

Gray Iron Flanges

Class 125 /150 (Standard) and Class 250 /300(Extra Heavy)

SPECIFICATIONS

All Gray Iron Flanged Fittings and Flanges in sizes listed are made to ASME or AWWA and are marked 125 or 250 for pipe sizes 48 NPS and smaller. Unless otherwise specified, cast iron flanges and fittings are drilled and faced in accordance with **ASME B 16.1 or AWWA C110**.

COATINGS

Flanged fittings and flanges are available in both black painted and galvanized. Consult a Representative for available sizes.

SIZES

Size of all flanged fittings and flanges scheduled indicates nominal pipe diameter of ports. Standard reducing elbows carry the same dimensions center-to-face as regular elbows of largest straight size.

ORDERING

To order tapped flanges, specify threaded or reduced size first, then the outside diameter of flange wanted. For instance, if a reducing flange is required to connect a 2-inch pipe to an 8-inch flanged valve or fitting having a 13-1/2 inch O.D. flange, order: 2 x 13-1/2 inch tapped flange.

DIMENSIONS

AWWA C110 bolt hole dimensions are specific to the fitting's nominal size and require consulting a detailed dimensional table or the standard itself, as there is no single universal dimension. For example, a 6-inch fitting might have a 7/8-inch bolt hole diameter, while a 10-inch fitting might have a 1-inch bolt hole diameter. The holes are also drilled to straddle the centerline, and the bolt pattern (bolt circle) also varies by size

TOLERANCES

AWWA C110 flanges require manufacturers to meet specific tolerances for the bolt circle diameter (± 0.06 in.), bolt hole-to-hole distance (± 0.03 in.), and flange thickness (e.g., $+0.13$ in., -0.0 in. for the size range) to ensure proper mating with other flanges. The standard also limits the slope of the back face to a maximum of 3 degrees




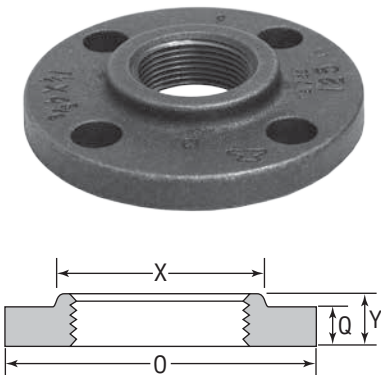
Cast Iron Flanged Fittings & Cast Iron Flanges

ASME Standards ASME B16.1 and ASME B16.42				
	Gray Iron ASTM A126		Ductile Iron ASTM A395	
	Class B		Gr 60-40-18	
	Class 125	Class 250	Class 150	Class 300
	1-12 NPS	14-24 NPS	1-12 NPS	14-24
Temp	PSIG	PSIG	PSIG	PSIG
100 °F	200	150	500	300
200 °F	190	135	460	280
300 °F	165	110	375	260
AWWA Standards AWWA C110				
	Gray Iron		Ductile Iron	
	Class 35 or 30		Gr 70-50-05	
	Class 125		Class 125	
	3-12 NPS	14-24	3-12 NPS	14-24
Temp	PSIG	PSIG	PSIG	PSIG
100 °F	250	250	350*	350*
200 °F				
300 °F				
*Special gasket required to operate at max temp. Consult with Customer Service for appr				


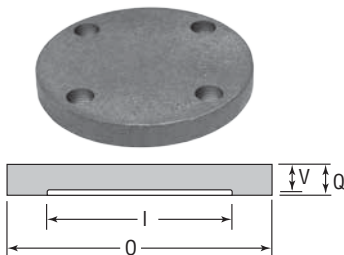
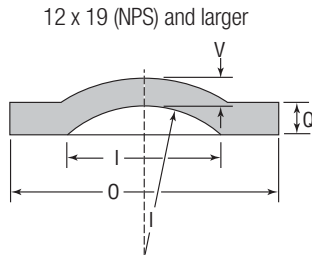
For Listings/Approval Details and Limitations, contact
a Sales Representative.

