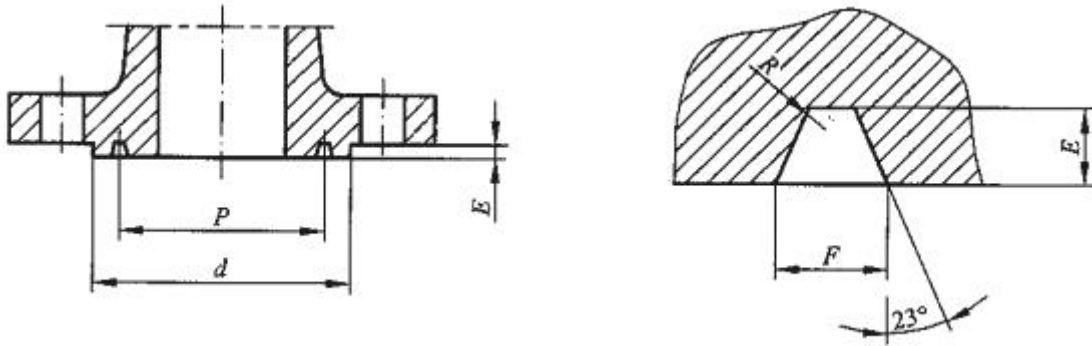


## Dimensions of ring joint facing - ASME B16.5 & B16.47 - Class150



DN	NPS	Groove Number	Diameter of Raised Portion, $d$ (min)	Pitch Diameter, $P$	Depth, $E$	Width, $F$	Radius at bottom, $R$ (max)
25	1	R15	63.5	47.63	6.35	8.74	0.8
32	1 ¼	R17	73	57.15	6.35	8.74	0.8
40	1 ½	R19	82.5	65.07	6.35	8.74	0.8
50	2	R22	102	82.55	6.35	8.74	0.8
65	2 ½	R25	121	101.60	6.35	8.74	0.8
80	3	R29	133	114.30	6.35	8.74	0.8
90	3 ½	R33	154	131.78	6.35	8.74	0.8
100	4	R36	171	149.23	6.35	8.74	0.8
125	5	R40	194	171.45	6.35	8.74	0.8
150	6	R43	219	193.68	6.35	8.74	0.8
200	8	R48	273	247.65	6.35	8.74	0.8
250	10	R52	330	304.80	6.35	8.74	0.8
300	12	R56	406	381.00	6.35	8.74	0.8
350	14	R59	425	396.88	6.35	8.74	0.8
400	16	R64	483	454.03	6.35	8.74	0.8
450	18	R68	546	517.53	6.35	8.74	0.8
500	20	R72	597	558.80	6.35	8.74	0.8
600	24	R76	711	673.10	6.35	8.74	0.8

(1) The height of the raised portion is equal to the depth of the groove dimension,  $E$ , but is not subjected to the tolerances for  $E$ . Former full-face contour may be used.

(2) For ring joints with lapped flanges in Classes 300 and 600, ring and groove number R30 is used instead of R31.

### TOLERANCES:

$E$  (depth)  $+0.4, -0.0$

$F$  (width)  $\pm 0.2$

$P$  (pitch diameter)  $\pm 0.13$

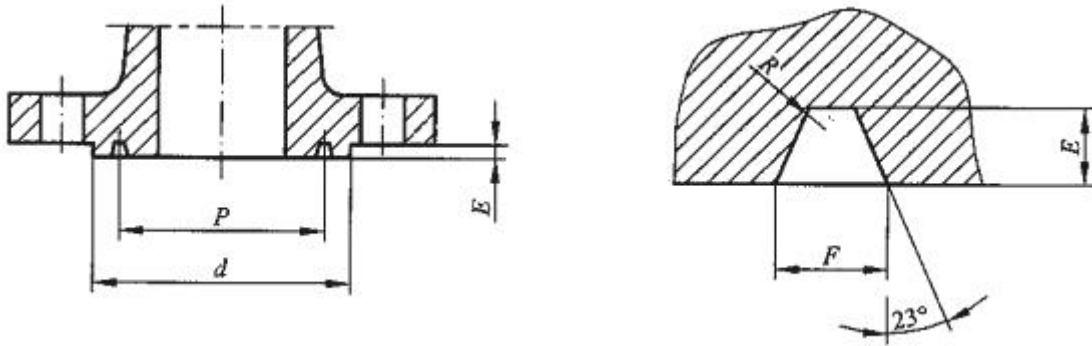
$R$  (radius at bottom)

