



# Ductile Iron Flanged Fittings

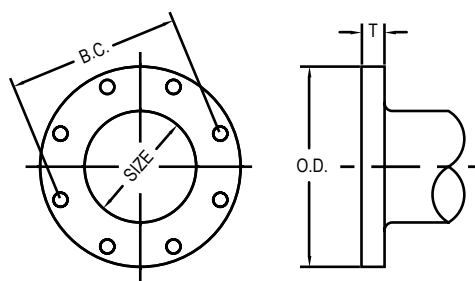
## ANSI/AWWA C110/A21.10

### GENERAL SPECIFICATIONS

- MATERIAL:** Ductile iron per ASTM A536
- PRESSURE:** 250 PSI rating for 1" - 48" sizes and 150 PSI rating for 54" - 64"  
\* 24" and smaller sizes can be rated for 350 PSI with the use of STAR-TITE Gasket
- TESTING:** In accordance with ANSI/AWWA C110/A21.10, UL and FM requirements
- LAYING LENGTH:** 2" - 48" sizes in accordance with ANSI/AWWA C110/A21.10 and ANSI B16.1 and 54" - 64" sizes in accordance with ANSI/AWWA C153/A21.53 (fittings not listed in ANSI/AWWA have dimensions per Star design as noted in the catalog)
- WEIGHTS:** Are in pounds, unless noted otherwise and do not include accessories, cement lining and coatings
- DRILLING:** In accordance with ANSI/AWWA C110/A21.10, ANSI/AWWA C153/A21.53 and ANSI B16.1 Class 125 Flanges
- CEMENT LINING:** In accordance with ANSI/AWWA C104/A21.4 -- sizes 1" - 3" single thickness and sizes 4" - 64" double thickness
- COATING:** Asphaltic seal coat inside in accordance with ANSI/AWWA C104/A21.4 and prime coat outside
- APPROVALS:** 2" - 12" Underwriters Laboratories and ULC Listed and Factory Mutual approved for 300 PSI rating. Please consult factory for detail listing and approvals.  
2" and greater are UL/NSF-61.
- DIMENSIONS:** All dimensions are in inches unless noted otherwise.
- INSTALLATION:** Per ANSI/AWWA C110 and C111



| SUBMITTAL INFORMATION |                      |
|-----------------------|----------------------|
| PROJECT NAME:         | <input type="text"/> |
| ENGINEER:             | <input type="text"/> |
| CONTRACTOR:           | <input type="text"/> |
| SPEC. SECTION:        | <input type="text"/> |



| FLANGE DETAILS |       |       |      |                |               |     |  |
|----------------|-------|-------|------|----------------|---------------|-----|--|
| NOM. SIZE      | O.D.  | B.C.  | T    | BOLT HOLE DIA. | BOLTS         |     |  |
|                |       |       |      |                | SIZE          | NO. |  |
| 1              | 4.25  | 3.12  | 0.44 | 0.62           | 1/2 x 2       | 4   |  |
| 1 1/2          | 5.00  | 3.88  | 0.56 | 0.62           | 1/2 x 2       | 4   |  |
| 2              | 6.00  | 4.75  | 0.62 | 0.75           | 5/8 x 2 1/4   | 4   |  |
| 2 1/2          | 7.00  | 5.50  | 0.69 | 0.75           | 5/8 x 2 1/2   | 4   |  |
| 3              | 7.50  | 6.00  | 0.75 | 0.75           | 5/8 x 2 1/2   | 4   |  |
| 4              | 9.00  | 7.50  | 0.94 | 0.75           | 5/8 x 3       | 8   |  |
| 5              | 10.00 | 8.50  | 0.94 | 0.88           | 3/4 x 3       | 8   |  |
| 6              | 11.00 | 9.50  | 1.00 | 0.88           | 3/4 x 3 1/2   | 8   |  |
| 8              | 13.50 | 11.75 | 1.12 | 0.88           | 3/4 x 3 1/2   | 8   |  |
| 10             | 16.00 | 14.25 | 1.19 | 1.00           | 7/8 x 4       | 12  |  |
| 12             | 19.00 | 17.00 | 1.25 | 1.00           | 7/8 x 4       | 12  |  |
| 14             | 21.00 | 18.75 | 1.38 | 1.13           | 1 x 4 1/2     | 12  |  |
| 16             | 23.50 | 21.25 | 1.44 | 1.13           | 1 x 4 1/2     | 16  |  |
| 18             | 25.00 | 22.75 | 1.56 | 1.25           | 1 1/8 x 5     | 16  |  |
| 20             | 27.50 | 25.00 | 1.69 | 1.25           | 1 1/8 x 5     | 20  |  |
| 24             | 32.00 | 29.50 | 1.88 | 1.38           | 1 1/4 x 5 1/2 | 20  |  |
| 30             | 38.75 | 36.00 | 2.12 | 1.38           | 1 1/4 x 6 1/2 | 28  |  |
| 36             | 46.00 | 42.75 | 2.38 | 1.63           | 1 1/2 x 7     | 32  |  |
| 42             | 53.00 | 49.50 | 2.62 | 1.63           | 1 1/2 x 7 1/2 | 36  |  |
| 48             | 59.50 | 56.00 | 2.75 | 1.63           | 1 1/2 x 8     | 44  |  |
| 54             | 66.25 | 62.75 | 3.00 | 2.00           | 1 3/4 x 8 1/2 | 44  |  |
| 60             | 73.00 | 69.25 | 3.12 | 2.00           | 1 3/4 x 9     | 52  |  |
| 64             | 80.00 | 76.00 | 3.38 | 2.00           | 1 3/4 x 9     | 52  |  |

#### SIZE RANGE (Please specify):

Size Range \_\_\_\_\_

#### LINING OPTIONS (Please check one):

- Standard: Cement-lined and asphalt seal coat per ANSI/AWWA C104/A21.4 and UL/NSF-61
- Optional: FBE (Fusion Bonded Epoxy) per ANSI/AWWA C116/A21.16 and UL/NSF-61 - ID & OD Only
- Optional: P401 (Protecto 401) Ceramic Epoxy - sewer applications only. Not NSF-61
- Optional: Other (specify) \_\_\_\_\_

#### COATING OPTIONS (Please check one):

- Standard: Red Prime Coat
- Optional: Asphaltic seal coat per ANSI/AWWA C104/A21.4
- Optional: FBE (Fusion Bonded Epoxy) per ANSI/AWWA C116/A21.16 and UL/NSF-61 - ID & OD Only
- Optional: Other (specify) \_\_\_\_\_

