

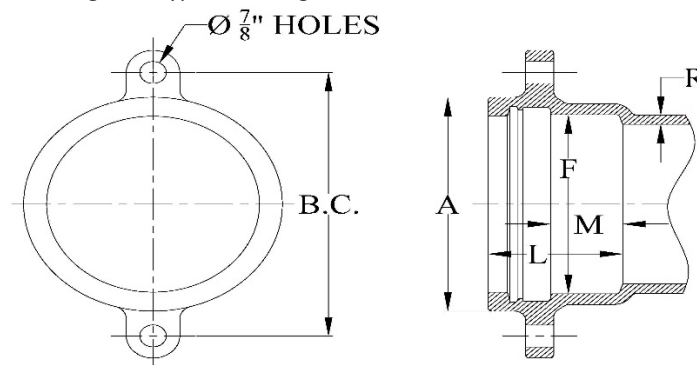
DOMESTIC

NON-DOMESTIC

SUBMITTAL: C153 UNION-TITE PRODUCT

[\(Current revisions for the noted Standards apply\)](#)

- SIZES:** 4" - 24"
- STANDARDS:** ANSI/AWWA C153/A21.53, NFPA13/24, 4"-12" UL listed & approved (File - Tyler Union)
- MATERIAL:** Cast of ASTM A536 qualified ductile iron. Date code is cast on and required for traceability.
- PRESSURE RATING:** Union-Tite/Push-on Joints 4" – 24" rated at 350 psi. *Flanged fittings rated at 250 psi.
*Note: With rubber annular ring flange gasket, 4" – 24" Flanged fittings can be rated at 350 psi.
Note: Wyes over 12" are not pressure rated. Contact Tyler Union for rating in your application.
- DEFLECTION:** Joint deflection 5° max for 4"– 12" and 3° max for 14"– 24". Reduces by 50% at nominal pipe & fitting diameters
- NSF-61 & NSF372:** Meets all requirements including Annex G, Tyler Union's Underwriters Laboratory listing MH16439.
- ASPHALT COATING:** Per ANSI/AWWA C104/A21.4 and ANSI/AWWA C153/A21.53.
- CEMENT LINING:** Per ANSI/AWWA C104/A21.4, with double cement lining available upon request.
- EPOXY COATING:** Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Additional coatings available upon request.
- BARE FITTINGS:** Available upon request.
- FASTENERS:** High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242
- RESTRAINING LUGS:** *Lugs provided on 16" and smaller fittings. Lug pattern accommodates most grip type restraints.
*NOTE: With sufficient lead time to adapt tooling, restraining lugs are available on 18"-24" fittings.
- INSTALLATION:** Install per AWWA C600/C651 using pipe conforming to ANSI/AWWA C151/A21.51 or AWWA C900/905. Designed for use with TYTON® and McWane Sure Stop® gaskets. Contact Tyler Union regarding the installation or use of other gasket types and/or gasket manufacturers.



NOMINAL JOINT DIMENSIONS IN INCHES

Size Inches	Pipe Diameter	A Dia.	F Dia.	B.C. Dia.	L Dim.	M Dim.	R Dim.
4	4.80	6.38	5.04	7.88	4.16	2.25	0.35
6	6.90	8.52	7.14	10.50	4.29	2.25	0.37
8	9.05	10.90	9.32	12.88	4.78	2.25	0.39
10	11.10	12.91	11.37	14.69	4.98	2.25	0.41
12	13.20	15.12	13.47	17.19	4.98	2.25	0.43
14	15.30	18.12	15.64	19.00	5.40	2.25	0.51
16	17.40	20.32	17.74	21.40	5.40	2.25	0.52
18	19.50	22.52	19.83	5.40	2.25	0.59
20	21.60	24.29	21.94	5.40	2.25	0.60
24	25.80	29.14	26.14	5.65	2.50	0.62

Tyler Union Waterworks Contact Information

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Tyler: (800) 527-8478

C153 DUCTILE IRON COMPACT FITTINGS

SAMPLE SPECIFICATIONS

(Current ANSI/AWWA revisions apply)

Push-On joint ductile iron fittings size 4" through 24" shall be produced in accordance with all applicable terms and provisions of ANSI/AWWA C153/A21.53. Fittings are cement lined and seal coated in accordance with ANSI/AWWA C104/A21.4. Joints shall be in accordance with manufacturer's design with bell sockets designed to receive pressure pipe O.D.s as specified in ANSI/AWWA C151/A21.51 and AWWA C900 TABLE 2. The working pressure rating shall be 350 PSI, except for wyes and flanged-branch fittings. NOTE: Fittings are cement lined and seal coated in accordance with ANSI/AWWA C104/A21.4, also available bare or epoxy coated. Double cement lined available. Coated and/or lined fittings meet NSF-61, NSF-372 and Annex G.

Thicknesses and dimensions of bell sockets and gaskets shall be in accordance with the manufacturer's design. Gaskets shall be furnished by the manufacturer. Working pressures apply to fittings only and do not apply to restraining lugs or external restraining devices. Installation of fittings shall be per AWWA C600 and AWWA C651, current revision.

