003	196
		3/8 x 10			5/8 x 14	411-00383008-003	237
		1/2 x 10			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			5/8 x 14	411-00420003-003	214
		3/8 x 7			5/8 x 11	411-00420007-003	216
		3/8 x 10			5/8 x 14	411-00420008-003	262
		1/2 x 10			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			5/8 x 14	411-00425003-003	215
		3/8 x 7			5/8 x 11	411-00425007-003	220
		3/8 x 10			5/8 x 14	411-00425008-003	263
		1/2 x 10			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			5/8 x 14	411-00427503-003	216
		3/8 x 7			5/8 x 11	411-00427507-003	221
		3/8 x 10			5/8 x 14	411-00427508-003	264
		1/2 x 10			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			5/8 x 14	411-00442003-003	225
		3/8 x 7			5/8 x 11	411-00442007-003	225
		3/8 x 10			5/8 x 14	411-00442008-003	275
		1/2 x 10			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			5/8 x 14	411-00445003-003	228
		3/8 x 7			5/8 x 11	411-00445007-003	228
		3/8 x 10			5/8 x 14	411-00445008-003	278
		1/2 x 10			5/8 x 14	411-00445009-003	329
48	48.00	1/4 x 7	52 1/2	20	5/8 x 11	411-00480002-003	208
		1/4 x 10			5/8 x 14	411-00480003-003	245
		3/8 x 7			5/8 x 11	411-00480007-003	246
		3/8 x 10			5/8 x 14	411-00480008-003	299
		1/2 x 10			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			5/8 x 14	411-00487503-003	249
		3/8 x 7			5/8 x 11	411-00487507-003	246
		3/8 x 10			5/8 x 14	411-00487508-003	303
		1/2 x 10			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			5/8 x 14	411-00505003-003	255
		3/8 x 7			5/8 x 11	411-00505007-003	258
		3/8 x 10			5/8 x 14	411-00505008-003	312
		1/2 x 10			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			5/8 x 14	411-00508003-003	260
		3/8 x 7			5/8 x 11	411-00508007-003	261
		3/8 x 10			5/8 x 14	411-00508008-003	317
		1/2 x 10			5/8 x 14	411-00508009-003	375

See Notes on Page 13.

Revised 06/04

411 Steel Couplings for Large Diameter Steel and Cast Iron Pipe-Standard Length Sleeves

Nom. Pipe Size Inches	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)		
54	57.10	1/4 x 7	61 19/32	24	5/8 x 11	411-00571002-003	238
		1/4 x 10			5/8 x 14	411-00571003-003	286
		3/8 x 7			5/8 x 11	411-00571007-003	292
		3/8 x 10			5/8 x 14	411-00571008-003	349
		1/2 x 10			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.

++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.

Larger Sizes and Longer Length Sleeves Available. Consult Smith-Blair® Engineering Dept.

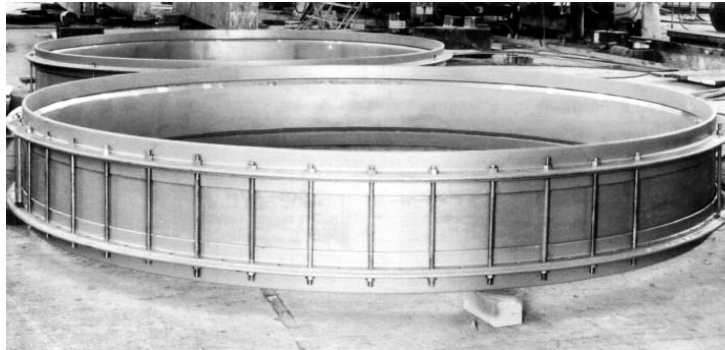


Penstock Couplings

Pressure and other service conditions of penstock require that coupling design be modified to fit the requirements for each individual penstock.

Smith-Blair® engineers should be consulted for recommendations.

Smith-Blair® personnel are available for assistance in field supervision of the installation of penstock couplings or other large size couplings where required.



Smith-Blair® can produce couplings to fit any size pipe up to 200 inch dia.



Bolting up of coupling being completed.



Penstock coupled with 190 inch Smith-Blair® couplings.