

SMITH Fibercast™

A Varco Company

EPOXY FITTINGS DIMENSIONS

- 2"-16" GREEN THREAD® fittings may be used with GREEN THREAD and RED THREAD® II piping. Refer to *Chemical Resistance Guide*, Bulletin No. E5615, for chemical recommendations.
- 2"-16" RED THREAD II fittings may be used on RED THREAD II piping.
- 1"-1½" fittings are available in GREEN THREAD products only.

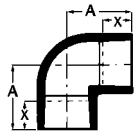
INDEX

Adapters5
Blind Flanges3
Concentric Reducers6
Crosses7

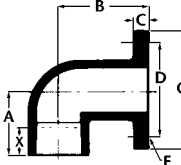
Elbows, 90°1
Elbows, 45°2
End Caps5
Flanges3
Laterals, 45°7
Nipples4

Orifice Flanges4
Reducers6
Reducer Bushings6
Saddles8
Sleeve Couplings4
Tees2, 3

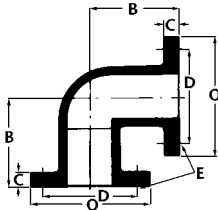
90° ELBOWS(1) • 1" & 16" parts are available in GREEN THREAD only.



BELL x BELL



BELL x FLANGE(3)



FLANGE x FLANGE(3)

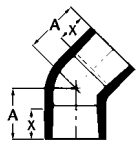
Nominal Pipe Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	X ⁽²⁾ (In.) With GT Pipe	X ⁽²⁾ (In.) With RT II Pipe	Nominal Weight-lbs. BxB	Nominal Weight-lbs. BxF	Nominal Weight-lbs. FxF	Cyclic/Steady Pressure (psig)
1	2¾	3½	¾	3¾	¾D - 4 holes	4¼	1	—	.4	1.0	1.7	300/450
1½	3¾	4	¾	3¾	¾D - 4 holes	5	1½	—	.6	1.5	2.4	300/450
2	3¾	4½	¾	4¾	¾D - 4 holes	6	1½	1¾	1.2	2.5	3.6	300/450
3	4¾	5½	1¾	6	¾D - 4 holes	7½	2½	1½	2.3	4.6	10.0	300/450
4	5½	6½	1¾	7½	¾D - 8 holes	9	2	1½	3.3	6.4	15.9	150/225
6	6½	8	1½	9½	¾D - 8 holes	11	2½	2¾	7.2	11.8	15.9	150/225
8	11¾	9	1¾	11¾	¾D - 8 holes	13½	3¾	4¾	10.9	15.4	19.9	150/225
10	13½	11	2	14¼	1 D - 12 holes	16	3¾	4¾	14.9	23.8	32.8	150/225
12	14	12	2¼	17	1 D - 12 holes	19	4	4¼	22.6	38.3	54.0	150/225
14	19	14	2½	18¾	1½D - 12 holes	20¾	3¾	3¾	26.5	45.0	65.0	150/225
16	20¼	15	2½	21¼	1½D - 16 holes	23¼	3¾	3¾	45.0	65.0	108.0	150/225

(In.)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(MPa)
1	70	89	19	79	16 D - 4 holes	108	25	—	.18	.45	.77	2.07/3.10
1½	86	102	19	98	16 D - 4 holes	127	35	—	.27	.68	1.09	2.07/3.10
2	86	114	19	121	19 D - 4 holes	152	41	35	.54	1.13	1.63	2.07/3.10
3	117	140	35	152	19 D - 4 holes	190	54	41	1.04	2.09	4.54	2.07/3.10
4	130	165	35	190	19 D - 8 holes	229	51	38	1.50	2.90	7.21	1.03/1.55
6	156	203	38	241	22 D - 8 holes	279	73	60	3.27	5.35	7.21	1.03/1.55
8	295	229	44	298	22 D - 8 holes	343	86	111	3.11	5.40	7.62	1.03/1.55
10	333	279	51	362	25 D - 12 holes	406	98	105	4.04	8.39	12.8	1.03/1.55
12	356	305	57	432	25 D - 12 holes	483	102	108	6.35	13.9	21.4	1.03/1.55
14	483	356	64	476	29 D - 12 holes	527	92	92	12.0	20.4	29.5	1.03/1.55
16	514	381	64	540	29 D - 16 holes	594	92	92	20.4	29.5	49.0	1.03/1.55

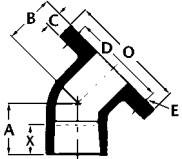
(1) "A" dimensions shown are for GREEN THREAD fittings. 1"-6" fittings are compression molded; 8"-16" fittings are filament wound.
(2) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

(3) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, bolt, and gasket recommendations.
GT = GREEN THREAD
RT II = RED THREAD II

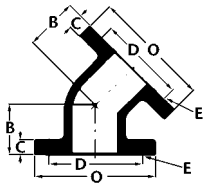
45° ELBOWS⁽¹⁾ • 1" - 16" parts are available in GREEN THREAD only.



BELL x BELL



BELL x FLANGE⁽³⁾

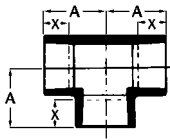


FLANGE x FLANGE⁽³⁾

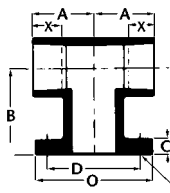
Nominal Pipe Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	X ⁽²⁾ (In.) With GT Pipe	X ⁽²⁾ (In.) With RT II Pipe	Nominal Weight-lbs. BxB	Nominal Weight-lbs. BxF	Nominal Weight-lbs. FxF	Cyclic/Steady Pressure (psig)
1	2 ⁵ / ₈	2	3/4	3 ¹ / ₈	5/8 D - 4 holes	4 ¹ / ₄	1	—	.3	.8	1.4	300/450
1 ¹ / ₂	2 ⁷ / ₈	2 ¹ / ₄	3/4	3 ³ / ₈	5/8 D - 4 holes	5	1 ³ / ₈	—	.4	1.2	2.0	300/450
2	2 ⁵ / ₈	2 ¹ / ₂	3/4	4 ¹ / ₄	3/4 D - 4 holes	6	1 ⁵ / ₈	1 ³ / ₈	.9	1.9	2.8	300/450
3	3 ³ / ₄	3	1 ¹ / ₈	6	3/4 D - 4 holes	7 ¹ / ₂	2 ¹ / ₈	1 ⁵ / ₈	1.6	3.5	7.9	300/450
4	3 ⁷ / ₈	4	1 ³ / ₈	7 ¹ / ₂	3/4 D - 8 holes	9	2	1 ¹ / ₂	2.4	5.1	13.1	150/225
6	4 ³ / ₈	5	1 ¹ / ₂	9 ¹ / ₂	7/8 D - 8 holes	11	2 ¹ / ₈	2 ³ / ₈	4.8	8.4	12.5	150/225
8	5 ¹ / ₈	5 ¹ / ₂	1 ³ / ₄	11 ³ / ₄	7/8 D - 8 holes	13 ¹ / ₂	3 ³ / ₈	4 ³ / ₈	6.9	11.9	16.8	150/225
10	5 ⁷ / ₈	6 ¹ / ₂	2	14 ¹ / ₄	1 D - 12 holes	16	3 ⁷ / ₈	4 ¹ / ₈	8.9	18.5	28.2	150/225
12	6 ¹ / ₂	7 ¹ / ₂	2 ¹ / ₄	17	1 D - 12 holes	19	4	4 ¹ / ₄	14.0	32.6	47.2	150/225
14	7 ¹ / ₂	7 ¹ / ₂	2 ¹ / ₂	18 ³ / ₄	1 ¹ / ₈ D - 12 holes	20 ³ / ₄	3 ⁵ / ₈	3 ⁵ / ₈	17.0	46.0	73.0	150/225
16	8 ¹ / ₄	8	2 ¹ / ₂	21 ¹ / ₄	1 ¹ / ₈ D - 16 holes	23 ¹ / ₄	3 ⁵ / ₈	3 ⁵ / ₈	25.0	56.0	84.0	150/225

(In.)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(MPa)
1	60	51	19	79	16 D - 4 holes	108	25	—	.14	.36	.64	2.07/3.10
1 ¹ / ₂	73	57	19	98	16 D - 4 holes	127	35	—	.18	.54	.91	2.07/3.10
2	67	64	19	121	19 D - 4 holes	152	41	35	.41	.86	1.27	2.07/3.10
3	95	76	35	152	19 D - 4 holes	190	54	41	.73	1.59	3.58	2.07/3.10
4	98	102	35	190	19 D - 8 holes	229	51	38	1.09	2.31	5.94	1.03/1.55
6	111	127	38	241	22 D - 8 holes	279	73	60	2.18	3.81	5.67	1.03/1.55
8	206	140	44	298	22 D - 8 holes	343	86	111	3.11	5.40	7.62	1.03/1.55
10	219	165	51	362	25 D - 12 holes	406	98	105	4.04	8.39	12.8	1.03/1.55
12	241	190	57	432	25 D - 12 holes	483	102	108	6.35	13.9	21.4	1.03/1.55
14	318	191	64	476	29 D - 12 holes	527	92	92	7.71	20.9	33.1	1.03/1.55
16	337	203	64	540	29 D - 16 holes	594	92	92	11.3	25.4	38.1	1.03/1.55

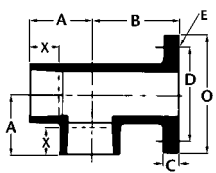
TEES⁽¹⁾ • 1" - 16" parts are available in GREEN THREAD only.



