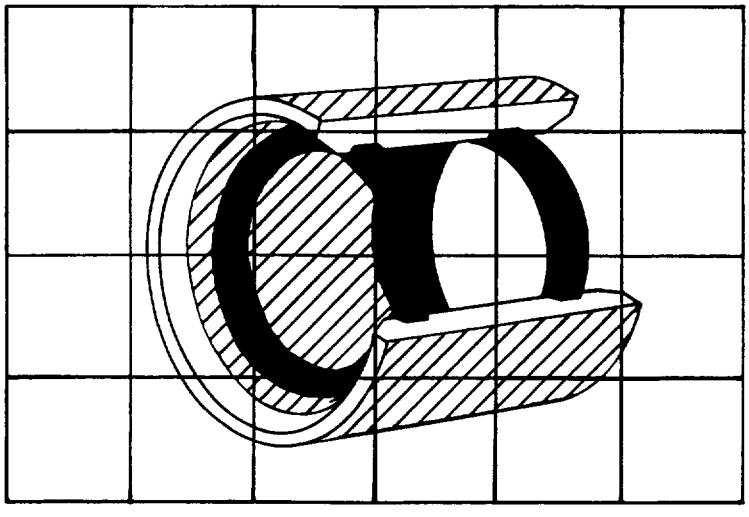
PLAINTIFF'S EXHIBIT

CT-1006

CertainTeed

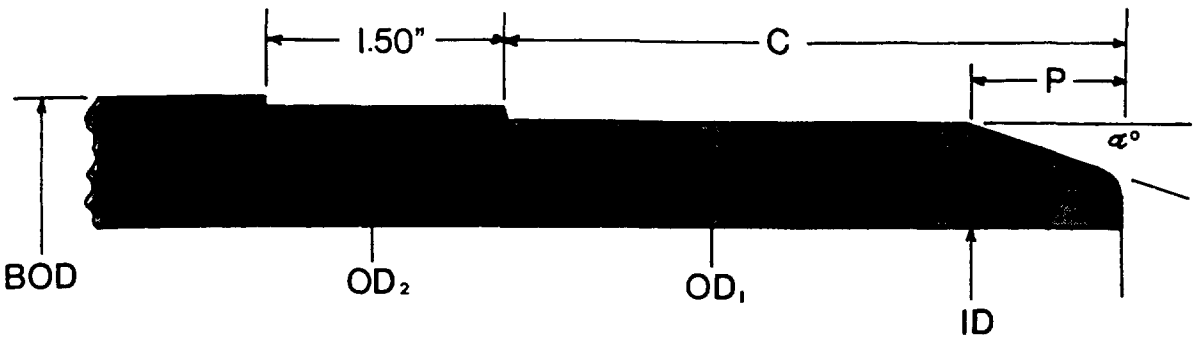
AC Pressure Pipe & Fluid-Tite® Couplings