$R \leq 2 + 0.8, -0.0$

$R > 2 \pm 0.8$

23 deg (angle)  $\pm 1/2$  deg

## Dimensions of ring joint facing - ASME B16.5 & B16.47 - Class300, 400, 600



DN	NPS	Groove Number	Diameter of Raised Portion, $d$ (min)	Pitch Diameter, $P$	Depth, $E$	Width, $F$	Radius at bottom, $R$ (max)
15	1/2	R11	51	34.14	5.54	7.14	0.8
20	3/4	R13	63.5	42.88	6.35	8.74	0.8
25	1	R16	70	50.80	6.35	8.74	0.8
32	1 ¼	R18	79.5	60.33	6.35	8.74	0.8
40	1 ½	R20	90.5	68.27	6.35	8.74	0.8
50	2	R23	108	82.55	7.92	11.91	0.8
65	2 ½	R26	127	101.60	7.92	11.91	0.8
80	3	R31	146	123.83	7.92	11.91	0.8
90	3 ½	R34	159	131.78	7.92	11.91	0.8
100	4	R37	175	149.23	7.92	11.91	0.8
125	5	R41	210	180.98	7.92	11.91	0.8
150	6	R45	241	211.12	7.92	11.91	0.8
200	8	R49	302	269.88	7.92	11.91	0.8
250	10	R53	356	323.85	7.92	11.91	0.8
300	12	R57	413	381.00	7.92	11.91	0.8
350	14	R61	457	419.10	7.92	11.91	0.8
400	16	R65	508	469.90	7.92	11.91	0.8
450	18	R69	575	533.40	7.92	11.91	0.8
500	20	R73	635	584.20	7.92	11.91	1.5
600	24	R77	749	692.15	7.92	11.91	1.5
650	26	R93	810	749.30	12.70	19.84	1.5
700	28	R94	861	800.10	12.70	19.84	1.5
750	30	R95	917	857.25	12.70	19.84	1.5
800	32	R96	984	914.40	14.27	23.01	1.5
850	34	R97	1035	965.20	14.27	23.01	1.5
900	36	R98	1092	1022.35	14.27	23.01	1.5

(3) The height of the raised portion is equal to the depth of the groove dimension, E, but is not subjected to the tolerances for E. Former full-face contour may be used.

(4) For ring joints with lapped flanges in Classes 300 and 600, ring and groove number R30 is used instead of R31.

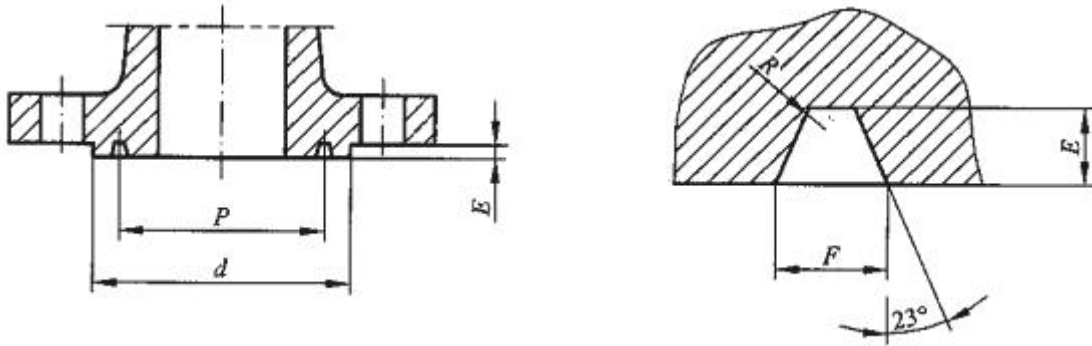
### TOLERANCES:

E (depth) +0.4, -0.0      F (width)  $\pm 0.2$       P (pitch diameter)  $\pm 0.13$