T1 - BELLED



T2 - BELL x BELL x FLANGE⁽³⁾



T3 - BELL x FLANGE x BELL⁽³⁾

Nominal Pipe Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	X ⁽²⁾ (In.) With GT Pipe	X ⁽²⁾ (In.) With RT II Pipe	Nominal Weight-lbs. BxBxB	Nominal Weight-lbs. BxBxF	Nominal Weight-lbs. BxFxB	Cyclic/Steady Pressure (psig)
1	2 ⁵ / ₈	3 ¹ / ₂	3/4	3 ¹ / ₈	5/8 D - 4 holes	4 ¹ / ₄	1	—	.5	1.1	1.1	300/450
1 ¹ / ₂	3 ³ / ₈	4	3/4	3 ³ / ₈	5/8 D - 4 holes	5	1 ³ / ₈	—	.9	1.9	1.9	300/450
2	3 ³ / ₈	4 ¹ / ₂	3/4	4 ¹ / ₄	3/4 D - 4 holes	6	1 ⁵ / ₈	1 ³ / ₈	1.9	3.1	3.1	300/450
3	4 ¹ / ₈	5 ¹ / ₂	1 ¹ / ₈	6	3/4 D - 4 holes	7 ¹ / ₂	2 ¹ / ₈	1 ⁵ / ₈	3.6	5.8	5.8	300/450
4	5 ¹ / ₈	6 ¹ / ₂	1 ³ / ₈	7 ¹ / ₂	3/4 D - 8 holes	9	2	1 ¹ / ₂	4.9	8.0	8.0	150/225
6	6 ¹ / ₈	8	1 ¹ / ₂	9 ¹ / ₂	7/8 D - 8 holes	11	2 ¹ / ₈	2 ³ / ₈	10.1	14.3	14.3	150/225
8	11 ¹ / ₈	9	1 ³ / ₄	11 ³ / ₄	7/8 D - 8 holes	13 ¹ / ₂	3 ³ / ₈	4 ³ / ₈	16.1	20.4	20.4	150/225
10	13 ³ / ₈	11	2	14 ¹ / ₄	1 D - 12 holes	16	3 ⁷ / ₈	4 ¹ / ₈	26.2	34.1	34.1	150/225
12	14	12	2 ¹ / ₄	17	1 D - 12 holes	19	4	4 ¹ / ₄	31.8	47.1	47.1	150/225
14	19	14	2 ¹ / ₂	18 ³ / ₄	1 ¹ / ₈ D - 12 holes	20 ³ / ₄	3 ⁵ / ₈	3 ⁵ / ₈	52.0	75.5	75.5	150/225
16	20 ¹ / ₄	15	2 ¹ / ₂	21 ¹ / ₄	1 ¹ / ₈ D - 16 holes	23 ¹ / ₄	3 ⁵ / ₈	3 ⁵ / ₈	68.0	107.0	107.0	150/225

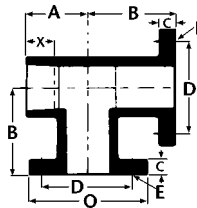
(In.)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(MPa)
1	70	89	19	79	16 D - 4 holes	108	25	—	.23	.50	.50	2.07/3.10
1 ¹ / ₂	86	102	19	98	16 D - 4 holes	127	35	—	.41	.86	.86	2.07/3.10
2	86	114	19	121	19 D - 4 holes	152	41	35	.86	1.41	1.41	2.07/3.10
3	117	140	35	152	19 D - 4 holes	190	54	41	1.63	2.63	2.63	2.07/3.10
4	130	165	35	190	19 D - 8 holes	229	51	38	2.22	3.63	3.63	1.03/1.55
6	156	203	38	241	22 D - 8 holes	279	73	60	4.58	6.49	6.49	1.03/1.55
8	295	229	44	298	22 D - 8 holes	343	86	111	7.30	9.25	9.25	1.03/1.55
10	333	279	51	362	25 D - 12 holes	406	98	105	11.4	15.5	15.5	1.03/1.55
12	356	305	57	432	25 D - 12 holes	483	102	108	14.4	21.4	21.4	1.03/1.55
14	483	356	64	476	29 D - 12 holes	527	92	92	23.6	32.3	32.3	1.03/1.55
16	514	381	64	540	29 D - 16 holes	594	92	92	30.8	48.5	48.5	1.03/1.55

(1) "A" dimensions shown are for GREEN THREAD fittings. 1"-6" fittings are compression molded; 8"-16" fittings are filament wound.

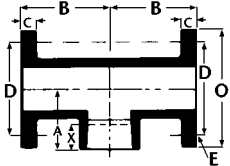
(2) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

(3) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, bolt, and gasket recommendations.

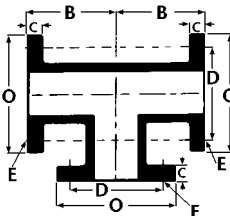
TEES(1) • 1" - 16" parts are available in GREEN THREAD only.



T4 - BELL x FLANGE x FLANGE⁽³⁾



T5 - FLANGE x FLANGE x BELL⁽³⁾



T6 - FLANGED⁽³⁾

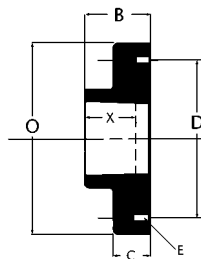
Nominal Pipe Size (In.)	A (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	X ⁽²⁾ (In.) With GT Pipe	X ⁽²⁾ (In.) With RT II Pipe	Nominal Weight-lbs. BxFxF	Nominal Weight-lbs. FxFxB	Nominal Weight-lbs. FxFxF	Cyclic/Steady Pressure (psig)
1	2 3/4	3 1/2	3/4	3 1/8	5/8 D - 4 holes	4 1/4	1	-	1.8	1.8	2.5	300/450
1 1/2	3 3/8	4	3/4	3 3/8	5/8 D - 4 holes	5	1 3/8	-	2.8	2.8	3.6	300/450
2	3 3/8	4 1/2	3/4	4 3/4	3/4 D - 4 holes	6	1 3/8	1 3/8	4.8	4.8	5.5	300/450
3	4 5/8	5 1/2	1 1/8	6	3/4 D - 4 holes	7 1/2	2 1/8	1 3/8	8.0	8.0	14.5	300/450
4	5 1/8	6 1/2	1 3/8	7 1/2	3/4 D - 8 holes	9	2	1 1/2	11.3	11.3	22.7	150/225
6	6 1/8	8	1 1/2	9 1/2	7/8 D - 8 holes	11	2 7/8	2 3/8	19.0	19.0	22.3	150/225
8	11 5/8	9	1 3/4	11 3/4	7/8 D - 8 holes	13 1/2	3 3/8	4 3/8	24.6	24.6	28.9	150/225
10	13 1/8	11	2	14 1/4	1 D - 12 holes	16	3 7/8	4 1/8	42.0	42.0	49.8	150/225
12	14	12	2 1/4	17	1 D - 12 holes	19	4	4 1/4	62.5	62.5	77.8	150/225
14	19	14	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	3 3/8	3 3/8	99.5	99.5	127.0	150/225
16	20 1/4	15	2 1/2	21 1/4	1 1/8 D - 16 holes	23 1/4	3 5/8	3 5/8	135.0	135.0	170.0	150/225

(In.)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(kg)	(kg)	(MPa)
1	70	89	19	79	16 D - 4 holes	108	25	-	.82	.82	1.13	2.07/3.10
1 1/2	86	102	19	98	16 D - 4 holes	127	35	-	1.27	1.27	1.63	2.07/3.10
2	86	114	19	121	19 D - 4 holes	152	41	35	2.18	2.18	2.50	2.07/3.10
3	117	140	35	152	19 D - 4 holes	190	54	41	3.63	3.63	6.58	2.07/3.10
4	130	165	35	190	19 D - 8 holes	229	51	38	5.13	5.13	10.3	1.03/1.55
6	156	203	38	241	22 D - 8 holes	279	73	60	8.62	8.62	10.1	1.03/1.55
8	295	229	44	298	22 D - 8 holes	343	86	111	11.2	11.2	13.1	1.03/1.55
10	333	279	51	362	25 D - 12 holes	406	98	105	19.1	19.1	22.6	1.03/1.55
12	356	305	57	432	25 D - 12 holes	483	102	108	28.4	28.4	35.3	1.03/1.55
14	483	356	64	476	29 D - 12 holes	527	92	92	45.1	45.1	57.6	1.03/1.55
16	514	381	64	540	29 D - 16 holes	594	92	92	61.2	61.2	77.1	1.03/1.55

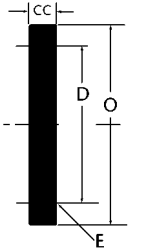
FLANGES

All flanges meet ANSI B16.5 Class 150 Bolt Hole Standards. The following flanges are available as standard parts:

Flanges	1" - 12" 2" - 6" 14" - 16"	GREEN THREAD RED THREAD II RED THREAD II or GREEN THREAD	Compression Molded (M) or Filament Wound (FW) Filament Wound (FW) Filament Wound (FW)
Blind Flanges	1" - 12" 14" - 16"	GREEN THREAD RED THREAD II or GREEN THREAD	Compression Molded (M) Contact Molded (M)