engineering drawings & dimensions

CTD032862

CG Fluid-Tite® Pipe



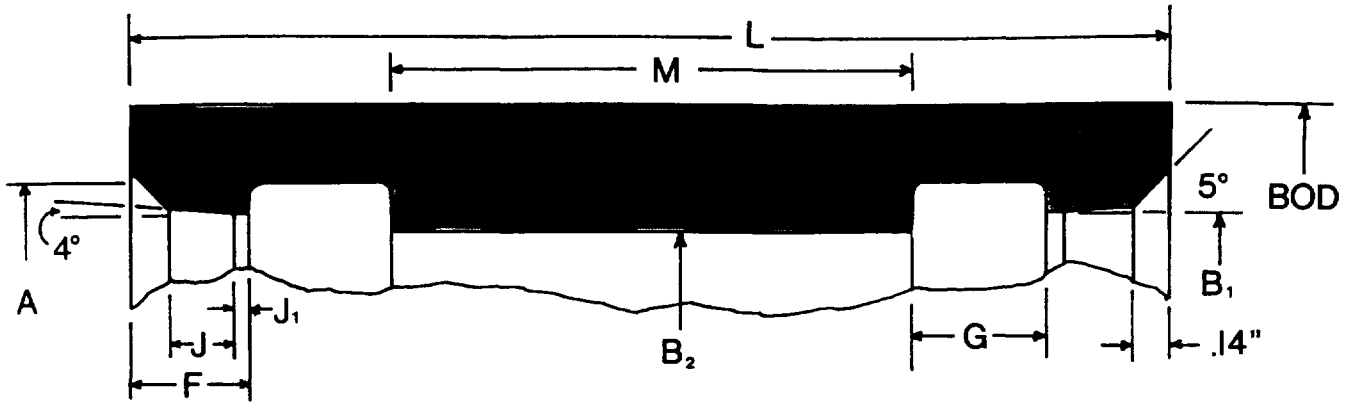
Nom. Size Pipe & Class	Nom. I.D. Inches	B.O.D. Inches	O.D.1 Inches	O.D.2 Inches	C Inches	P Inches	α°
6"-100	6.00	7.16	6.91	7.07	2.40	.75	16
8"-100	8.00	9.32	9.11	9.27	2.40	.75	16
10"-100	10.00	11.46	11.24	11.40	2.40	.75	16
12"-100	12.00	13.70	13.44	13.60	2.90	1.00	16
14"-100	13.60	15.36	15.07	15.23	3.25	1.00	18
16"-100	15.50	17.50	17.15	17.31	3.25	1.00	18
18"-100	18.00	20.30	19.90	20.06	3.75	1.00	20
20"-100	20.00	22.50	22.12	22.28	3.75	1.00	20
24"-100	24.00	27.00	26.48	26.64	3.75	1.00	20
6"-150	5.80	7.12	6.91	7.07	2.40	.75	16
8"-150	7.80	9.32	9.11	9.27	2.40	.75	16
10"-150	10.00	11.85	11.66	11.82	2.40	.75	16
12"-150	12.00	14.11	13.92	14.08	2.90	1.00	16
14"-150	14.00	16.41	16.22	16.38	3.25	1.00	18
16"-150	16.00	18.65	18.46	18.62	3.25	1.00	18
18"-150	18.00	21.20	20.94	21.10	3.75	1.00	20
20"-150	20.00	23.54	23.28	23.44	3.75	1.00	20
24"-150	24.00	28.22	27.96	28.12	3.75	1.00	20
6"-200	5.70	7.36	6.91	7.07	2.40	.75	16
8"-200	7.60	9.46	9.11	9.27	2.40	.75	16
10"-200	9.60	11.88	11.66	11.82	2.40	.75	16
12"-200	11.44	14.11	13.92	14.08	2.90	1.00	16
14"-200	13.60	16.44	16.22	16.38	3.25	1.00	18
16"-200	15.50	18.74	18.46	18.62	3.25	1.00	18

All Dimensions Subject to Manufacturing Tolerances

To better service your requirements, please contact your local CertainTeed Territory Manager, Sales Agent or CertainTeed Sales Representative for availability.

