USEFUL TECHNICAL DATA

FACING DIMENSIONS FOR ASME B16.5 & BS 1560 FLANGES

CLASS 150, 300, 400, 600, 900, 1500 AND 2500

TABLE 23

| | OUTSIDE | DIAMETER See | Note 3 | | OUTSIDE DIAMETER See Note 3 | | | | HEIGHT | | |
|-------------------------|--|--|------------------------------------|--|--|--|---|--|---|---|---------------------------------|
| NOMINAL PIPE SIZE | RAISED FACE, LAPPED, LARGE MALE, & LARGE TONGUES See Note 5 | SMALL MALE See Notes 4&5 S | SMALL TONGUE See Note 5 | I.D. OF LARGE & SMALL TONGUE See Notes 3 & 5 U | LARGE FEMALE & LARGE GROOVE See Note 5 | SMALL FEMALE See Note 4 See Note 5 X | SMALL GROOVE See Note 5 V | I.D. OF LARGE & SMALL GROOVE See Note 3 See Note 5 Z | RAISED FACE CLASS 150 & 300 See Note 1 | RAISED FACE LARGE & SMALL MALE & TONGUE CLASS 400, 600, 900 1500 & 2500 See Note 2 | DEPTH OF GROOVE OR FEMALE |
| 1/2 | 1³/ ₈ | ²² / ₃₂ | 1³/ ₈ | 1 | 17/16 | ²⁵ / ₃₂ | 1 ⁷ / ₁₆ | ¹⁵ / ₁₆ | 1/16 | 1/4 | 3/16 |
| 3/4 | 1 ¹¹ / ₁₆ | ¹⁵ / 16 | 1 ¹¹ / 16 | 1 5 / 16 | 13/4 | 1 | 13/4 | 11/4 | 1/16 | 1/4 | 3/16 |
| 1 | 2 | 1³/ ₁₆ | 1 ⁷ /8 | 11/2 | 21/16 | 11/4 | 1 ¹⁵ / ₁₆ | 17/16 | 1/16 | 1/4 | 3/16 |
| 11/4 | 21/2 | 11/2 | 21/4 | 17/8 | 21/16 | 1%16 | 25/16 | 1 ¹³ / ₁₆ | 1/16 | 1/4 | 3/16 |
| 11/2 | 27/8 | 13/4 | 21/2 | 21/8 | 215/16 | 1 ¹³ / 16 | 21/16 | 21/16 | 1/16 | 1/4 | 3/16 |
| 2 | 35/8 | 21/4 | 31/4 | 27/8 | 311/16 | 25/16 | 35/16 | 213/16 | 1/16 | 1/4 | 3/16 |
| 21/2 | 4 ¹ / ₈ | 211/16 | 33/4 | 33/8 | 4³/ ₁₆ | 23/4 | 313/16 | 35/16 | 1/16 | 1/4 | 3/16 |
| 3 | 5 | 35/16 | 4 5/8 | 4 ¹ / ₄ | 51/16 | 33/8 | 4 ¹¹ / ₁₆ | 4 ³ / ₁₆ | 1/16 | 1/4 | 3/16 |
| 31/2 | 5½ | 313/16 | 51/8 | 4 ³ / ₄ | 5%16 | 37/8 | 5³/16 | 4 ¹¹ / ₁₆ | 1/16 | 1/4 | 3/16 |
| 4 | 6³/ ₁₆ | 4 ⁵ / 16 | 5 ¹¹ / ₁₆ | 5³/₁6 | 6¹/₄ | 43/8 | 53/4 | 51/8 | 1/16 | 1/4 | 3/16 |
| 5 | 7 5/ ₁₆ | 53/8 | 613/16 | 6 ⁵ / 16 | 73/8 | 57/16 | 67/8 | 61/4 | 1/16 | 1/4 | 3/16 |
| 6 | 81/2 | 63/8 | 8 | 7 ½ | 81/16 | 67/16 | 81/16 | 77/16 | 1/16 | 1/4 | 3/16 |
| 8 | 105/8 | 83/8 | 10 | 9 ³/ ₈ | 1011/16 | 87/16 | 101/16 | 95/16 | 1/16 | 1/4 | ³ / 16 |
| 10 | 12³/₄ | 101/2 | 12 | 1111/4 | 1213/16 | 10%16 | 121/16 | 11³/ ₁₆ | 1/16 | 1/4 | 3/16 |
| 12 | 15 | 12 ¹ / ₂ | 14¹/₄ | 131/2 | 15 ¹ / ₁₆ | 121/16 | 14 ⁵ / ₁₆ | 137/16 | 1/16 | 1/4 | 3/16 |
| 14 | 16 ¹ / ₄ | 13³/₄ | 15½ | 14³/ ₄ | 16 ⁵ / ₁₆ | 1313/16 | 15%16 | 14 ¹¹ / ₁₆ | 1/16 | 1/4 | ³ / 16 |
| 16 | 181/2 | 15³/₄ | 17 ⁵ /8 | 16³/₄ | 18%16 | 15 ¹³ / 16 | 17 ¹¹ / ₁₆ | 16 ¹¹ / 16 | 1/16 | 1/4 | 3/16 |
| 18 | 21 | 17³/₄ | 201/8 | 19¹/₄ | 211/16 | 17 ¹³ / ₁₆ | 20³/16 | 19³/ ₁₆ | 1/16 | 1/4 | 3/16 |
| 20 | 23 | 19³/ ₄ | 22 | 21 | 231/16 | 19 ¹³ / ₁₆ | 221/16 | 2015/16 | 1/16 | 1/4 | ³ / ₁₆ |
| 24 | 271/4 | 233/4 | 261/4 | 251/4 | 275/16 | 2313/16 | 265/16 | 25³/ ₁₆ | 1/16 | 1/4 | 3/16 |

DIMENSIONS IN INCHES

- NOTES
- 1. Regular facing far class 150 and 300 steel flanged fittings and companion flange standards is a 1/16" raised face included in the minimum flange thickness dimensions. A 1/16" raised face may be supplied also on the class 400, 600, 900, 1500, and 2500 flange standards, but it must be added to the minimum flange thickness.
- Regular facing for class 400, 600, 900, 1500, and 2500 flange thickness dimensions.
- 3. Tolerance of plus or minus 0.016 in. 1/64" is allowed on the inside and outside diameters of all facings.
- 4. For small male and female joints care should be taken in the use of these dimensions to insure that pipe used is thick enough to permit sufficient bearing surface to prevent the crushing of the gasket. The dimensions apply particularly on lines where the joint is made on the end of the pipe. Screwed companion flanges for small male and female joints are furnished with plain face and are threaded with American Standard Locknut Thread.
- Gaskets for male-female and tongue-groove joints shall cover the bottom of the recess with minimum clearances taking into account the tolerances prescribed in Note 3.