FLANGE



BLIND FLANGE

Nom. Pipe Size (In.)	B (In.)	C (In.)	CC ⁽⁴⁾ (In.)	D (In.)	E (In.)	O (In.)	X ⁽²⁾ (In.) With Green Thread Pipe		X ⁽²⁾ (In.) With Red Thread II Pipe		Recommended Torquing of Flanges ⁽³⁾ Torque ft.-lbs. To Seal Max.		Nominal Wt. (lbs.) Flange		Nominal Wt. (lbs.) Blind Flange	Cyclic/Steady Pressure (psig)		
							M	FW	M	FW	M	FW	M	FW		Flange M	Flange FW	Blind Flange
1	1 1/4	3/4	3/4	3 1/8	5/8 D - 4 holes	4 1/4	1	1	-	-	20	25	.6	.6	.8	300/450	300/450	200/300
1 1/2	1 1/4	3/4	3/4	3 3/8	5/8 D - 4 holes	5	1 3/8	1 3/8	-	-	20	25	.9	.9	.9	300/450	300/450	200/300
2	2 1/4	3/4	3/4	4 3/4	3/4 D - 4 holes	6	2	1 3/8	1 1/2	2 1/8	25	30	1.3	1.3	1.3	300/450	300/450	200/300
3	2 5/8	1 1/8	1	6	3/4 D - 4 holes	7 1/2	2 1/2	2 1/2	1 1/2	2 1/2	25	30	2.6	3.4	3.0	300/450	200/300 ⁽⁶⁾	200/300
4 ⁽⁵⁾	2 5/8	1 1/8	1	7 1/2	3/4 D - 8 holes	9	2 1/2	2 1/2	1 1/8	3 3/8	25	30	3.6	4.9	4.0	150/225	150/225 ⁽⁶⁾	100/150
6 ⁽⁵⁾	3	1 1/2	1 1/8	9 1/2	7/8 D - 8 holes	11	2 1/2	2 1/2	2	3 3/8	25	30	4.4	6.5	6.6	150/225	150/225 ⁽⁶⁾	100/150
8	4	1 1/2	1 1/8	11 1/4	7/8 D - 8 holes	13 1/2	3	2 1/2	3 1/2	3 3/8	30	100	9.3	11.0	10.6	150/225	150/225	90/135
10	4 3/4	2	1 1/4	14 1/4	1 D - 12 holes	16	3 3/8	3 3/8	4 1/4	3 1/2	80	100	16.0	15.8	16.3	150/225	150/225	65/95
12	5	2 1/4	1 1/4	17	1 D - 12 holes	19	4	3 3/8	4 1/2	3 3/8	80	100	24.0	25.8	24.0	150/225	150/225	45/65
14	3 3/8	2 1/2	1 1/8	18 3/4	1 1/8 D - 12 holes	20 3/4	-	3	-	3	80	100	-	30.0	44.8	-	150/225	100/150
16	3 3/8	2 1/2	2 1/4	21 1/4	1 1/8 D - 16 holes	23 1/4	-	3	-	3	80	100	-	37.0	67.3	-	150/225	100/150

In.	mm	mm	mm ⁽³⁾	mm	mm	mm	mm ⁽²⁾	mm ⁽²⁾	mm ⁽²⁾	mm ⁽²⁾	N-m ⁽³⁾	N-m ⁽³⁾	kg	kg	kg	MPa	MPa	MPa
1	44	19	19	79	16 D - 4 holes	108	25	25	-	-	27	34	.27	.27	.36	2.07/3.10	2.07/3.10	1.38/2.07
1 1/2	44	19	19	98	16 D - 4 holes	127	35	35	-	-	27	34	.41	.41	.41	2.07/3.10	2.07/3.10	1.38/2.07
2	54	19	19	121	19 D - 4 holes	152	51	41	38	54	34	41	.59	.59	.59	2.07/3.10	2.07/3.10	1.38/2.07
3	67	35	25	152	19 D - 4 holes	191	60	54	48	60	34	41	1.18	1.54	1.36	2.07/3.10	1.38/2.07 ⁽⁶⁾	1.38/2.07
4 ⁽⁵⁾	67	35	25	191	19 D - 8 holes	229	60	64	48	86	34	41	1.63	2.22	1.81	1.03/1.55	1.03/1.55 ⁽⁶⁾	0.69/1.03
6 ⁽⁵⁾	76	38	29	241	22 D - 8 holes	279	64	67	51	98	34	41	2.00	2.95	2.99	1.03/1.55	1.03/1.55 ⁽⁶⁾	0.69/1.03
8	102	44	29	298	22 D - 8 holes	343	76	73	89	98	41	136	4.22	4.99	4.81	1.03/1.55	1.03/1.55	0.62/0.93
10	121	51	32	362	25 D - 12 holes	406	95	83	108	89	108	136	7.26	7.17	7.39	1.03/1.55	1.03/1.55	0.45/0.65
12	127	57	32	432	25 D - 12 holes	483	102	92	114	98	108	136	10.89	11.70	10.89	1.03/1.55	1.03/1.55	0.31/0.45
14	79	64	48	476	29 D - 12 holes	527	-	76	-	76	108	136	-	13.61	20.32	-	1.03/1.55	0.69/1.03
16	79	64	57	540	29 D - 16 holes	594	-	76	-	76	108	136	-	16.78	30.53	-	1.03/1.55	0.69/1.03

(1) "A" dimensions shown are for GREEN THREAD fittings. 1"-6" fittings are compression molded; 8"-16" fittings are filament wound.

(2) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

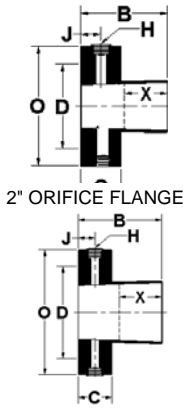
(3) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, bolt, and gasket recommendations.

(4) Steel back-up plates must be used to achieve pressure ratings equivalent to the pipe.

(5) "B" dimension shown is for molded GREEN THREAD parts. For filament wound parts, "B" dimension is 3/4" for 4-inch flange and 3/4" for 6-inch flange.

(6) Also available 300/450 psig (2.07/3.10 MPa) pressure class. "C" dimension is 3" for 3-inch, 3 1/2" for 4-inch, and 4" for 6-inch.

ORIFICE FLANGES • 2"-8" parts are available in GREEN THREAD only



2" ORIFICE FLANGE

3"-8" ORIFICE FLANGE

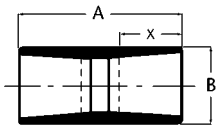
Nom. Pipe Size (In.)	B (In.)	C (In.)	D (In.)	E (In.)	H (In.)	J (In.)	O (In.)	X ⁽¹⁾ (In.) With Green Thread Pipe	X ⁽¹⁾ (In.) With Red Thread II Pipe	Recommended Torquing of Flanges ⁽²⁾ Torque ft.-lbs.		Nom. Weight (lbs.)	Cyclic/Steady Pressure (psig)
										To Seal	Max.		
2	4 1/4	2	4 3/4	3/4 D - 4 holes	1/2 NPT	1	6	1 1/8	1 1/8	25	30	3.6	300/450
3	5	2	6	3/4 D - 4 holes	1/2 NPT	1	7 1/2	2 1/8	1 1/8	25	30	5.3	300/450
4	5	2	7 1/2	3/4 D - 8 holes	1/2 NPT	1	9	2	1 1/2	25	30	6.6	150/225
6	6	2	9 1/2	7/8 D - 8 holes	1/2 NPT	1	11	2 1/8	2 1/8	25	30	8.8	150/225
8	8 3/4	2	11 3/4	7/8 D - 8 holes	1/2 NPT	1	13 1/2	3 3/8	4 3/8	30	100	14.5	150/225

(In.)	mm	mm	mm	mm	mm	mm	mm	mm ⁽¹⁾	mm ⁽¹⁾	N-m ⁽²⁾	N-m ⁽²⁾	kg	MPa
2	110	51	121	19 D - 4 holes	12.7 NPT	25	152	41	35	34	41	1.63	2.07/3.10
3	165	51	152	19 D - 4 holes	12.7 NPT	25	191	54	41	34	41	2.39	2.07/3.10
4	165	51	191	19 D - 8 holes	12.7 NPT	25	229	51	38	34	41	2.98	1.03/1.55
6	178	51	241	22 D - 8 holes	12.7 NPT	25	279	73	60	34	41	3.97	1.03/1.55
8	203	51	298	22 D - 8 holes	12.7 NPT	25	343	86	111	41	136	6.58	1.03/1.55

SLEEVE COUPLINGS

GREEN THREAD Product

RED THREAD II Product



SLEEVE COUPLING

Nom. Pipe Size (In.)	A (In.)	B (In.)	X ⁽¹⁾ (In.)	Nominal Weight (Lbs.)	Cyclic/Steady Pressure (psig)
1	2 3/4	1 1/2	1	.1	300/450
1 1/2	3 1/4	2	1 3/8	.1	300/450
2	4 7/8	2 5/8	1 5/8	.4	300/450
3	5	3 3/4	2 1/8	.8	300/450
4	5	4 3/4	2	.9	150/225
6	7	6 7/8	2 7/8	1.9	150/225
8	10	9	2 7/8	3.4	150/225
10	10 1/2	11	3 1/4	5.2	150/225
12	11	13 1/8	3 5/8	7.5	150/225
14	12 1/2	15	4 3/8	11.2	150/225
16	13	17 1/8	4 1/2	16.0	150/225

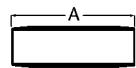
Nom. Pipe Size (In.)	A (In.)	B (In.)	X ⁽¹⁾ (In.)	Nominal Weight (Lbs.)	Cyclic/Steady Pressure (psig)
1	-	-	-	-	-
1 1/2	-	-	-	-	-
2	6	2 5/8	2 1/8	.4	300/450
3	6	3 3/4	2 3/8	.8	300/450
4	7	4 7/8	2 1/8	1.4	300/450
6	8 3/8	7 7/8	3 3/8	2.8	300/450
8	10	9	3 7/8	3.3	150/225
10	10 1/2	11 1/8	3 1/2	4.7	150/225
12	11	13 1/8	3 3/8	6.8	150/225
14	12 1/2	15	4 3/8	11.2	150/225
16	13	17 1/8	4 1/2	16.0	150/225

