

# ASME B16.36 Orifice Flange Dimensions

## Class 300:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	3.75	2.75	4	0.63	1.63	1.00	2.00
3/4	4.62	3.50	4	0.75	2.00	1.13	2.25
1	4.88	3.88	4	0.75	2.38	1.19	2.38
1-1/4	5.25	4.25	4	0.75	2.75	1.25	2.62
1-1/2	6.12	5.00	4	0.75	3.12	1.38	2.75
2	6.50	5.50	8	0.75	3.75	1.50	2.88
2-1/2	7.50	6.50	8	0.88	4.62	1.75	3.12
3	8.25	7.25	8	0.88	5.38	1.88	3.25
4	10.00	9.00	8	0.88	6.88	2.19	3.50
5	11.00	10.00	8	1.00	8.00	2.31	3.75
6	12.50	11.50	12	1.00	9.50	2.62	4.00
8	15.00	13.75	12	1.13	11.75	2.88	4.38
10	17.50	16.25	16	1.13	14.25	3.19	4.88
12	20.50	19.00	16	1.25	17.00	3.50	5.25
14	23.00	21.25	20	1.25	18.75	3.88	5.62
16	25.50	23.75	20	1.38	21.25	4.19	6.00
18	28.00	25.75	24	1.38	22.75	4.50	6.38
20	30.50	28.25	24	1.38	25.00	4.75	6.88
24	36.00	33.00	24	1.63	29.50	5.38	7.62

# Class 400:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	4.25	3.12	4	0.75	1.63	1.12	2.12
3/4	5.00	3.88	4	0.75	2.00	1.25	2.38
1	5.50	4.25	4	0.88	2.38	1.38	2.62
1-1/4	6.00	4.88	4	0.88	2.88	1.50	2.88
1-1/2	6.50	5.38	4	0.88	3.38	1.62	3.00
2	7.50	6.50	8	0.88	4.12	1.88	3.25
2-1/2	8.50	7.50	8	1.00	4.88	2.12	3.62
3	9.38	8.25	8	1.00	5.62	2.25	3.75
4	11.50	10.00	8	1.00	7.12	2.62	4.12
5	13.00	11.50	8	1.13	8.50	2.88	4.50
6	14.00	12.50	12	1.13	9.62	3.12	4.75
8	16.50	15.00	12	1.25	11.88	3.50	5.12
10	20.00	17.50	16	1.25	14.25	3.88	5.62
12	23.00	20.50	20	1.25	17.00	4.25	6.12
14	25.25	22.75	20	1.38	18.75	4.62	6.62
16	27.75	25.25	20	1.38	21.25	5.00	7.00
18	30.00	27.25	24	1.50	22.75	5.25	7.50
20	32.50	29.75	24	1.50	25.00	5.62	8.00
24	38.00	35.00	24	1.63	29.50	6.38	8.62

# Class 600:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	4.62	3.88	4	0.75	1.88	1.25	2.38
3/4	5.50	4.62	4	0.88	2.38	1.38	2.62
1	6.12	5.00	4	0.88	2.88	1.50	2.88
1-1/4	6.88	5.88	4	0.88	3.50	1.62	3.00
1-1/2	7.50	6.50	4	1.00	4.12	1.75	3.25
2	8.50	7.50	8	1.00	5.00	2.00	3.50
2-1/2	9.62	8.50	8	1.13	5.88	2.38	3.88
3	10.62	9.50	8	1.13	6.62	2.62	4.12
4	12.88	11.75	8	1.25	8.12	3.00	4.62
5	14.88	13.75	8	1.25	9.62	3.38	5.12
6	16.00	15.00	12	1.25	10.62	3.62	5.38
8	19.12	18.12	12	1.38	13.00	4.25	6.12
10	23.50	22.00	16	1.38	15.62	4.88	6.88
12	27.50	25.00	20	1.38	18.62	5.38	7.50
14	30.50	28.00	20	1.62	20.88	5.88	8.12
16	33.00	30.50	20	1.62	23.12	6.38	8.62
18	35.50	32.75	24	1.62	24.62	6.88	9.12
20	38.00	35.00	24	1.88	27.00	7.38	9.62
24	44.50	40.50	24	1.88	31.50	8.25	10.62