CTD032863

CG Fluid-Tite® Coupling



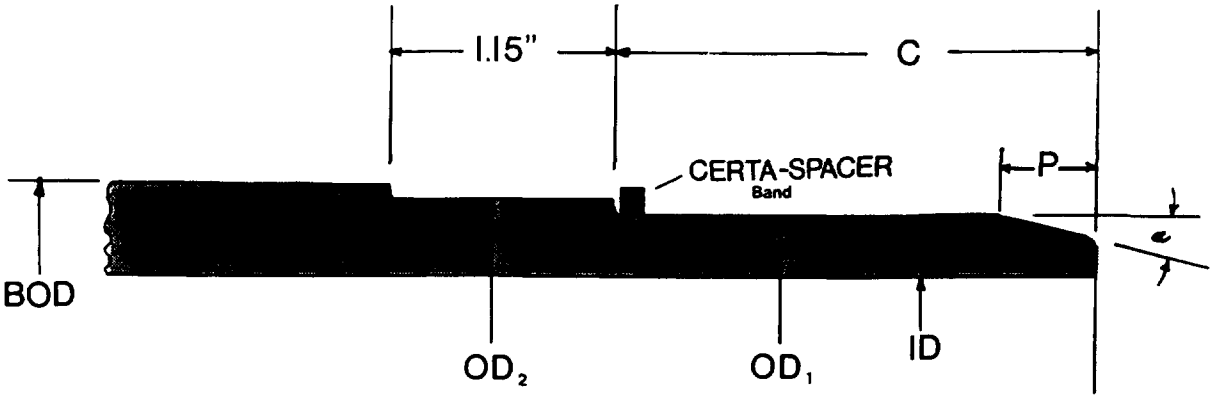
Nom. Size & Class	A Inches	B_1 Inches	B_2 Inches	B.O.D. Inches	M Inches	L Inches	F Inches	G Inches	J Inches	J_1 Inches
6"-100	7.65	7.20	7.03	8.40	3.50	7.00	.76	.92	.42	.18
8"-100	9.85	9.40	9.23	10.80	3.50	7.00	.76	.92	.42	.18
10"-100	11.98	11.53	11.36	13.30	3.50	7.00	.76	.92	.42	.18
12"-100	14.18	13.73	13.56	15.55	4.50	8.00	.76	.92	.42	.18
14"-100	15.95	15.39	15.20	17.60	5.20	9.00	.83	1.00	.42	.25
16"-100	18.03	17.47	17.28	19.80	5.20	9.00	.83	1.00	.42	.25
18"-100	20.78	20.22	20.03	22.60	6.20	10.00	.83	1.00	.42	.25
20"-100	23.00	22.44	22.25	25.30	6.20	10.00	.83	1.00	.42	.25
24"-100	27.36	26.80	26.61	30.00	6.20	10.00	.83	1.00	.42	.25
6"-150	7.65	7.20	7.03	8.76	3.50	7.00	.76	.92	.42	.18
8"-150	9.85	9.40	9.23	11.32	3.50	7.00	.76	.92	.42	.18
10"-150	12.40	11.95	11.78	14.36	3.50	7.00	.76	.92	.42	.18
12"-150	14.66	14.21	14.04	17.00	4.50	8.00	.76	.92	.42	.18
14"-150	17.10	16.54	16.35	19.80	5.20	9.00	.83	1.00	.42	.25
16"-150	19.34	18.78	18.59	22.28	5.20	9.00	.83	1.00	.42	.25
18"-150	21.82	21.26	21.07	24.91	6.20	10.00	.83	1.00	.42	.25
20"-150	24.16	23.60	23.41	27.55	6.20	10.00	.83	1.00	.42	.25
24"-150	28.84	28.28	28.09	33.02	6.20	10.00	.83	1.00	.42	.25
6"-200	7.65	7.20	7.03	9.35	3.50	7.00	.76	.92	.42	18
8"-200	9.85	9.40	9.23	12.00	3.50	7.00	.76	.92	.42	.18
10"-200	12.40	11.95	11.78	15.15	3.50	7.00	.76	.92	.42	.18
12"-200	14.66	14.21	14.04	17.90	4.50	8.00	.76	.92	.42	.18
14"-200	17.10	16.54	16.35	20.50	5.20	9.00	.83	1.00	.42	.25
16"-200	19.34	18.78	18.59	23.20	5.20	9.00	.83	1.00	.42	.25

All Dimensions Subject to Manufacturing Tolerances

To better service your requirements, please contact your local CertainTeed Territory Manager, Sales Agent or CertainTeed Sales Representative for availability.

