

## Ring joint facing dimensions - ASME/ANSI B16.5 and B16.47 Series A (MSS SP-44) and Series B (API 605) (Continued)

Class (lb)							Groove/Ring Number	Raised Face		Groove				
150	300	400	600	900	1500	2500		G	K	L	M	R		
Nominal Pipe Size (NPS)								Face Diameter min	Pitch Diameter	Depth <sup>1</sup>	Width	Radius at Bottom		
							in mm	in mm	in mm	in mm	in mm			
					24		R79	31.250 793.75	27.250 692.15	0.812 20.62	1.438 36.53	0.09 2.29		
MSS SP-44 only, covers NPS 22:														
	22	22	22				R81	27.000 685.80	25.000 635.00	0.438 11.13	0.594 15.09	0.06 1.52		
ASME/ANSI B16.47 (MSS SP-44 & API 605) covers NPS 26 to 36. (There are no ring joint facings >NPS 36)														
	26	26	26				R93	31.880 809.75	29.500 749.30	0.500 12.70	0.781 19.84	0.06 1.52		
	28	28	28				R94	33.880 860.55	31.500 800.10	0.500 12.70	0.781 19.84	0.06 1.52		
	30	30	30				R95	36.120 917.45	33.750 857.25	0.500 12.70	0.781 19.84	0.06 1.52		
	32	32	32				R96	38.750 984.25	36.000 914.40	0.562 14.27	0.906 23.01	0.06 1.52		
	34	34	34				R97	40.750 1035.1	38.000 965.20	0.562 14.27	0.906 23.01	0.06 1.52		
	36	36	36				R98	43.000 1092.2	40.250 1022.4	0.562 14.27	0.906 23.01	0.06 1.52		
				26			R100	32.750 831.85	29.500 749.30	0.688 17.48	1.188 30.18	0.09 2.29		
				28			R101	35.000 889.00	31.500 800.10	0.688 17.48	1.312 33.32	0.09 2.29		
				30			R102	37.250 946.15	33.750 857.25	0.688 17.48	1.312 33.32	0.09 2.29		
				32			R103	39.500 1003.3	36.000 914.40	0.688 17.48	1.312 33.32	0.09 2.29		
				34			R104	42.000 1066.8	38.000 965.20	0.812 20.62	1.438 36.53	0.09 2.29		
				36			R105	44.250 1124.0	40.250 1022.4	0.812 20.62	1.438 36.53	0.09 2.29		

### Notes

- Ring joint gasket dimensions conform to ASME B16.20 (not covered in this summary).
  - Use Class 600 lb in sizes NPS 1/2 to NPS 3 1/2 for Class 400 lb.
  - Use Class 1500 lb in sizes NPS 1/2 to NPS 2 1/2 for Class 900 lb.
  - Tolerances are as shown in the table below.
- 1 The height of the raised portion is equal to the depth of groove dimension L, but is not subject to the tolerances for L.
  - 2 Ring joints with lapped flanges in Classes 300 lb and 600 lb use R30 instead of R31.

### Ring joint facing tolerances (ASME/ANSI B16.5 and B16.47)

Dimension	Range	Tolerance	
		in	mm
L (depth)	All	+0.016, -0	+0.406, -0
M (width)	All	±0.008	±0.203
K (pitch diameter)	All	±0.005	±0.127
R (radius at bottom)	R ≤ 0.06 in	+0.03, -0	+0.762, -0
	R > 0.06 in	±0.03	±0.762
	≥ NPS 26	maximum quoted	
D (overall length) for flanges with ring joint	≤ NPS 10	±0.06	±1.52
	≥ NPS 12	±0.12	±3.05