# Class 900:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	5.00	3.88	4	0.75	2.00	1.38	2.62
3/4	5.88	4.62	4	0.88	2.50	1.62	3.00
1	6.62	5.00	4	0.88	2.88	1.75	3.12
1-1/4	7.25	5.88	4	1.00	3.50	1.88	3.25
1-1/2	8.00	6.50	4	1.00	4.12	2.00	3.50
2	9.12	7.50	8	1.00	5.00	2.38	3.88
2-1/2	10.50	8.88	8	1.13	5.88	2.62	4.12
3	12.12	10.00	8	1.25	6.62	2.88	4.38
4	14.50	12.25	8	1.25	8.12	3.38	5.00
5	16.50	14.25	8	1.38	9.62	3.88	5.62
6	17.88	15.50	12	1.38	11.12	4.12	6.12
8	21.00	18.62	12	1.62	13.50	4.88	6.88
10	25.50	22.00	16	1.62	16.50	5.62	7.50
12	30.00	26.00	20	1.62	19.50	6.38	8.12
14	32.75	28.25	20	1.88	22.00	7.00	9.00
16	36.00	31.00	20	1.88	24.50	7.62	9.62
18	38.75	33.25	24	2.00	26.50	8.25	10.25
20	42.00	36.00	24	2.00	29.00	9.00	11.00
24	50.00	42.50	24	2.00	35.50	10.12	12.25

# Class 1500:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	5.88	4.62	4	0.88	2.38	1.62	3.00
3/4	6.62	5.00	4	0.88	2.88	1.75	3.12
1	7.25	5.88	4	1.00	3.50	1.88	3.25
1-1/4	8.12	6.62	4	1.13	4.12	2.12	3.62
1-1/2	9.00	7.50	4	1.13	4.88	2.25	3.88
2	10.50	8.88	8	1.25	5.88	2.62	4.12
2-1/2	12.12	10.25	8	1.38	6.62	3.12	4.62
3	14.25	12.00	8	1.50	8.12	3.62	5.12
4	17.00	14.25	8	1.63	9.62	4.12	5.88
5	20.00	17.00	8	1.88	11.12	4.75	6.50
6	21.00	18.12	12	1.88	13.00	5.00	6.88
8	25.50	22.00	12	2.00	16.12	6.00	7.88
10	30.50	26.50	16	2.25	19.25	7.12	9.00
12	36.00	31.00	20	2.25	23.00	8.25	10.25
14	38.75	33.25	20	2.50	25.00	9.00	11.00
16	42.25	36.50	20	2.50	27.50	9.62	11.88
18	46.00	39.75	20	2.75	30.00	10.38	12.62
20	50.00	43.00	24	2.75	32.50	11.12	13.25
24	57.00	50.00	24	3.00	38.00	12.38	14.50

# Class 2500:

Nominal Pipe Size (in)	Diameter of Flange (D)	Bolt Circle Diameter (K)	Number of Bolts (N)	Diameter of Bolts (H)	Outside Diameter of Hub (G)	Thickness of Flange (C)	Length through Hub (L)
1/2	6.62	5.00	4	0.88	2.38	1.75	3.12
3/4	7.50	5.88	4	1.00	2.88	2.00	3.38
1	8.25	6.62	4	1.13	3.50	2.12	3.62
1-1/4	9.62	7.88	4	1.25	4.12	2.38	4.12
1-1/2	10.50	8.62	4	1.38	4.88	2.62	4.38
2	12.12	10.25	8	1.38	5.88	3.12	4.88
2-1/2	14.25	12.00	8	1.63	6.62	3.62	5.38
3	17.00	14.25	8	1.75	8.12	4.12	5.88
4	19.00	16.25	8	2.00	9.62	4.88	6.62
5	23.00	19.25	8	2.25	11.12	5.62	7.38
6	25.50	22.00	12	2.25	13.00	6.25	8.12
8	30.50	26.50	12	2.50	16.12	7.50	9.50
10	36.00	31.00	16	2.75	19.25	8.62	10.62
12	42.00	36.00	20	3.00	23.00	10.00	12.00
14	45.00	39.00	20	3.00	25.00	10.88	13.00
16	48.00	42.00	20	3.00	27.50	11.62	13.88
18	52.00	46.00	20	3.00	30.00	12.50	14.75
20	56.00	50.00	24	3.00	32.50	13.38	15.50
24	62.00	55.50	24	3.25	38.00	15.00	17.00

## Characteristics:

- **Flange Diameter (D):** This is the overall diameter of the flange.
- **Bolt Circle Diameter (K):** This is the diameter of the circle formed by the centers of the bolt holes.
- **Number of Bolts (N):** This is the total number of bolts required to join the flange to another component.
- **Diameter of Bolts (H):** This is the diameter of the bolts used.
- **Outside Diameter of Hub (G):** This is the diameter of the hub, which is the central portion of the flange that fits over the pipe.
- **Thickness of Flange (C):** This is the thickness of the flange material itself.
- **Length through Hub (L):** This is the length of the hub portion of the flange.