

Cast Iron Flanged Fittings & Flanges

Class 125 (Standard) and Class 250 (Extra Heavy)

SPECIFICATIONS

All Cast Iron Flanged Fittings and Flanges in sizes listed are made to ASME and are marked 125 or 250 for pipe sizes 12 NPS (300 DN) and smaller. Unless otherwise specified, cast iron flanges and fittings are drilled and faced in accordance with **ASME B 16.1**.

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 reducing companion 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 5-inch pipe to an 8-inch flanged valve or fitting having a 13-1/2 inch O.D. flange, order: 5 x 13-1/2 inch standard reducing flange.

DIMENSIONS

Bolt holes for bolts smaller than 1-3/4 inches (44mm) in diameter are drilled 1/8 inch larger than the bolt diameter; 1-3/4 inch (44mm) and larger bolts have holes drilled 1/4 inch (6mm) larger than bolt diameter. Bolt holes straddle the center line. Bolt holes are spot faced on order only.

TOLERANCES

An inspection limit of plus or minus 1/32 inch (1mm) shall be allowed on all center to contact surface dimensions for sizes up to and including 10NPS (250 DN); plus or minus 1/16 inch (1.5mm) on sizes larger than 10 NPS (250 DN). Inspection limit of plus or minus 1/16 inch (1.5mm) shall be allowed on all contact surface to contact surface dimensions for sizes up to and including 10 NPS(250 DN); plus or minus 1/8 inch (3mm) on sizes larger than 10 NPS (250 DN). The largest opening in the fitting governs the tolerance to be applied to all openings.



Cast Iron Flanged Fittings & Cast Iron Flanges

Temperature		Pressure*			
		Class 125		Class 250	
		1"-12"		1"-12"	
(°F)	(°C)	psi	bar	psi	bar
-20° to 150°	-28.9° to 65.6°	200	13.8	500	34.5
200°	93.3°	190	13.1	460	31.7
225°	107.2°	180	12.4	440	30.3
250°	121.1°	175	12.1	415	28.6
275°	135.0°	170	11.7	395	27.2
300°	148.9°	165	11.4	375	25.9
325°	162.8°	155	10.7	355	24.5
350°	178.3°	150	10.3	335	23.1
375°	190.6°	145	10.0	315	21.7
400°	207.8°	140	9.7	290	20.0
425°	218.3°	130	9.0	270	18.6
450°	232.2°	125	8.6	250	17.2

* Applies to fittings and flanges manufactured with ASTM A-126 Class B material only.

Standards & Specifications

	Dimensions	Material	Galvanizing**	Thread	Pressure Rating
CAST IRON THREADED FITTINGS					
Class 125 (1"-12")	ASME B16.1	ASTM A-126(A) or (B)	ASTM A-153	ASME B1.20.1	ASME B16.1
Class 250 (1"-12")	ASME B16.1	ASTM A-126(A) or (B)	ASTM A-153	ASME B1.20.1	ASME B16.1

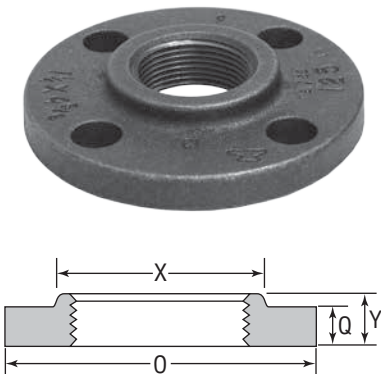
** ASTM B 633. Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.



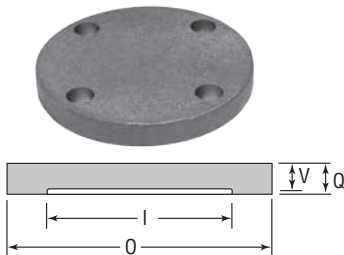
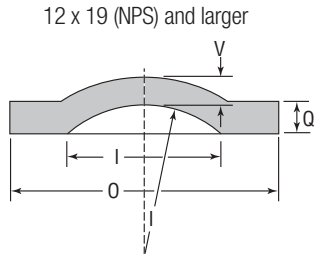
For Listings/Approval Details and Limitations, contact a Sales Representative.

Cast Iron Flanges

Class 125 (Standard)

 Companion Flange	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
 When ordering companion flanges, always give outside diameter as well as nominal pipe size.	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.

 Blind Flange	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
10 x 16 (NPS) and smaller  12 x 19 (NPS) and larger 	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.