(In.)	mm	mm	mm ⁽¹⁾	kg	MPa
1	70	38	27	.05	2.07/3.10
1 1/2	83	52	35	.05	2.07/3.10
2	124	67	41	.18	2.07/3.10
3	127	95	54	.36	2.07/3.10
4	127	121	51	.41	1.03/1.55
6	178	175	73	.86	1.03/1.55
8	254	229	73	1.54	1.03/1.55
10	268	279	83	2.36	1.03/1.55
12	279	333	92	3.40	1.03/1.55
14	318	381	111	5.08	1.03/1.55
16	330	435	114	7.26	1.03/1.55

(In.)	mm	mm	mm ⁽¹⁾	kg	MPa
1	-	-	-	-	-
1 1/2	-	-	-	-	-
2	152	67	54	.18	2.07/3.10
3	152	95	60	.36	2.07/3.10
4	178	124	73	.64	2.07/3.10
6	213	181	86	1.27	2.07/3.10
8	254	229	98	1.50	1.03/1.55
10	268	283	89	2.13	1.03/1.55
12	279	333	98	3.08	1.03/1.55
14	318	381	111	5.08	1.03/1.55
16	330	435	114	7.26	1.03/1.55

NIPPLES

GT - GREEN THREAD
 RT - RED THREAD II
 □ - STD. AVAILABLE SIZE



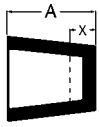
NIPPLE

Size (In.)	Close		4"		6"		8"		10"		12"		16"		24"		36"	
	GT	RT	GT	RT	GT	RT	GT	RT	GT	RT	GT	RT	GT	RT	GT	RT	GT	RT
1	2 1/2	-	-	-	□	-	□	-	-	-	-	-	-	-	-	-	-	-
1 1/2	3 1/8	-	-	-	-	-	□	-	-	-	-	-	-	-	-	-	-	-
2	4 1/2	□	-	□(3)	□	□	□	□	-	□	-	□	-	-	-	-	-	-
3	5 1/8	5 1/8	-	-	□	□(4)	□	□	-	□	-	□	-	-	-	-	-	-
4	5 3/8	5 3/8	-	-	□	□	□	□	-	□	-	□	-	-	-	-	-	-
6	6 1/8	6 1/8	-	-	□(4)	□(5)	□	□	-	□	□	-	-	-	-	-	-	-
8	8 3/8	9 3/8	-	-	-	-	-	-	-	□	□	□	□	-	□	-	□	-
10	9 3/8	9 3/8	-	-	-	-	-	-	-	□	□	□	□	-	□	-	□	-
12	9 3/8	10 1/4	-	-	-	-	-	-	-	□	□	□	□	-	□	-	□	-
14	-	□	-	-	-	-	-	-	-	□	□	□	□	-	□	-	□	-
16	-	-	-	-	-	-	-	-	-	□	□	□	□	-	□	-	□	-

(1) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.
 (2) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, bolt, and gasket recommendations.

(3) Actual length 4 1/4".
 (4) Actual length 6 1/4".
 (5) Actual length 6 1/8".

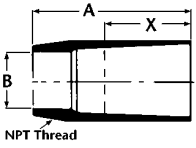
END CAPS • Parts are available in GREEN THREAD only



END CAP

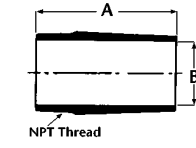
Nominal Pipe Size (In.)	A (In.)	X ⁽¹⁾ (In.) With Green Thread Pipe	X ⁽¹⁾ (In.) With Red Thread II Pipe	Nominal Weight (Lbs.)	Cyclic/Steady Pressure (psig)	A mm	X ⁽¹⁾ (mm) With Green Thread Pipe	X ⁽¹⁾ (mm) With Red Thread II Pipe	Nominal Weight kg	Cyclic/Steady Pressure MPa
1	2 3/4	1	—	.3	300/450	70	25	—	.14	2.07/3.10
1 1/2	2 5/8	1 1/8	—	.6	300/450	67	35	—	.27	2.07/3.10
2	2 3/4	1 1/8	1 3/8	1.4	300/450	70	41	35	.64	2.07/3.10
3	3 1/4	2 1/8	1 5/8	1.9	300/450	83	54	41	.86	2.07/3.10
4	3 3/4	2	1 1/2	3.0	150/225	95	51	38	1.36	1.03/1.55
6	7	2 1/8	2 3/8	4.2	150/225	178	73	60	1.91	1.03/1.55
8	8 3/4	3 3/8	4 3/8	5.6	150/225	222	86	111	2.54	1.03/1.55
10	9 7/8	3 7/8	4 1/8	8.4	150/225	251	98	105	3.81	1.03/1.55
12	11	4	4 1/4	12.5	150/225	279	102	108	5.67	1.03/1.55
14	12	3 5/8	3 3/8	15.6	150/225	305	92	92	7.08	1.03/1.55
16	13	3 5/8	3 3/8	19.5	150/225	330	92	92	8.85	1.03/1.55

ADAPTERS • 1" & 1 1/2" parts are available in GREEN THREAD only; 2"-8" parts are available in GREEN THREAD or RED THREAD II; 10" & 12" parts are available in RED THREAD II only



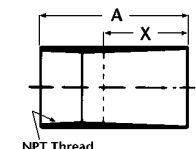
BELL x MALE

Nom. Pipe Size (In.)	A (In.)	B (In.)	X ⁽¹⁾ (In.) With GT Pipe	X ⁽¹⁾ (In.) With RTII Pipe	Nom. Wt. (Lbs.) GT	Nom. Wt. (Lbs.) RT II	Cyclic/ Steady Pressure (psig)	Nom. Pipe Size (In.)	A (mm)	B (mm)	X ⁽¹⁾ (mm) With GT Pipe	X ⁽¹⁾ (mm) With RTII Pipe	Nom. Wt. (kg) GT	Nom. Wt. (kg) RT II	Cyclic/ Steady Pressure (MPa)
1	3 1/2	1	1	—	.1	—	300/450	1	89	25	27	—	.05	—	2.07/3.10
1 1/2	3 3/4	1 1/2	1 3/8	—	.3	—	300/450	1 1/2	99	38	35	—	.14	—	2.07/3.10
2	4 1/4	2	1 5/8	1 3/8	.4	.3	300/450	2	108	51	41	35	.18	.14	2.07/3.10
3	5 1/2	3	2 1/8	1 5/8	.9	.6	200/300	3	140	76	54	41	.41	.27	1.38/2.07
4	5 1/2	4	2	1 1/2	1.6	1.0	150/225	4	140	102	51	38	.73	.45	1.03/1.55
6	6	6	2 1/8	2 3/8	2.6	1.8	150/225	6	152	152	73	60	1.18	.82	1.03/1.55
8	9 1/4	8	2 3/8	3 3/8	7.2	6.6	150/225	8	235	203	73	98	3.27	2.99	1.03/1.55



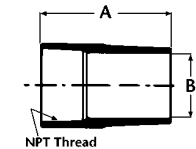
SPIGOT x MALE

1	2 5/8	1	—	—	.1	—	300/450	1	67	25	—	—	.05	—	2.07/3.10
1 1/2	2 3/4	1 1/4	—	—	.3	—	300/450	1 1/2	70	38	—	—	.14	—	2.07/3.10
2	3 5/8	2	—	—	.4	.3	300/450	2	92	51	—	—	.18	.14	2.07/3.10
3	4 5/8	3	—	—	.9	.6	200/300	3	117	76	—	—	.41	.27	1.38/2.07
4	4 7/8	4	—	—	1.1	1.0	150/225	4	124	102	—	—	.50	.45	1.03/1.55
6	6 1/8	6	—	—	2.6	2.0	150/225	6	175	152	—	—	1.18	.91	1.03/1.55
8	8	8	—	—	5.6	4.9	150/225	8	203	203	—	—	2.54	2.22	1.03/1.55



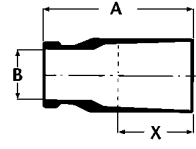
BELL x FEMALE

1	2 5/8	—	1	—	.1	—	300/450	1	67	—	27	—	.05	—	2.07/3.10
1 1/2	2 3/4	—	1 3/8	—	.3	—	300/450	1 1/2	70	—	35	—	.14	—	2.07/3.10
2	3 1/2	—	1 5/8	1 3/8	.6	.3	300/450	2	89	—	41	35	.27	.14	2.07/3.10
3	4 1/2	—	2 1/8	1 5/8	.6	.5	200/300	3	114	—	54	41	.27	.23	1.38/2.07
4	4 1/2	—	2	1 1/2	.6	.5	150/225	4	114	—	51	38	.27	.23	1.03/1.55
6	5 1/2	—	2 1/8	2 3/8	1.9	1.3	150/225	6	140	—	73	60	.86	.59	1.03/1.55
8	7	—	2 3/8	3 3/8	5.1	3.5	100/150	8	178	—	73	98	2.31	1.56	0.69/1.03