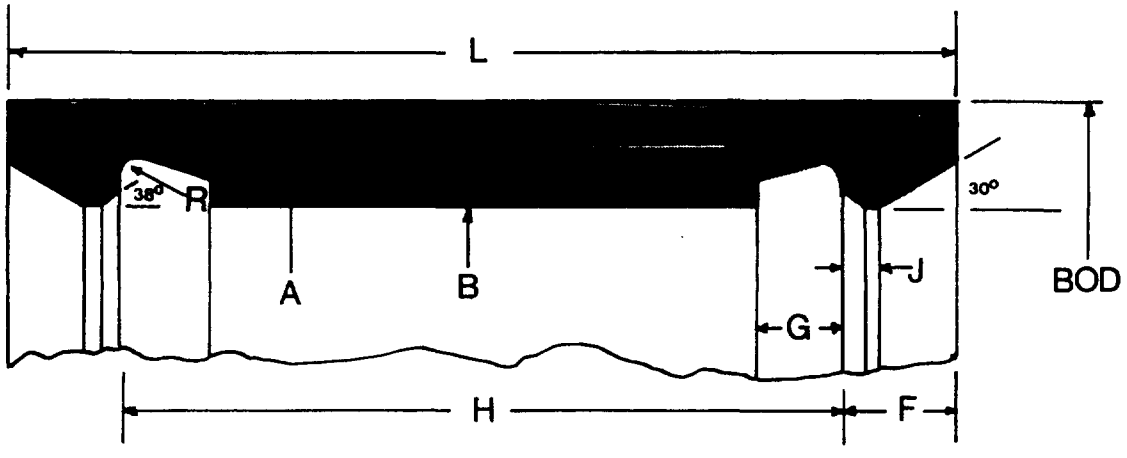
CTD032864

Fluid-Tite® Pipe End with Certa-Spacer® Band



Nom. Size Pipe & Class	Nom. I.D. Inches	B.O.D. Inches	O.D.1 Inches	O.D.2 Inches	C Inches	P Inches	α°
4"-100	4.00	5.05	4.64	4.80	2.90	.75	16
4"-150	4.00	5.14	4.81	4.97	2.90	.75	16
4"-200	4.00	5.32	4.81	4.97	2.90	.75	16

Fluid-Tite® Coupling



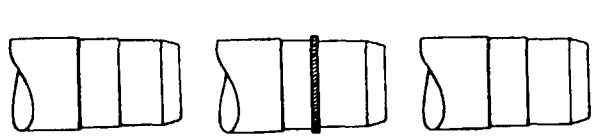
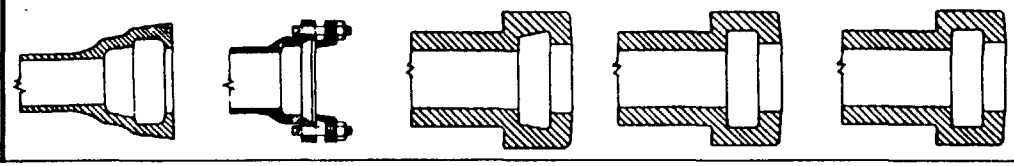
Nom. Size Pipe & Class	A Inches	B Inches	B.O.D. Inches	H Inches	L Inches	F Inches	G Inches	R Inches	J Inches	OC° Inches
4"-100	5.57	4.76	6.25	4.88	6.50	.81	.70	.13	.38	.18
4"-150	5.74	4.93	6.66	4.88	6.50	.81	.70	.13	.38	.18
4"-200	5.74	4.93	6.88	4.88	6.50	.81	.70	.13	.38	.18

CTD032865

All Dimensions Subject to Manufacturing Tolerances

To better service your requirements, please contact your local CertainTeed Territory Manager, Sales Agent or CertainTeed Sales Representative for availability.

How To Connect CertainTeed Fluid-Tite® Pipe To Other Pipe, Fittings and Valves

	How to Connect CertainTeed A/C Pipe to Pipe, Fittings and Valve Hubs							
								
	Fluid-Tite Common Groove (CG)	**Fluid-Tite Certa-Spacer**	**Other A/C**	**Class "D" Poured**	**Mechanical Joint**	**C.I. Pipe Slip Joint**	**Common Groove Hubs For A/C Class 100**	**Common Groove Hubs For A/C Class 150-200**
4"	CLASS 100 150/200	Direct Direct	Direct Direct	PAD 2 FM	PAD 2 FM	PAD 2 FM	Direct* PAD 5*	PAD 5* Direct*
6"CG	CLASS 100 150/200	Direct Direct	Direct Direct	FM FM	FM FM	FM FM	Direct Direct	Direct Direct
8" CG	CLASS 100 150/200	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct Direct	Direct Direct
10" CG	CLASS 100 150/200	PAD 11 Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
12" CG	CLASS 100 150/200	PAD 11 Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
14" CG	CLASS 100 150/200	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
16" CG	CLASS 100 150/200	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
18" CG	CLASS 100 150	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
20" CG	CLASS 100 150	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
24" CG	CLASS 100 150	Direct Direct	Direct Direct	PAD 2 PAD 3	PAD 2 PAD 3	PAD 2 PAD 3	Direct PAD 5	PAD 5 Direct
		Do not use CG gasket in FT coupling.	Use CG in CG coupling.				Use FT* or CG gasket. Remove Certa-Spacer.	Use FT* or CG gasket. Remove Certa-Spacer.

