

Companion Flange & Blind Flange (Class 125 Standard) Fig. 1011, 1018



Fig. 1011



Fig. 1018



Class 125 (standard) iron flanges are manufactured to American National Standard ASME B16.1 except as noted.

Class 125 iron flanges are available in both black painted and galvanized.

For Listings/Approval Details and Limitations, visit our website at www.asc-es.com or contact an ASC Engineered Solutions™ Representative.

See following page for standards and specifications.

Cast Iron Flanged Fittings and Cast Iron Flanges

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

Note:

*Applies to fittings and flanges manufactured with ASTM A126 Class B material only.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Companion Flange & Blind Flange (Class 125 Standard) Fig. 1011, 1018



Standards and Specifications

Cast Iron Flanges and Flanged Fittings (Class 125 Standard and Class 250 Extra Heavy)

	Dimensions	Material	Galvanizing**	Thread	Pressure Rating
Class 125 (1"–12")	ASME B16.1	ASTM A126 (A) or (B)	ASTM A153	ASME B1.20.1	ASME B16.1
Class 250 (1"–12")	ASME B16.1	ASTM A126 (A) or (B)	ASTM A153	ASME B1.20.1	ASME B16.1

Note:

** ASTM B633. Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.

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 an ASC Engineered Solutions 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 13½ inch O.D. flange, order: 5 x 13½ inch standard reducing flange.

Dimensions

Bolt holes for bolts smaller than 1¼ inches (44mm) in diameter are drilled ⅛ inch larger than the bolt diameter; 1¼ inch (44mm) and larger bolts have holes drilled ¼ inch (6mm) larger than bolt diameter. Bolt holes straddle the center line. Bolt holes are spot faced on order only.

Tolerances

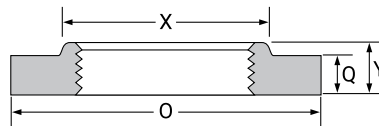
An inspection limit of plus or minus ⅓₂ inch (1mm) shall be allowed on all center to contact surface dimensions for sizes up to and including 10 NPS (250 DN); plus or minus ⅙ inch (1.5mm) on sizes larger than 10 NPS (250 DN). Inspection limit of plus or minus ⅙ inch (1.5mm) shall be allowed on all contact surface to contact surface dimensions for sizes up to and including 10 NPS (250 DN); plus or minus ⅙ 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.



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Companion Flange (Class 125 Standard) Fig. 1011



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

Note:

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

*Anvil size; not covered by ASME B16.1.

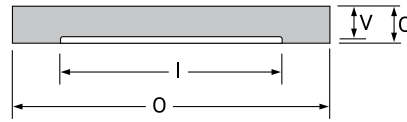
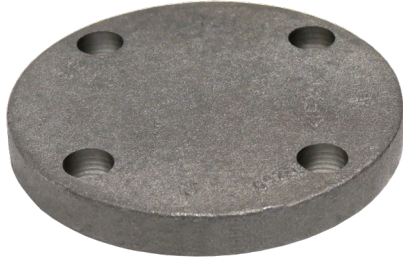
See first page for pressure-temperature ratings.



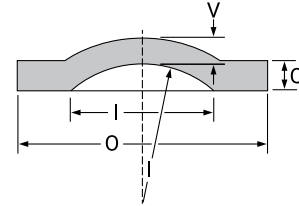
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Blind Flange (Class 125 Standard) Fig. 1018



10 x 16 (NPS) and smaller



12 x 19 (NPS) and larger

Pipe Size I	Diameter of Flange O	Min. Flange Thickness Q	Wall Thickness V	Unit Weight		Pipe Size I	Diameter of Flange O	Min. Flange Thickness Q	Wall Thickness V	Unit Weight	
				Black	Galv.					Black	Galv.
NPS/DN	In./mm	In./mm	In./mm	Lbs./kg	Lbs./kg	NPS/DN	In./mm	In./mm	In./mm	Lbs./kg	Lbs./kg
1	4¼	7/16	3/8	2.00	2.00	4	9	15/16	7/8	14.00	14.00
25	108	11	10	0.91	0.91	100	229	24	22	6.35	6.35
1¼	45/8	½	7/16	2.25	2.25	5	10	15/16	7/8	18.00	18.00
32	117	13	11	1.02	1.02	125	254	24	22	8.16	8.16
1½	5	9/16	½	3.75	—	6	11	1	15/16	23.00	23.00
40	127	14	13	1.70	—	150	279	25	24	10.43	10.43
2	6	5/8	9/16	4.00	4.00	8	13½	1½	1¼	40.00	40.00
50	152	16	14	1.81	1.81	200	343	29	27	18.14	18.14
2½	7	11/16	5/8	6.75	—	10	16	1¾	1½	59.00	—
65	178	17	16	3.06	—	250	406	30	29	26.76	—
3	7½	¾	11/16	8.00	8.00	12	19	1¼	1¾	88.00	—
80	191	19	17	3.63	3.63	300	483	32	21	39.92	—
3½	8½	13/16	¾	11.00	—						
90	216	21	19	4.99	—						

Note:

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.

See first page for pressure-temperature ratings.



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