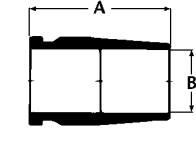
SPIGOT x FEMALE

1	3 5/8	1	—	—	.2	—	300/450	1	92	25	—	—	.09	—	2.07/3.10
1 1/2	4	1 1/2	—	—	.3	—	300/450	1 1/2	102	38	—	—	.14	—	2.07/3.10
2	3 7/8	2	—	—	.4	.3	300/450	2	98	51	—	—	.18	.14	2.07/3.10
3	4 3/4	3 3/8	—	—	.8	.5	200/300	3	121	76	—	—	.36	.23	1.38/2.07
4	4 7/8	4 1/8	—	—	1.0	.6	150/225	4	124	102	—	—	.45	.27	1.03/1.55
6	6 1/4	6	—	—	3.4	2.6	150/225	6	171	152	—	—	1.54	1.18	1.03/1.55
8	10	8	—	—	8.0	7.1	100/150	8	254	203	—	—	3.63	3.22	0.69/1.03



BELL x GROOVED⁽²⁾

1	3 1/2	7/8	1	—	.3	—	300/450	1	89	22	27	—	.14	—	2.07/3.10
1 1/2	3 3/8	1 1/2	1 3/8	—	.5	—	300/450	1 1/2	98	38	35	—	.23	—	2.07/3.10
2	4 1/4	2	1 5/8	1 3/8	.5	.3	300/450	2	108	51	41	35	.23	.14	2.07/3.10
3	5	3	2 1/8	1 5/8	.9	.6	200/300	3	127	76	54	41	.41	.27	1.38/2.07
4	5	4	2	1 1/2	1.0	.8	150/225	4	127	102	51	38	.45	.36	1.03/1.55
6	5 5/8	6	2 1/8	2 3/8	2.3	1.8	150/225	6	143	152	73	60	1.04	.82	1.03/1.55
8	8 1/4	8	2 3/8	3 3/8	5.8	4.9	150/225	8	210	203	73	98	2.63	2.22	1.03/1.55
10	8 3/4	10 1/8	—	3 1/2	—	6.3	125/190	10	210	257	—	89	—	2.86	0.86/1.31

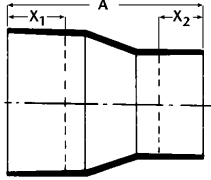


SPIGOT x GROOVED⁽²⁾

1	2 3/4	7/8	—	—	.1	—	300/450	1	70	22	—	—	.05	—	2.07/3.10
1 1/2	3 3/8	1 1/2	—	—	.2	—	300/450	1 1/2	79	38	—	—	.09	—	2.07/3.10
2	3 5/8	2	—	—	.3	.3	300/450	2	92	51	—	—	.14	.14	2.07/3.10
3	4 1/4	3	—	—	.9	.6	200/300	3	127	76	—	—	.41	.27	1.38/2.07
4	4 1/2	4	—	—	1.0	.9	150/225	4	114	102	—	—	.45	.41	1.03/1.55
6	5	6	—	—	2.6	2.0	150/225	6	127	152	—	—	1.18	.91	1.03/1.55
8	7	8	—	—	4.4	4.1	150/225	8	178	203	—	—	2.00	1.86	1.03/1.55
10	7	10 1/8	—	—	—	5.6	125/190	10	178	257	—	—	—	2.54	0.86/1.31
12	7	12	—	—	—	6.8	100/150	12	178	305	—	—	—	3.08	0.69/1.03

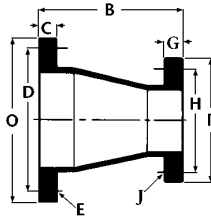
(1) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.
 (2) Do not pressurize over 1 1/2 times the maximum operating pressure.

REDUCERS • 1"-16" parts are available in GREEN THREAD only.



CONCENTRIC REDUCER
BELLED

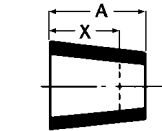
Nom. Pipe Size (In.)	A (In.)	X ₁ ⁽¹⁾ (In.) With GT Pipe	X ₂ ⁽¹⁾ (In.) With GT Pipe	X ₁ ⁽¹⁾ (In.) With RTII Pipe	X ₂ ⁽¹⁾ (In.) With RTII Pipe	Nom. Wt. (Lbs.)	Cyclic/Steady Pressure (psig)	Nom. Pipe Size (In.)	A (mm)	X ₁ ⁽¹⁾ (mm) With GT Pipe	X ₂ ⁽¹⁾ (mm) With GT Pipe	X ₁ ⁽¹⁾ (mm) With RTII Pipe	X ₂ ⁽¹⁾ (mm) With RTII Pipe	Nom. Wt. (kg)	Cyclic/Steady Pressure (MPa)
2 x 1	5/2	1 5/8	1 3/8	1 3/8	1 3/8	.6	300/450	2 x 1	127	41	35	35	35	.27	2.07/3.10
2 x 1 1/2	5 1/2	1 5/8	1 3/8	1 3/8	1 3/8	.6	300/450	2 x 1 1/2	127	41	35	35	35	.27	2.07/3.10
3 x 1 1/2	7 1/8	2 1/8	1 5/8	1 5/8	1 5/8	1.3	300/450	3 x 1 1/2	152	54	41	41	35	.59	2.07/3.10
3 x 2	7 1/8	2 1/8	1 5/8	1 5/8	1 5/8	1.3	300/450	3 x 2	152	54	41	41	35	.59	2.07/3.10
4 x 2	7 1/8	2	2 1/8	1 1/2	1 5/8	1.9	150/225 ⁽²⁾	4 x 2	178	51	54	38	41	.86	1.03/1.55 ⁽²⁾
4 x 3	7 1/8	2	2 1/8	1 1/2	1 5/8	1.9	150/225 ⁽²⁾	4 x 3	178	51	54	38	41	.86	1.03/1.55 ⁽²⁾
6 x 3	11 1/4	2 1/8	2	2 3/8	1 1/2	4.3	150/225 ⁽²⁾	6 x 3	229	73	51	60	38	1.95	1.03/1.55 ⁽²⁾
6 x 4	11 1/4	2 1/8	2	2 3/8	1 1/2	4.3	150/225 ⁽²⁾	6 x 4	229	73	51	60	38	1.95	1.03/1.55 ⁽²⁾
8 x 4	15 1/4	3 3/8	3 3/8	4 3/8	2 1/8	7.3	150/225	8 x 4	387	86	86	111	73	3.31	1.03/1.55
8 x 6	15 1/4	3 3/8	3 3/8	4 3/8	2 1/8	7.3	150/225	8 x 6	387	86	86	111	73	3.31	1.03/1.55
10 x 6	16 1/2	3 3/8	3 3/8	4 3/8	4 3/8	11.1	150/225	10 x 6	411	98	86	105	111	5.04	1.03/1.55
10 x 8	16 1/2	3 3/8	3 3/8	4 3/8	4 3/8	11.1	150/225	10 x 8	411	98	86	105	111	5.04	1.03/1.55
12 x 8	17 1/4	4	3 3/8	4 3/8	4 3/8	16.4	150/225	12 x 8	445	102	98	108	105	7.44	1.03/1.55
12 x 10	17 1/4	4	3 3/8	4 3/8	4 3/8	16.4	150/225	12 x 10	445	102	98	108	105	7.44	1.03/1.55
14 x 10	19 1/4	3 3/8	4 3/8	3 3/8	4 3/8	18.9	150/225	14 x 10	502	92	108	92	108	8.57	1.03/1.55
14 x 12	19 1/4	3 3/8	4 3/8	3 3/8	4 3/8	18.9	150/225	14 x 12	502	92	108	92	108	8.57	1.03/1.55
16 x 12	22	3 3/8	3 3/8	3 3/8	3 3/8	24.4	150/225	16 x 12	560	92	92	92	92	11.1	1.03/1.55
16 x 14	22	3 3/8	3 3/8	3 3/8	3 3/8	24.4	150/225	16 x 14	560	92	92	92	92	11.1	1.03/1.55



CONCENTRIC REDUCER
FLANGED⁽³⁾

Nom. Pipe Size (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	G (In.)	H (In.)	J (In.)	P (In.)	Nominal Weight (Lbs.)	Cyclic/Steady Pressure (psig)
2 x 1	5	3/4	4 3/4	3/4 D - 4 holes	6	3/4	3 3/8	5/8 D - 4 holes	5	2.6	200/300
2 x 1 1/2	5	3/4	4 3/4	3/4 D - 4 holes	6	3/4	3 3/8	5/8 D - 4 holes	5	2.6	200/300
3 x 1 1/2	6	1 3/8	6	3/4 D - 4 holes	7 1/2	3/4	4 3/4	3/4 D - 4 holes	6	4.4	125/190
3 x 2	6	1 3/8	6	3/4 D - 4 holes	7 1/2	3/4	4 3/4	3/4 D - 4 holes	6	4.4	125/190
4 x 2	7	1 3/8	7 1/2	3/4 D - 8 holes	9	1 3/8	6	3/4 D - 4 holes	7 1/2	7.1	100/150
4 x 3	7	1 3/8	7 1/2	3/4 D - 8 holes	9	1 3/8	6	3/4 D - 4 holes	7 1/2	7.1	100/150
6 x 3	9	1 1/2	9 1/2	7/8 D - 8 holes	11	1 3/8	7 1/2	3/4 D - 8 holes	9	11.0	100/150
6 x 4	9	1 1/2	9 1/2	7/8 D - 8 holes	11	1 3/8	7 1/2	3/4 D - 8 holes	9	11.0	100/150
8 x 4	11	1 3/4	11 1/4	7/8 D - 8 holes	13 1/2	1 1/2	9 1/2	7/8 D - 8 holes	11	17.6	150/225
8 x 6	11	1 3/4	11 1/4	7/8 D - 8 holes	13 1/2	1 1/2	9 1/2	7/8 D - 8 holes	11	17.6	150/225
10 x 6	12	2	14 1/4	1 D - 12 holes	16	1 3/4	11 3/4	7/8 D - 8 holes	13 1/2	28.2	150/225
10 x 8	12	2	14 1/4	1 D - 12 holes	16	1 3/4	11 3/4	7/8 D - 8 holes	13 1/2	28.2	150/225
12 x 8	14	2 1/4	17	1 D - 12 holes	19	2	14 1/4	1 D - 12 holes	16	43.0	150/225
12 x 10	14	2 1/4	17	1 D - 12 holes	19	2	14 1/4	1 D - 12 holes	16	43.0	150/225
14 x 10	16	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	2 1/4	17	1 D - 12 holes	19	55.0	150/225
14 x 12	16	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	2 1/4	17	1 D - 12 holes	19	55.0	150/225
16 x 12	18	2 1/2	21 1/4	1 1/8 D - 16 holes	23 1/4	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	89.5	150/225
16 x 14	18	2 1/2	21 1/4	1 1/8 D - 16 holes	23 1/4	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	89.5	150/225