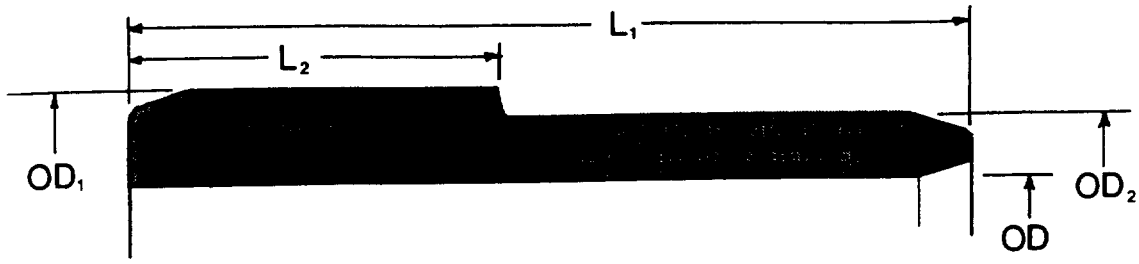
CTD032866

*1. All connections marked with an asterisk (*) are with CERTA-SPACER—All others are Common Groove (CG).
2. Where "No" is indicated, Class 150 pipe should not be used in Class 100 fittings.

Pipe Adaptors

When ordering adaptors state specifically what the adaptor is going from and to.

Example: PAD 3 from CLASS 150 10" A/C Fluid-Tite Pipe to 10" Mechanical Joint C.I.

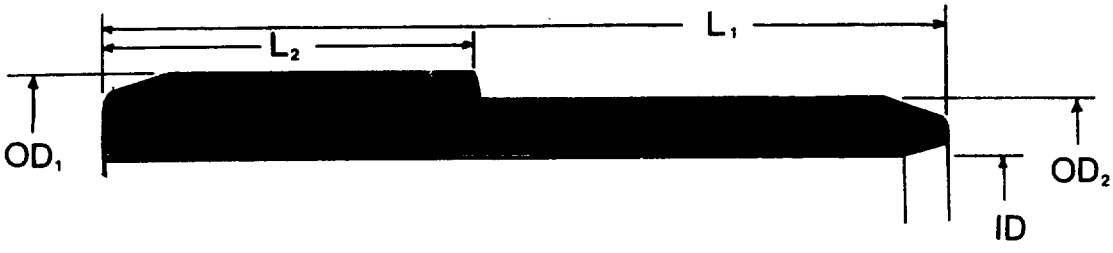


PAD 2 CLASS 100 FLUID-TITE CG TO CAST IRON MECHANICAL JOINT AND/OR POURED BELL END

PAD 2 SIZE INCHES	NOMINAL I.D. INCHES	L_1 INCHES	L_2 INCHES	$O.D._1$ INCHES	$O.D._2$ INCHES
4	3.73	15	8	4.64	4.81
8	7.45	15	8	9.11	9.05
10	8.94	15	8	11.24	11.10
12	10.98	15	8	13.44	13.20
14	13.17	19.5	11.5	15.07	15.30
16	15.16	19.5	11.5	17.15	17.40
18	17.34	19.5	11.5	19.90	19.50
20	19.02	19.5	11.5	22.12	21.60
24	22.98	19.5	11.5	26.48	25.80

Note: For 6" connections use appropriate Fully-Machined Pipe. An Internal Bevel has been specially provided where required for butterfly valve clearance.

All Dimensions Subject to Manufacturing Tolerances



PAD 3* CLASS 150 and 200 FLUID-TITE CG TO CAST IRON MECHANICAL JOINT AND/OR POURED BELL END

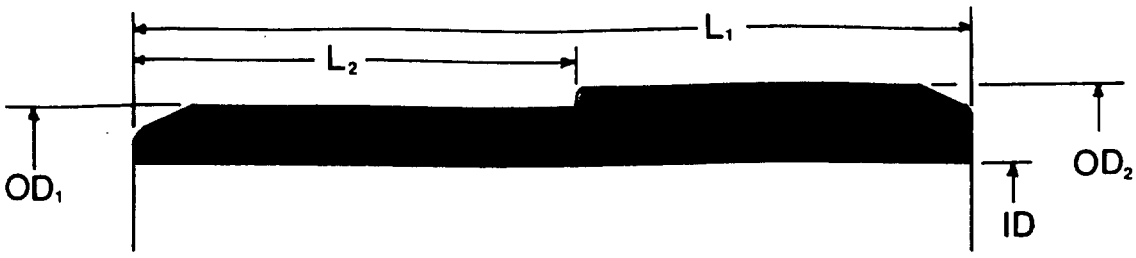
PAD 3 SIZE INCHES	NOMINAL I.D. INCHES	L_1 INCHES	L_2 INCHES	$O.D._1$ INCHES	$O.D._2$ INCHES
8	7.45	15	8	9.11	9.05
10	8.94	15	8	11.66	11.10
12	10.98	15	8	13.92	13.20
14	13.17	19.5	11.5	16.22	15.30
16	15.16	19.5	11.5	18.46	17.40
18	16.81	19.5	11.5	20.94	19.50
20	18.15	19.5	11.5	23.28	21.60
24	21.82	19.5	11.5	27.96	25.80