R (radius at bottom)  $R \leq 2 + 0.8, -0.0$      $R > 2 \pm 0.8$

23 deg (angle)  $\pm 1/2$  deg

## Dimensions of ring joint facing - ASME B16.5 & B16.47 - Class900



DN	NPS	Groove Number	Diameter of Raised Portion, $d$ (min)	Pitch Diameter, $P$	Depth, $E$	Width, $F$	Radius at bottom, $R$ (max)
15	1/2	R12	60.5	39.67	6.35	8.74	0.8
20	3/4	R14	66.5	44.45	6.35	8.74	0.8
25	1	R16	71.5	50.8	6.35	8.74	0.8
32	1 ¼	R18	81	60.33	6.35	8.74	0.8
40	1 ½	R20	92	68.27	6.35	8.74	0.8
50	2	R24	124	95.25	7.92	11.91	0.8
65	2 ½	R37	137	107.95	7.92	11.91	0.8
80	3	R31	156	123.83	7.92	11.91	0.8
100	3 ½	R37	181	149.23	7.92	11.91	0.8
125	5	R41	216	180.98	7.92	11.91	0.8
150	6	R45	241	211.12	7.92	11.91	0.8
200	8	R49	308	269.88	7.92	11.91	0.8
250	10	R53	362	323.85	7.92	11.91	0.8
300	12	R57	419	381.00	7.92	11.91	0.8
350	14	R62	467	419.10	11.13	16.66	1.5
400	16	R66	524	469.90	11.13	16.66	1.5
450	18	R70	594	533.40	12.70	19.84	1.5
500	20	R74	648	584.20	12.70	19.84	1.5
600	24	R78	772	692.15	15.88	26.97	2.4
650	26	R100	832	749.30	17.48	30.18	2.3
700	28	R101	889	800.10	17.48	33.32	2.3
750	30	R102	946	857.25	17.48	33.32	2.3
800	32	R103	1003	914.40	17.48	33.32	2.3
850	34	R104	1067	965.20	20.62	36.53	2.3
900	36	R105	1124	1022.35	20.62	36.53	2.3

(5) The height of the raised portion is equal to the depth of the groove dimension, E, but is not subjected to the tolerances for E. Former full-face contour may be used.

(6) For ring joints with lapped flanges in Classes 300 and 600, ring and groove number R30 is used instead of R31.

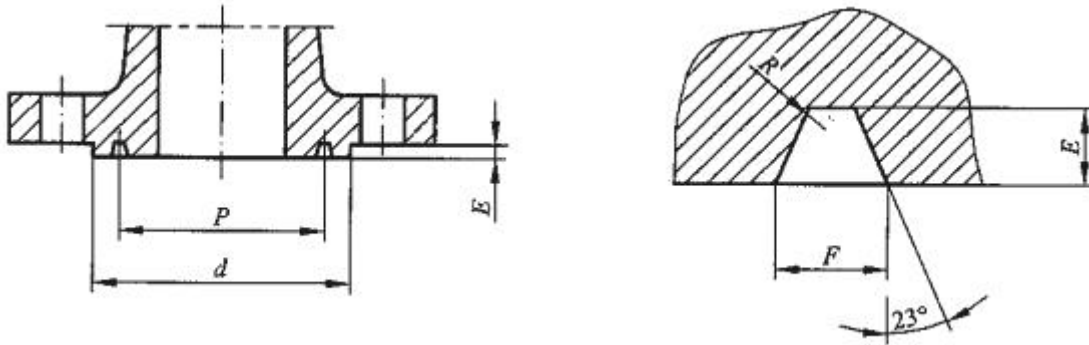
### TOLERANCES:

E (depth) +0.4, -0.0      F (width)  $\pm 0.2$       P (pitch diameter)  $\pm 0.13$

R (radius at bottom)  $R \leq 2 + 0.8, -0.0$      $R > 2 \pm 0.8$

23 deg (angle)  $\pm 1/2$  deg

## Dimensions of ring joint facing - ASME B16.5 & B16.47 - Class1500



DN	NPS	Groove Number	Diameter of Raised Portion, $d$ (min)	Pitch Diameter, $P$	Depth, $E$	Width, $F$	Radius at bottom, $R$ (max)
15	1/2	R12	60.5	39.67	6.35	8.74	0.8
20	3/4	R14	66.5	44.45	6.35	8.74	0.8
25	1	R16	71.5	50.80	6.35	8.74	0.8
32	1 1/4	R18	81	60.33	6.35	8.74	0.8
40	1 1/2	R20	92	68.27	6.35	8.74	0.8
50	2	R24	124	95.25	7.92	11.91	0.8
65	2 1/2	R27	137	107.95	7.92	11.91	0.8
80	3	R35	168	136.53	7.92	11.91	0.8
100	4	R39	194	161.93	7.92	11.91	0.8
125	5	R44	229	193.68	7.92	11.91	0.8
150	6	R46	248	211.14	9.53	13.49	1.5
200	8	R50	318	269.88	11.13	16.66	1.5
250	10	R54	371	323.85	11.13	16.66	1.5
300	12	R58	438	381.00	14.27	23.01	1.5
350	14	R63	489	419.10	15.88	26.97	2.4
400	16	R67	546	469.90	17.48	30.18	2.4
450	18	R71	613	533.40	17.48	30.18	2.4
500	20	R75	673	584.20	17.48	33.32	2.4
600	24	R79	794	692.15	20.62	36.53	2.4