(In.)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)	(MPa)
2 x 1	127	19	121	19 D - 4 holes	152	19	98	16 D - 4 holes	127	1.18	1.38/2.07
2 x 1 1/2	127	19	121	19 D - 4 holes	152	19	98	16 D - 4 holes	127	1.18	1.38/2.07
3 x 1 1/2	152	35	152	19 D - 4 holes	191	19	121	19 D - 4 holes	152	2.00	0.86/1.31
3 x 2	152	35	152	19 D - 4 holes	191	19	121	19 D - 4 holes	152	2.00	0.86/1.31
4 x 2	178	35	191	19 D - 8 holes	229	35	152	19 D - 4 holes	191	3.22	0.69/1.03
4 x 3	178	35	191	19 D - 8 holes	229	35	152	19 D - 4 holes	191	3.22	0.69/1.03
6 x 3	229	38	241	22 D - 8 holes	280	35	191	19 D - 8 holes	229	4.99	0.69/1.03
6 x 4	229	38	241	22 D - 8 holes	280	35	191	19 D - 8 holes	229	4.99	0.69/1.03
8 x 4	279	44	298	22 D - 8 holes	343	38	241	22 D - 8 holes	279	7.98	1.03/1.55
8 x 6	279	44	298	22 D - 8 holes	343	38	241	22 D - 8 holes	279	7.98	1.03/1.55
10 x 6	305	51	362	25 D - 12 holes	406	44	298	22 D - 8 holes	343	12.8	1.03/1.55
10 x 8	305	51	362	25 D - 12 holes	406	44	298	22 D - 8 holes	343	12.8	1.03/1.55
12 x 8	356	57	432	25 D - 12 holes	483	51	362	25 D - 12 holes	406	19.5	1.03/1.55
12 x 10	356	57	432	25 D - 12 holes	483	51	362	25 D - 12 holes	406	19.5	1.03/1.55
14 x 10	406	64	476	29 D - 12 holes	527	57	432	25 D - 12 holes	483	25.0	1.03/1.55
14 x 12	406	64	476	29 D - 12 holes	527	57	432	25 D - 12 holes	483	25.0	1.03/1.55
16 x 12	457	64	540	29 D - 16 holes	594	64	476	29 D - 12 holes	527	40.6	1.03/1.55
16 x 14	457	64	540	29 D - 16 holes	594	64	476	29 D - 12 holes	527	40.6	1.03/1.55



REDUCER BUSHING

Nom. Pipe Size (In.)	A (In.)	X ⁽¹⁾ (In.) With GT Pipe	X ⁽¹⁾ (In.) With RTII Pipe	Nominal Weight (Lbs.)	Cyclic/Steady Pressure (psig)	A (mm)	X ⁽¹⁾ (mm) With GT Pipe	X ⁽¹⁾ (mm) With RTII Pipe	Nominal Weight (kg)	Cyclic/Steady Pressure (MPa)
1 x 1/4 NPT, 1 x 1/2 NPT, 1 x 3/4 NPT	1 1/8	-	-	.1	300/450	29	-	-	.05	2.07/3.10
1 1/2 x 1/2 NPT, 1 1/2 x 3/4 NPT	1 3/8	-	-	.1	300/450	35	-	-	.05	2.07/3.10
1 1/2 x 1 NPT, 1 1/2 x 1, 1 1/2 x 1 1/4 NPT	2 1/4	1	-	.4	300/450	57	25	-	.18	2.07/3.10
2 x 1 NPT	1 3/4	-	-	.4	300/450	44	-	-	.18	2.07/3.10
2 x 1 1/4 NPT	1 3/4	-	-	.4	300/450	44	-	-	.18	2.07/3.10
2 x 1 1/2	2	1 3/8	-	.1	300/450	51	35	-	.05	2.07/3.10
2 x 1 1/2 NPT	1 3/4	-	-	.1	300/450	44	-	-	.05	2.07/3.10
3 x 2	2 1/4	2	1 1/2	.8	300/450	57	51	38	.36	2.07/3.10
4 x 3	2 3/8	2 3/8	1 3/8	1.0	300/450	67	60	48	.45	2.07/3.10
6 x 4	3 3/8	2 3/8	1 3/8	3.9	300/450	79	60	48	1.77	2.07/3.10
8 x 6	3 3/4	2 3/4	2 1/4	6.8	150/225	83	70	57	3.08	1.03/1.55
10 x 8	4	2 3/8	3 3/8	9.9	150/225	102	67	92	4.49	1.03/1.55
12 x 10	4 1/2	3 3/8	4 3/8	11.8	150/225	114	98	105	5.35	1.03/1.55
14 x 12	5 1/2	5 1/8	5 1/8	20.2	150/225	152	130	130	9.16	1.03/1.55
16 x 14	6	5 3/4	5 3/4	28.9	150/225	165	146	146	13.1	1.03/1.55

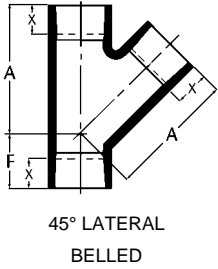
NOTE: MULTI-STEP and ECCENTRIC reducers are available through 16" sizes. Information available on request.

(2) Also available on special order for 300 psig cyclic and 450 psig steady pressure service with belled ends.

(1) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

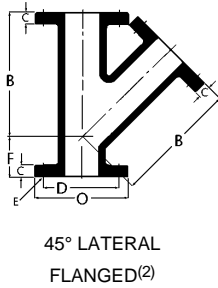
(3) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, torque, bolt, and gasket recommendations.

LATERALS • 1" - 2" belled laterals are available in GREEN THREAD only; 3"-16" belled laterals are available in GREEN THREAD and RED THREAD II; 1" - 6" flanged laterals are available in GREEN THREAD only; 8"-16" flanged laterals are available in GREEN THREAD and RED THREAD II



Nom. Pipe Size (In.)	A (In.)	F (In.)	X ⁽¹⁾ (In.) With GT Pipe	X ⁽¹⁾ (In.) With RTII Pipe	Nom. Weight (Lbs.)	Cyclic/ Steady Pressure (psig)
1	3 3/8	2 1/2	1	—	.6	100/150
1 1/2	5 1/4	3 3/4	1 3/8	—	1.3	100/150
2	6 5/8	2 3/4	1 5/8	1 3/8	4.1	300/450
3	7 3/4	4 1/4	2 1/8	1 5/8	4.4	100/150
4	9	4 3/8	2	1 1/2	7.8	100/150
6	12 1/2	5 3/4	2 7/8	2 3/8	13.7	90/135
8	16 1/4	7 3/8	2 3/4	3 3/8	33.7	90/135
10	19 3/8	8 3/4	3 3/4	3 1/2	53.3	80/120
12	24 3/4	11 3/4	3 3/8	3 3/8	96.0	60/90
14	32 1/2	15 3/4	4 3/8	4 3/8	154.2	50/75
16	35 3/4	17 3/4	4 1/2	4 1/2	222.6	50/75

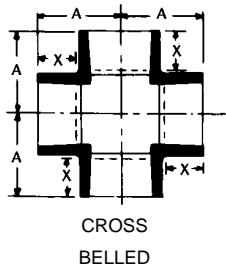
Nom. Pipe Size (In.)	A (mm)	F (mm)	X ⁽¹⁾ (mm) With GT Pipe	X ⁽¹⁾ (mm) With RTII Pipe	Nom. Weight (kg)	Cyclic/ Steady Pressure (MPa)
1	98	64	27	—	.27	0.69/1.03
1 1/2	133	83	35	—	.59	0.69/1.03
2	168	70	41	35	1.86	2.07/3.10
3	197	108	54	41	2.00	0.69/1.03
4	229	111	51	38	3.54	0.69/1.03
6	318	146	73	60	6.21	0.62/0.93
8	413	187	73	98	15.3	0.62/0.93
10	498	222	83	89	24.2	0.55/0.83
12	629	298	92	98	43.6	0.41/0.62
14	826	400	111	111	69.9	0.34/0.52
16	908	451	114	114	101	0.34/0.52