*For Class 200 Adaptors 8" through 16" only.

Note: For 4" and 6" Connections use appropriate Fully-Machined Pipe. An Internal Bevel has been specially provided where required for butterfly valve clearance.

All Dimensions Subject to Manufacturing Tolerances

CTD032867

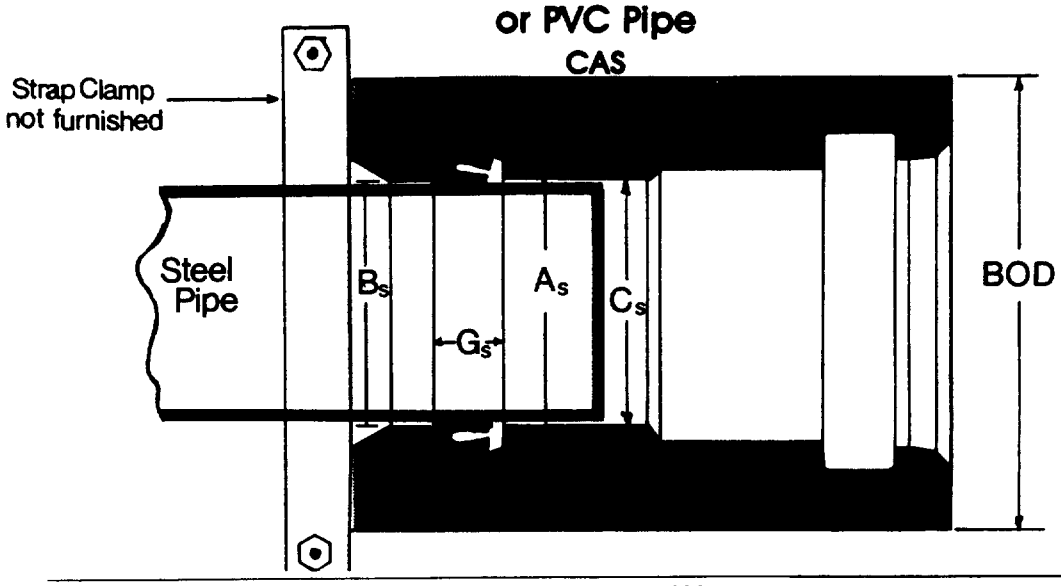


PAD 5* CLASS 100 FLUID-TITE CG to CLASS 150/200 FLUID-TITE CG

PAD 5 SIZE INCHES	NOMINAL I.D. INCHES	L_1 INCHES	L_2 INCHES	$O.D._1$ INCHES	$O.D._2$ INCHES
4	3.80	15	8	4.64	4.81
10	9.56	15	8	11.24	11.66
12	11.44	15	8	13.44	13.92
14	13.30	19.5	11.5	15.07	16.22
16	15.16	19.5	11.5	17.15	18.46
18	17.34	19.5	11.5	19.90	20.94
20	19.63	19.5	11.5	22.12	23.28
24	23.37	19.5	11.5	26.48	27.96

*For Class 200 Adaptors 4" and 10" through 16" only.
Note: For 6" and 8" Connections use Class 200 Fully-Machined Pipe.
All Dimensions Subject to Manufacturing Tolerances