(7) The height of the raised portion is equal to the depth of the groove dimension,  $E$ , but is not subjected to the tolerances for  $E$ . Former full-face contour may be used.

(8) For ring joints with lapped flanges in Classes 300 and 600, ring and groove number R30 is used instead of R31.

### TOLERANCES:

$E$  (depth)  $+0.4, -0.0$

$F$  (width)  $\pm 0.2$

$P$  (pitch diameter)  $\pm 0.13$

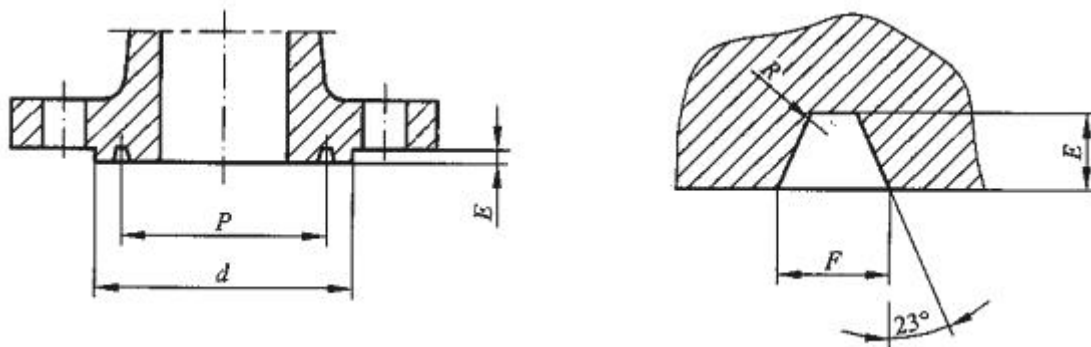
$R$  (radius at bottom)

$R \leq 2 + 0.8, -0.0$

$R > 2 \pm 0.8$

23 deg (angle)  $\pm 1/2$  deg

## Dimensions of ring joint facing - ASME B16.5 & B16.47 - Class2500



DN	NPS	Groove Number	Diameter of Raised Portion, $d$ (min)	Pitch Diameter, $P$	Depth, $E$	Width, $F$	Radius at bottom, $R$ (max)
15	1/2	R13	65	42.88	6.35	8.74	0.8
20	3/4	R16	73	50.80	6.35	8.74	0.8
25	1	R18	82.5	60.33	6.35	8.74	0.8
32	1 ¼	R21	102	72.23	7.92	11.91	0.8
40	1 ½	R23	114	82.55	7.92	11.91	0.8
50	2	R26	133	101.60	7.92	11.91	0.8
65	2 ½	R28	149	111.13	9.53	13.49	1.5
80	3	R32	168	127.00	9.53	13.49	1.5
100	4	R38	203	157.18	11.13	16.66	1.5
125	5	R42	241	190.50	12.70	19.84	1.5
150	6	R47	279	228.60	12.70	19.84	1.5
200	8	R51	340	279.40	14.27	23.01	1.5
250	10	R55	425	342.90	17.48	30.18	2.4
300	12	R60	495	406.40	17.48	33.32	2.4

(9) The height of the raised portion is equal to the depth of the groove dimension,  $E$ , but is not subjected to the tolerances for  $E$ . Former full-face contour may be used.

(10) For ring joints with lapped flanges in Classes 300 and 600, ring and groove number R30 is used instead of R31.

### TOLERANCES:

$E$  (depth)  $+0.4, -0.0$

$F$  (width)  $\pm 0.2$

$P$  (pitch diameter)  $\pm 0.13$

$R$  (radius at bottom)

$R \leq 2 + 0.8, -0.0$

$R > 2 \pm 0.8$

23 deg (angle)  $\pm 1/2$  deg