Nom. Pipe Size (In.)	B (In.)	C (In.)	D (In.)	E (In.)	F (In.)	O (In.)	Nom. Weight (Lbs.)	Cyclic/ Steady Pressure (psig)
1	6	3/4	3 1/4	5/8 D - 4 holes	4 1/2	4 1/4	2.8	100/150
1 1/2	8 1/2	3/4	3 3/8	5/8 D - 4 holes	5 1/2	5	4.4	100/150
2	8 7/8	3/4	4 3/4	3/4 D - 4 holes	6 3/8	6	7.8	100/150
3	11 1/4	1 1/8	6	3/4 D - 4 holes	8	7 1/2	13.4	100/150
4	12 1/2	1 1/8	7 1/2	3/4 D - 8 holes	8 1/2	9	19.2	100/150
6	18	1 1/2	9 1/2	7/8 D - 8 holes	11	11	35.0	90/135
8	21 3/4	1 3/4	11 3/4	7/8 D - 8 holes	13 3/4	13 1/2	65.3	90/135
10	26 5/8	2	14 1/4	1 D - 12 holes	16 5/8	16	112	80/120
12	32	2 1/4	17	1 D - 12 holes	20	19	172	60/90
14	36	2 1/2	18 3/4	1 1/8 D - 12 holes	22	20 3/4	209	50/75
16	40	2 1/2	21 1/4	1 1/8 D - 16 holes	24	23 1/4	267	50/75

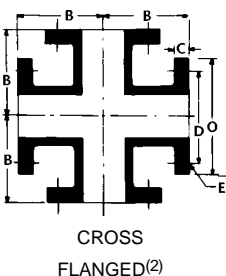
Nom. Pipe Size (In.)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	O (mm)	Nom. Wt. (kg)	Cyclic/ Steady Pressure (MPa)
1	152	19	79	16 D - 4 holes	114	108	1.27	0.69/1.03
1 1/2	216	19	98	16 D - 4 holes	140	127	2.00	0.69/1.03
2	225	19	121	19 D - 4 holes	162	152	3.54	0.69/1.03
3	298	35	152	19 D - 4 holes	203	191	6.08	0.69/1.03
4	327	35	191	19 D - 8 holes	216	229	8.71	0.69/1.03
6	457	38	241	22 D - 8 holes	279	279	15.9	0.62/0.93
8	552	44	298	22 D - 8 holes	349	343	29.6	0.62/0.93
10	676	51	362	25 D - 12 holes	422	406	50.8	0.55/0.83
12	813	57	432	25 D - 12 holes	508	483	78.0	0.41/0.62
14	914	64	476	29 D - 12 holes	559	527	94.6	0.34/0.52
16	1016	64	540	29 D - 16 holes	610	594	121	0.34/0.52

CROSSES • 1" - 6" parts are available in GREEN THREAD only; 8" - 16" parts are available in GREEN THREAD and RED THREAD II



Nom. Pipe Size (In.)	A (In.)	X ⁽¹⁾ (In.) With GT Pipe	X ⁽¹⁾ (In.) With RTII Pipe	Nom. Weight (Lbs.)	Cyclic/ Steady Pressure (psig)
1	2 3/4	1	—	1.4	200/300
1 1/2	3 3/8	1 3/8	—	2.0	200/300
2	3 3/8	1 5/8	1 3/8	3.4	200/300
3	4 3/8	2 1/8	1 5/8	8.5	125/190
4	5 1/2	2	1 1/2	10.7	100/150
6	6 1/8	2 7/8	2 3/8	17.3	100/150
8	11 3/8	2 3/8	3 3/8	30.8	100/150
10	13 3/8	3 1/4	3 1/2	42.7	100/150
12	14	3 3/8	3 3/8	73.2	100/150
14	16	4 3/8	4 3/8	104	100/150
16	17 1/4	4 1/2	4 1/2	143	100/150

Nom. Pipe Size (In.)	A (mm)	X ⁽¹⁾ (mm) With GT Pipe	X ⁽¹⁾ (mm) With RTII Pipe	Nom. Weight (kg)	Cyclic/ Steady Pressure (MPa)
1	70	27	—	.64	1.38/2.07
1 1/2	86	35	—	.91	1.38/2.07
2	86	41	35	1.54	1.38/2.07
3	117	54	41	3.86	0.86/1.31
4	130	51	38	4.85	0.69/1.03
6	156	73	60	7.85	0.69/1.03
8	295	73	98	14.0	0.69/1.03
10	333	83	89	19.4	0.69/1.03
12	356	92	98	33.2	0.69/1.03
14	406	111	111	47.2	0.69/1.03
16	438	114	114	64.7	0.69/1.03



Nom. Pipe Size (In.)	B (In.)	C (In.)	D (In.)	E (In.)	O (In.)	Nom. Weight (Lbs.)	Cyclic/ Steady Pressure (psig)
1	3 1/2	3/4	3 1/4	5/8 D - 4 holes	4 1/4	3.8	200/300
1 1/2	4	3/4	3 3/8	5/8 D - 4 holes	5	5.4	200/300
2	4 1/2	3/4	4 3/4	3/4 D - 4 holes	6	8.6	200/300
3	5 1/2	1 1/8	6	3/4 D - 4 holes	7 1/2	15.1	125/190
4	6 1/2	1 1/8	7 1/2	3/4 D - 8 holes	9	22.8	100/150
6	8	1 1/2	9 1/2	7/8 D - 8 holes	11	34.9	100/150
8	9	1 3/4	11 3/4	7/8 D - 8 holes	13 1/2	61.2	100/150
10	11	2	14 1/4	1 D - 12 holes	16	83.5	100/150
12	12	2 1/4	17	1 D - 12 holes	19	145	100/150
14	14	2 1/2	18 3/4	1 1/8 D - 12 holes	20 3/4	224	100/150
16	15	2 1/2	21 1/4	1 1/8 D - 16 holes	23 1/4	303	100/150

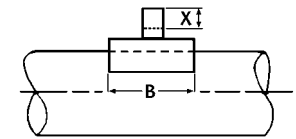
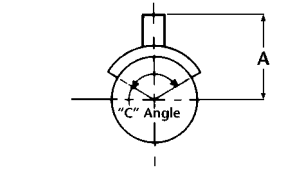
Nom. Pipe Size (In.)	B (mm)	C (mm)	D (mm)	E (mm)	O (mm)	Nom. Weight (kg)	Cyclic/ Steady Pressure (MPa)
1	89	19	79	16 D - 4 holes	108	1.72	1.38/2.07
1 1/2	102	19	98	16 D - 4 holes	127	2.45	1.38/2.07
2	114	19	121	19 D - 4 holes	152	3.90	1.38/2.07
3	140	35	152	19 D - 4 holes	191	6.85	0.86/1.31
4	165	35	191	19 D - 8 holes	229	10.3	0.69/1.03
6	203	38	241	22 D - 8 holes	279	15.8	0.69/1.03
8	229	44	298	22 D - 8 holes	343	27.8	0.69/1.03
10	279	51	362	25 D - 12 holes	406	37.9	0.69/1.03
12	305	57	432	25 D - 12 holes	483	65.5	0.69/1.03
14	356	64	476	29 D - 12 holes	527	102	0.69/1.03
16	381	64	540	29 D - 16 holes	594	137	0.69/1.03

(1) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

(2) Flanges should be joined only to flat-faced flanges. See Smith Fibercast Installation Instructions for valve, torque, bolt, and gasket recommendations.