Pressure Pipe Coupling Adaptor Fluid-Tite® Pipe to IPS Steel Pipe or PVC Pipe



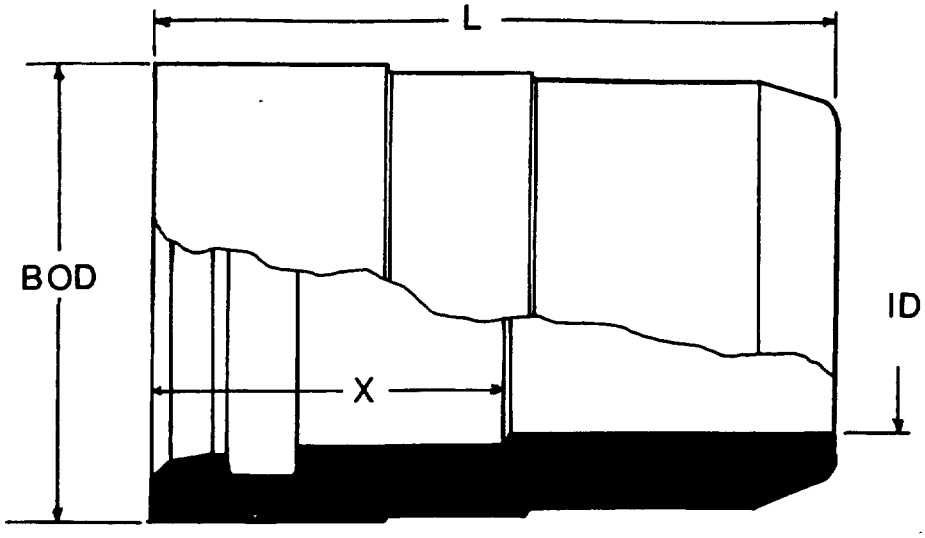
CLASSES 100, 150, 200

COUPLING SIZE INCHES	A_s INCHES	B_s INCHES	C_s INCHES	G_s INCHES	B.O.D. CL 100 INCHES	B.O.D. CL 150 INCHES	B.O.D. CL 200 INCHES
4	5.52	4.56	4.63	0.70	6.25	6.66	6.88
6	7.31	6.69	6.77	0.63	8.40	8.76	9.35
8	9.40	8.69	8.78	0.63	10.80	11.32	12.00
10	11.55	10.81	10.91	0.63	13.30	14.36	15.15
12	13.55	12.81	12.92	0.63	15.55	17.00	17.90

Other Dimensions: For other dimensions not shown, refer to standard coupling dimension.
Note: For excessively oval steel pipe, field reworking of the B s to the C s dimension is permitted. Special rings are supplied for the Steel/PVC end.
All Dimensions Subject to Manufacturing Tolerances

CTD032868

Pressure Pipe Coupling Reducer
Fluid-Tite® Pipe to Fluid-Tite® Pipe



COUPLING REDUCER SIZE INCHES	I.D. INCHES	B.O.D. INCHES	L INCHES	X INCHES
Class 100				
6 to 4	4.56	7.16	6.50	3.50
8 to 6	6.60	9.32	6.50	3.50
10 to 8	8.69	11.46	6.50	3.50
12 to 10	11.01	13.70	7.00	3.50
14 to 12	13.19	15.55	7.75	4.00
16 to 14	14.85	17.60	8.00	4.50
18 to 16	16.81	20.30	9.00	4.50
20 to 18	19.60	22.60	10.00	5.00
24 to 20	21.81	27.00	10.00	5.00
Class 150				
6 to 4	4.68	7.16	6.50	3.50
8 to 6	6.60	9.32	6.50	3.50
10 to 8	8.69	11.85	6.50	3.50
12 to 10	11.47	14.36	7.00	3.50
14 to 12	13.77	17.00	7.75	4.00
16 to 14	16.00	19.80	9.50	4.50
18 to 16	18.00	22.28	10.00	4.50
20 to 18	20.00	24.91	10.50	5.00
24 to 20	23.00	28.22	10.00	5.00
Class 200				
6 to 4	4.68	7.16	6.50	3.50
8 to 6	6.60	9.36	6.50	3.50
10 to 8	8.69	12.00	6.50	3.50
12 to 10	11.47	15.15	8.25	3.50
14 to 12	13.60	17.90	9.00	4.00
16 to 14	15.50	20.50	9.50	4.50

Other Dimensions: For other dimensions not shown refer to standard Pipe and Coupling dimensions.

All Dimensions Subject to Manufacturing Tolerances

CTD032869

District Offices

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