Cast Iron Flanges

Class 125 (Standard)

<div>  Companion Flange </div>	Pipe Size		Diameter of Flange O		Min. Flange Thickness Q		Min. Diameter of Hub X		Min. Length Through Hub Y		Unit Weight			
											Black Paint		Galvanized	
	NPS	DN	in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
 <p>When ordering companion flanges, always give outside diameter as well as nominal pipe size.</p>	3/4*	20	3 7/8	98	7/16	11	1 3/4	44	5/8	16	1.50	0.68	1.50	0.68
	1	25	4 1/4	108	7/16	11	1 15/16	49	1 1/16	17	1.75	0.79	1.75	0.79
	1 1/4	32	4 5/8	117	1/2	13	2 5/16	59	1 3/16	22	2.00	0.91	2.00	0.91
	1 1/2	40	5	127	9/16	14	2 9/16	65	7/8	22	2.25	1.02	2.25	1.02
	2	50	6	152	5/8	16	3 1/16	78	1	25	4.00	1.81	4.00	1.81
	2 1/2	65	7	178	1 1/16	17	3 9/16	90	1 1/8	29	6.00	2.72	6.00	2.72
	3	80	7 1/2	191	3/4	19	4 1/4	108	1 3/16	30	7.63	3.46	7.63	3.46
	3 1/2	90	8 1/2	216	13/16	21	4 13/16	122	1 1/4	32	9.00	4.08	—	—
	4	100	9	229	15/16	24	5 5/16	135	1 5/16	33	11.75	5.33	11.75	5.33
	5	125	10	254	15/16	24	6 7/16	164	1 7/16	37	14.00	6.35	14.00	6.35
	6	150	11	279	1	25	7 9/16	192	1 9/16	40	16.50	7.48	16.50	7.48
	8	200	13 1/2	343	1 1/8	29	9 11/16	246	1 3/4	44	26.00	11.79	26.00	11.79
	10	250	16	406	1 3/16	30	11 15/16	303	1 15/16	49	37.75	17.12	37.75	17.12
	12	300	19	483	1 1/4	32	14 1/16	357	2 3/16	56	50.50	22.91	50.50	22.91

* Size; not covered by ASME B16.1.

<div>  Blind Flange </div>	Pipe Size I		Diameter of Flange O		Min. Flange Thickness Q		Wall Thickness V		Unit Weight			
									Black Paint		Galvanized	
	NPS	DN	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
<div> <p>10 x 16 (NPS) and smaller</p>  <p>12 x 19 (NPS) and larger</p>  </div>	1	25	4 1/4	108	7/16	11	3/8	10	2.00	0.91	2.00	0.91
	1 1/4	32	4 5/8	117	1/2	13	7/16	11	2.25	1.02	2.25	1.02
	1 1/2	40	5	127	9/16	14	1/2	13	3.75	1.70	—	—
	2	50	6	152	5/8	16	9/16	14	4.00	1.81	4.00	1.81
	2 1/2	65	7	178	1 1/16	17	5/8	16	6.75	3.06	—	—
	3	80	7 1/2	191	3/4	19	1 1/16	17	8.00	3.63	8.00	3.63
	3 1/2	90	8 1/2	216	13/16	21	3/4	19	11.00	4.99	—	—
	4	100	9	229	15/16	24	7/8	22	14.00	6.35	14.00	6.35
	5	125	10	254	15/16	24	7/8	22	18.00	8.16	18.00	8.16
	6	150	11	279	1	25	15/16	24	23.00	10.43	23.00	10.43
	8	200	13 1/2	343	1 1/8	29	1 1/16	27	40.00	18.14	40.00	18.14
	10	250	16	406	1 3/16	30	1 1/8	29	59.00	26.76	—	—
	12	300	19	483	1 1/4	32	13/16	21	88.00	39.92	—	—

All Class 125 cast iron standard flanges have a flat face. Blind Flange 12 x 19 NPS supplied dished with inside radius to the pipe diameter. When ordering blind flanges, always give the outside diameters.