SADDLES • parts are available in GREEN THREAD only

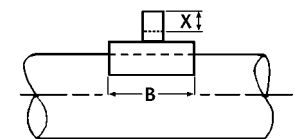
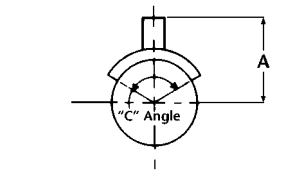
Nominal Size (In.)	A (In.)	B (In.)	C Angle °	X ⁽¹⁾ (In.) With GT Pipe	X ⁽¹⁾ (In.) With RTII Pipe	Nom. Wt. (Lbs.)	Cyclic/ Steady Pressure (psig)	A (mm)	B (mm)	X ⁽¹⁾ (mm) With GT Pipe	X ⁽¹⁾ (mm) With RTII Pipe	Nom. Wt. (kg)	Cyclic/ Steady Pressure (MPa)
2 x 1	2 ⁷ / ₁₆	4	180	1	—	.6	300/450	73	102	25	—	.27	2.07/3.10
2 x 1 ¹ / ₂	2 ⁷ / ₁₆	4	180	1 ³ / ₈	—	.5	300/450	73	102	35	—	.23	2.07/3.10
3 x 1	3 ¹ / ₂	6	180	1	—	1.5	200/300	89	152	25	—	.68	1.38/2.07
3 x 1 ¹ / ₂	3 ¹ / ₂	6	180	1 ³ / ₈	—	.9	200/300	89	152	35	—	.41	1.38/2.07
3 x 2	4	6	180	1 ⁵ / ₈	1 ³ / ₈	1.4	200/300	102	152	41	35	.64	1.38/2.07
4 x 1	4	6	180	1	—	1.4	150/225	102	152	25	—	.64	1.03/1.55
4 x 1 ¹ / ₂	4	6	180	1 ³ / ₈	—	1.5	150/225	102	152	35	—	.68	1.03/1.55
4 x 2	4 ¹ / ₂	6	180	1 ⁵ / ₈	1 ³ / ₈	1.5	150/225	114	152	41	35	.68	1.03/1.55
4 x 3	5 ¹ / ₄	6	180	2 ¹ / ₈	1 ⁵ / ₈	1.6	150/225	133	152	54	41	.73	1.03/1.55
6 x 1	5	6	120	1	—	1.4	150/225	127	152	25	—	.64	1.03/1.55
6 x 1 ¹ / ₂	5	6	120	1 ³ / ₈	—	1.3	150/225	127	152	35	—	.59	1.03/1.55
6 x 2	5 ¹ / ₂	6	120	1 ⁵ / ₈	1 ³ / ₈	1.5	150/225	140	152	41	35	.68	1.03/1.55
6 x 3	6 ¹ / ₄	6	120	2 ¹ / ₈	1 ⁵ / ₈	1.6	150/225	159	152	54	41	.73	1.03/1.55
6 x 4	6 ³ / ₈	8	140	2	1 ¹ / ₂	2.4	150/225	162	203	51	38	1.09	1.03/1.55
(2)8 x 1	7 ¹ / ₈	9	120	1	—	3.1	150/225	181	229	25	—	1.41	1.03/1.55
(2)8 x 1 ¹ / ₂	7 ¹ / ₈	9	120	1 ³ / ₈	—	2.8	150/225	181	229	35	—	1.27	1.03/1.55
8 x 2	7 ¹ / ₈	9	120	1 ⁵ / ₈	1 ³ / ₈	2.7	150/225	181	229	41	35	1.23	1.03/1.55
8 x 3	8	14	180	2 ¹ / ₈	1 ⁵ / ₈	6.0	150/225	203	356	54	41	2.72	1.03/1.55
8 x 4	7 ³ / ₈	14	180	2	1 ¹ / ₂	6.1	150/225	187	356	51	38	2.77	1.03/1.55
8 x 6	9 ⁵ / ₈	14	180	2 ¹ / ₈	2 ³ / ₈	7.7	125/190	244	356	73	60	3.49	0.86/1.31
(2)10 x 1	8 ⁵ / ₈	9	95	1	—	3.1	150/225	206	229	25	—	1.41	1.03/1.55
(2)10 x 1 ¹ / ₂	8 ⁵ / ₈	9	95	1 ³ / ₈	—	2.8	150/225	206	229	35	—	1.27	1.03/1.55
10 x 2	8 ⁵ / ₈	9	95	1 ⁵ / ₈	1 ³ / ₈	2.7	150/225	206	229	41	35	1.23	1.03/1.55
10 x 3	9	14	150	2 ¹ / ₈	1 ⁵ / ₈	6.1	150/225	229	356	54	41	2.77	1.03/1.55
10 x 4	8 ⁵ / ₈	16 ³ / ₄	180	2	1 ¹ / ₂	8.4	150/225	213	425	51	38	3.81	1.03/1.55
10 x 6	10 ⁵ / ₈	16 ³ / ₄	180	2 ¹ / ₈	2 ³ / ₈	10.0	125/190	270	425	73	60	4.54	0.86/1.31
10 x 8	12 ¹ / ₈	16 ³ / ₄	180	3 ¹ / ₈	4 ³ / ₈	11.9	100/150	308	425	86	111	5.40	0.69/1.03
(2)12 x 1	9 ¹ / ₈	10	90	1	—	3.6	150/225	232	254	25	—	1.63	1.03/1.55
(2)12 x 1 ¹ / ₂	9 ¹ / ₈	10	90	1 ³ / ₈	—	3.3	150/225	232	254	35	—	1.50	1.03/1.55
12 x 2	9 ¹ / ₈	10	90	1 ⁵ / ₈	1 ³ / ₈	3.2	150/225	232	254	41	35	1.45	1.03/1.55
12 x 3	10	14	125	2 ¹ / ₈	1 ⁵ / ₈	6.1	150/225	254	356	54	41	2.77	1.03/1.55
12 x 4	9 ⁵ / ₈	17	155	2	1 ¹ / ₂	8.6	150/225	238	432	51	38	3.90	1.03/1.55
12 x 6	11 ⁵ / ₈	21	180	2 ¹ / ₈	2 ³ / ₈	13.5	150/225	296	533	73	60	6.12	1.03/1.55
12 x 8	13 ¹ / ₈	21	180	3 ¹ / ₈	4 ³ / ₈	15.3	125/190	333	533	86	111	6.94	0.86/1.31
12 x 10	13	21	180	3 ¹ / ₈	4 ¹ / ₈	22.0	100/150	330	533	98	105	9.98	0.69/1.03
(2)14 x 1	10	12	95	1	—	4.7	150/225	254	305	25	—	2.13	1.03/1.55
(2)14 x 1 ¹ / ₂	10	12	95	1 ³ / ₈	—	4.4	150/225	254	305	35	—	2.00	1.03/1.55
14 x 2	10	12	95	1 ⁵ / ₈	1 ³ / ₈	4.3	150/225	254	305	41	35	1.95	1.03/1.55
14 x 3	10 ⁷ / ₈	15	120	2 ¹ / ₈	1 ⁵ / ₈	6.9	150/225	276	381	54	41	3.13	1.03/1.55
14 x 4	10 ¹ / ₄	17	135	2	1 ¹ / ₂	8.4	150/225	260	432	51	38	3.81	1.03/1.55
14 x 6	12 ⁵ / ₈	21	165	2 ¹ / ₈	2 ³ / ₈	12.2	150/225	321	533	73	60	5.53	1.03/1.55
14 x 8	14	21	165	3 ¹ / ₈	4 ³ / ₈	15.9	150/225	356	533	86	111	7.21	1.03/1.55
14 x 10	14	26	180	3 ¹ / ₈	4 ³ / ₈	28.4	100/150	356	660	98	105	12.9	0.69/1.03
14 x 12	14 ³ / ₈	26	180	4	4 ¹ / ₄	30.1	100/150	365	660	102	108	13.7	0.69/1.03
(2)16 x 1	11	13	90	1	—	5.4	150/225	279	330	25	—	2.45	1.03/1.55
(2)16 x 1 ¹ / ₂	11	13	90	1 ³ / ₈	—	5.1	150/225	279	330	35	—	2.31	1.03/1.55
16 x 2	11	13	90	1 ⁵ / ₈	1 ³ / ₈	5.0	150/225	279	330	41	35	2.27	1.03/1.55
16 x 3	11 ⁷ / ₈	15	105	2 ¹ / ₈	1 ⁵ / ₈	6.9	150/225	302	381	54	41	3.13	1.03/1.55
16 x 4	11 ¹ / ₄	17	120	2	1 ¹ / ₂	8.6	150/225	286	432	51	38	3.90	1.03/1.55
16 x 6	13 ⁵ / ₈	21	145	2 ¹ / ₈	2 ³ / ₈	14.2	150/225	346	533	73	60	6.44	1.03/1.55
16 x 8	15	26	180	3 ¹ / ₈	4 ³ / ₈	21.9	150/225	381	660	86	111	9.93	1.03/1.55
16 x 10	15	26	180	3 ¹ / ₈	4 ³ / ₈	31.0	150/225	381	660	98	105	14.1	1.03/1.55
16 x 12	15 ³ / ₈	26	180	4	4 ¹ / ₄	32.6	100/150	391	660	102	108	14.8	0.69/1.03
16 x 14	14 ¹ / ₈	26	180	3 ¹ / ₈	3 ³ / ₈	30.6	100/150	359	660	92	92	13.9	0.69/1.03



BELLED SIDE OUTLET

It is the policy of Smith Fibercast to improve its products continually. In accordance with that policy, the right is reserved to make changes in specifications, descriptions, and illustrative material contained in this bulletin as conditions warrant. The information contained herein is general in nature and is not intended to express any warranty of any type whatsoever, nor shall any be implied.

Nominal Size (In.)	A (In.)	B (In.)	C Angle (P)	Nom. Wt. (Lbs.)	Cyclic/ Steady Pressure (psig)	Nominal Size (In.)	A (mm)	B (mm)	C Angle (P)	Nom. Wt. (kg)	Cyclic/ Steady Pressure (MPa)
2 x 1	2 ⁷ / ₁₆	4	180	.6	300/450	2 x 1	73	102	180	.27	2.07/3.10
2 x 1 ¹ / ₂	2 ⁷ / ₁₆	4	180	.6	300/450	2 x 1 ¹ / ₂	73	102	180	.27	2.07/3.10
3 x 1	3 ¹ / ₂	6	180	1.1	200/300	3 x 1	89	152	180	.50	1.38/2.07
3 x 1 ¹ / ₂	3 ¹ / ₂	6	180	1.0	200/300	3 x 1 ¹ / ₂	89	152	180	.45	1.38/2.07
4 x 1	4	6	180	1.6	150/225	4 x 1	102	152	180	.73	1.03/1.55
4 x 1 ¹ / ₂	4	6	180	1.5	150/225	4 x 1 ¹ / ₂	102	152	180	.68	1.03/1.55
6 x 1	5	6	120	1.5	150/225	6 x 1	127	152	120	.68	1.03/1.55
6 x 1 ¹ / ₂	5	6	120	1.5	150/225	6 x 1 ¹ / ₂	127	152	120	.64	1.03/1.55
8 x 1	7 ¹ / ₈	9	120	3.1	150/225	8 x 1	181	229	25	1.41	1.03/1.55
10 x 1	8 ⁵ / ₈	9	95	3.1	150/225	10 x 1	206	229	25	1.41	1.03/1.55
12 x 1	9 ¹ / ₈	10	90	3.6	150/225	12 x 1	232	254	25	1.63	1.03/1.55
14 x 1	10	12	95	4.7	150/225	14 x 1	254	305	25	2.13	1.03/1.55
16 x 1	11	13	90	5.4	150/225	16 x 1	279	330	25	2.45	1.03/1.55



THREADED SIDE OUTLET
NPT INTERNAL THREADS

(1) This is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

(2) Saddle is manufactured by bonding a reducer bushing into a saddle with a 2" outlet.