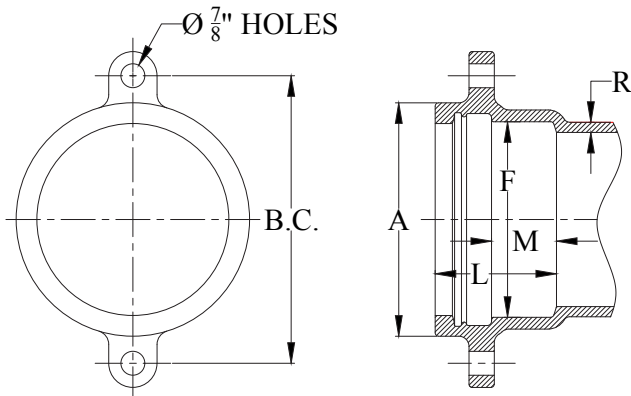
NOTE: Standard restraining lugs are provided on sizes 4" through 16" ONLY. Restraining lugs are available on 18" through 24" fittings, provided sufficient time is available to make tooling adaptations.

EXCEPTIONS: Union-Tite fittings with flanged branches are rated for water pressure of 250 psi but can be rated for 350 psi with the use of an annular ring or comparable gasket. Wye fittings over 12" are not pressure rated. Call Tyler Union for information.

ADVANTAGES AND FEATURES NOTE:

- Push-on gasket joint uses TYTON® or McWane 350 Sure Stop® gaskets.
- For use with Ductile Iron Pipe, C-900/905 PVC pipe and 4" through 12" pressure-rated IPS diameter PVC pipe (with transition gasket).
- Deep stab joint design accommodates common spigot end taper on plastic pipes.
- Slip joint installation eliminates T-bolts and nuts (MJ glands not needed).

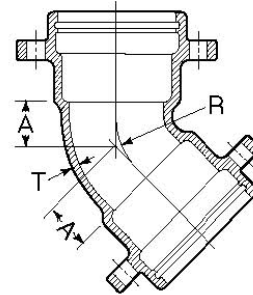
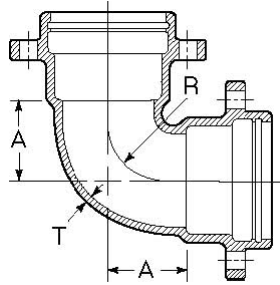
NOTE: TYTON is a registered trademark of U.S. Pipe and Foundry Company.



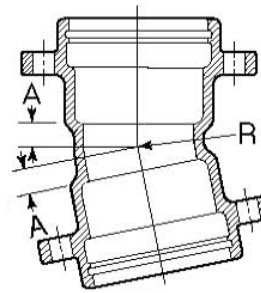
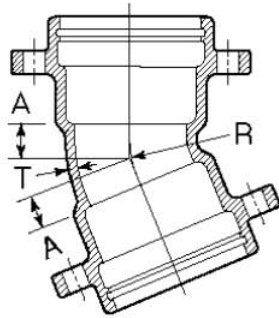
ANSI/AWWA C153 Push-On Joint Fittings

Nominal Joint Dimensions in Inches						
Size	F	A	B.C.	L	M	R
4	5.04	6.38	7.88	4.16	2.25	0.35
6	7.14	8.52	10.50	4.29	2.25	0.37
8	9.32	10.90	12.88	4.78	2.25	0.39
10	11.37	12.91	14.69	4.98	2.25	0.41
12	13.47	15.12	17.19	4.98	2.25	0.43
14	15.64	18.12	19.00	5.40	2.25	0.51
16	17.74	20.32	21.40	5.40	2.25	0.52
18	19.83	22.52	—	5.40	2.25	0.59
20	21.94	24.29	—	5.40	2.25	0.60
24	26.14	29.14	—	5.65	2.50	0.62

C153 DUCTILE IRON COMPACT FITTINGS



90° (1/4) UT Bends						45° (1/8) UT Bends					
Domestic					Import					Domestic	Import
Size	T	A	R	Weight	T	Weight	A	R	Weight	Weight	
4	0.35	4.00	3.87	24	0.34	25	2.00	3.31	26	22	
6	0.37	5.00	5.37	51	0.36	39	3.00	5.72	42	32	
8	0.39	6.50	6.37	80	0.38	57	3.50	6.93	66	46	
10	0.41	7.50	8.36	121	0.40	89	4.50	9.34	101	70	
12	0.43	9.00	9.36	151	0.42	108	5.50	11.75	128	86	
14	0.51	11.50	10.98	254	0.47	210	5.00	10.85	143	160	
16	0.52	12.50	12.00	328	0.50	264	5.50	12.02	225	202	
18	0.59	14.00	14.00	482	0.54	335	6.00	12.36	209	250	
20	0.60	15.00	15.50	340	0.57	400	7.00	13.59	397	305	
24	0.62	16.75	15.59	674	0.61	565	7.50	14.69	492	405	



22½° (1/16) UT Bends			
		Domestic	Import
A	R	Weight	Weight
1.50	4.38	18	18
2.00	8.16	39	31
2.50	9.40	64	46
3.00	13.17	67	64
3.50	14.42	111	80
3.75	13.82	162	136
3.75	14.97	195	172
4.50	30.19	209	255
4.50	35.19	414	310
4.50	37.69	596	412

11¼° (1/32) UT Bends			
		Domestic	Import
A	R	Weight	Weight
1.25	6.77	18	16
1.50	9.38	40	30
1.75	11.48	60	42
2.00	13.95	77	58
2.25	16.5	94	67
2.50	14.26	113	93
2.50	15.23	172	148
3.00	60.94	209	205
3.00	71.07	265	245
-	-	-	315