C110 DUCTILE IRON
FLANGED FITTINGS

Project Name: | Contractor: | Date:

Engineer: | Spec Section:

PRODUCT SPECIFICATIONS

Material:
Ductile Iron ASTM A536 Grade 60-42-10, 65-45-12 or 70-50-05.

Pressure Rating:
250 PSI rating for 2" – 48" sizes and 150 PSI rating for 54" – 64" sizes. (Higher PSI ratings available but are dependent on the gasket)

Testing:
In accordance with ANSI/AWWA C110/A21.10 & UL-FM Requirements. | Hydrostatically Tested in accordance with SIGMA Waterworks Quality Management Standard.

Traceability:
All fittings are heat coded to ensure traceability and verification of metallurgical properties in accordance with SIGMA Waterworks Quality Management Standards.

Size Range:
2"- 64"

Laying Length:
3" – 48" : In accordance with ANSI/AWWA C110/A21.10, 54" – 64": In accordance with ANSI/AWWA C153/A21.53.
Non-Standard Items will be as per SIGMA Waterworks design.

Approvals:
3"-16" Underwriters Laboratories listed and Factory Mutual Approved. UL/NSF61 & 372.

Standards:
ANSI/AWWA C110/A21.10 for Ductile Iron Fittings 2"-48" for water and other liquids, ANSI/AWWA C153 for Compact Ductile Iron Fittings 54" – 64" for water and other liquids, and Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372.

Installations:
Per ANSI/AWWA C600 and C111 using DIP conforming to C150/C151 and PVC pipe conforming to C900/905 and C909.

OPTIONAL SPECIFICATIONS

Coating

- Red Primer ☐
  (In accordance with ANSI / AWWA C104/A21.04 and ANSI / AWWA C110/A21.10)
- Asphaltic Seal Coat ☐
  (In accordance with ANSI/AWWA C104/A21.04 and ANSI/AWWA C110/A21.10)
- Fusion Bonded Epoxy (FBE) ☐
  *Interior and exterior
  (In accordance with ANSI / AWWA C116/A21.16)
- Zinc ☐
  (In accordance with ISO 8179-2)
- Others- Specify ☐

Lining

- Cement-Mortar ☐
  *Double thickness with asphaltic coating
  (In accordance with ANSI/AWWA C104/A21.4)
- Fusion Bonded Epoxy (FBE) ☐
  *Interior and exterior
  (In accordance with ANSI/AWWA C116/A21.16)
- Protecto 401 Ceramic Epoxy ☐
- Others- Specify ☐

Refer to: Lining Technical Bulletin and Guideline for more information

FM APPROVED

CLASSIFIED UL WATER QUALITY

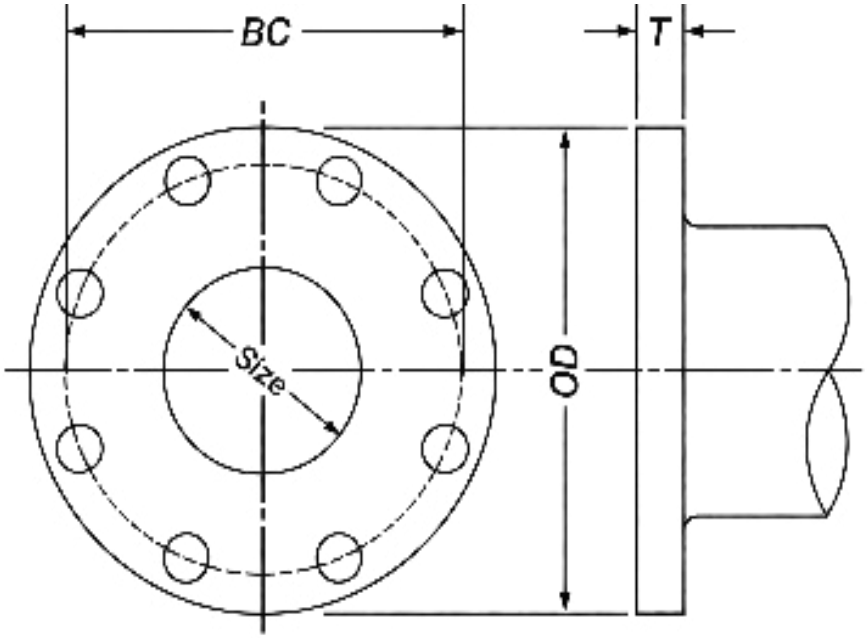
Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372

UL

SIGMA WATERWORKS

C110 DUCTILE IRON

FLANGED FITTINGS



Flange Details

	Size	OD	BC	T	Hole Dia.	Bolt Size	No.Bolts
☐	**2***	6.00	4.75	0.62	0.75	⅝ x 2 ½	4
☐	**3**	7.50	6.00	0.75	0.75	⅝ x 2 ½	4
☐	**4**	9.00	7.50	0.94	0.75	⅝ x 3	8
☐	**5***	10.00	8.50	0.94	0.88	¾ x 3	8
☐	**6**	11.00	9.50	1.00	0.88	¾ x 3 ½	8
☐	**8**	13.50	11.75	1.12	0.88	¾ x 3 ½	8
☐	**10**	16.00	14.25	1.19	1.00	⅞ x 4	12
☐	**12**	19.00	17.00	1.25	1.00	⅞ x 4	12
☐	**14**	21.00	18.75	1.38	1.12	1 x 4 ½	12
☐	**16**	23.50	21.25	1.44	1.12	1 x 4 ½	16
☐	**18**	25.00	22.75	1.56	1.25	1 ⅛ x 5	16
☐	**20**	27.50	25.00	1.69	1.25	1 ⅛ x 5	20
☐	**24**	32.00	29.50	1.88	1.37	1 ¼ x 5 ½	20
☐	**30**	38.75	36.00	2.12	1.37	1 ¼ x 6 ½	28
☐	**36**	46.00	42.75	2.38	1.62	1 ½ x 7	32
☐	**42**	53.00	49.50	2.62	1.62	1 ½ x 7 ½	36
☐	**48**	59.50	56.00	2.75	1.62	1 ½ x 8	44
☐	**54***	66.25	62.75	3.00	2.00	1 ¾ x 8 ½	44
☐	**60***	73.00	69.25	3.12	2.00	1 ¾ x 9	52
☐	**64***	80.00	76.00	3.38	2.00	1 ¾ x 9	52

*Not included in AWWA C110

All dimensions are in inches