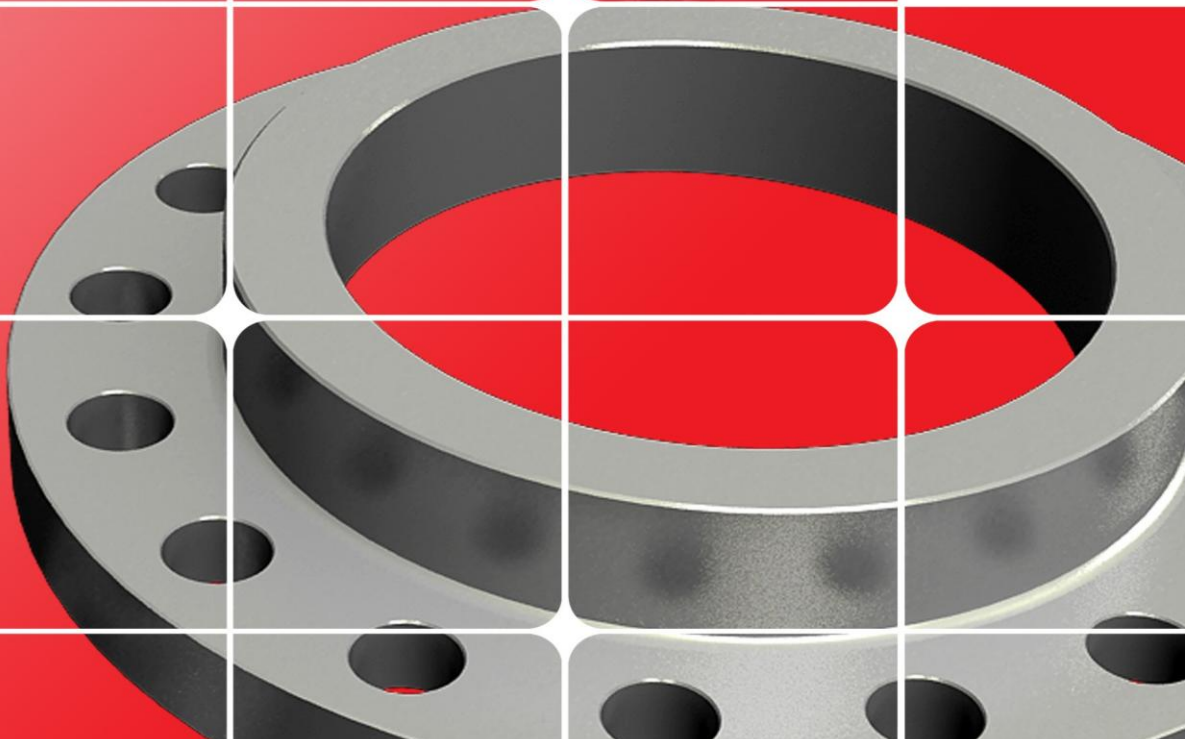
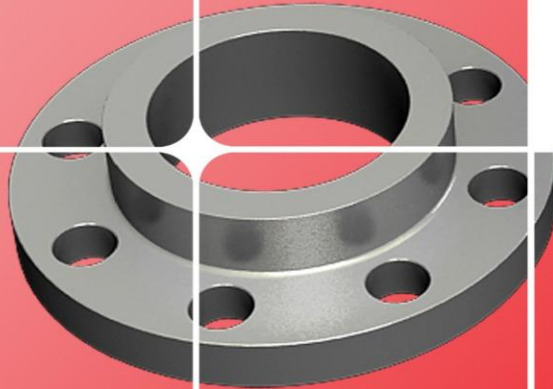
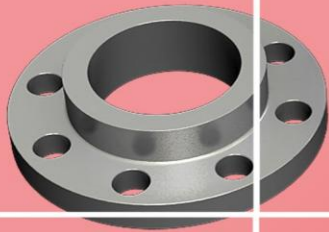


# BS 3293 FLANGES

- Weld Neck Flange
- Slip On Flange
- Class 150 Flanges
- Class 300 Flanges
- Class 400 Flanges
- Class 600 Flanges



**BS 3293 Flanges Specification**

|                      |                                                                            |
|----------------------|----------------------------------------------------------------------------|
| Flange Types:        | Weld Neck Flange, Slip-On Flange                                           |
| Dimension Standards: | BS 3293                                                                    |
| Pressure Class:      | 150 Lbs, 300 Lbs, 400 Lbs, 600 Lbs                                         |
| Sizes:               | 26" NB to 48" NB (DN 600 – 1200 mm)                                        |
| Material             | Carbon Steel, Stainless Steel, Alloy Steel                                 |
| Surface Treatment:   | Anti-rust Paint, Oil Black Paint, Zinc Plated, Cold and Hot Dip Galvanized |

**Industries and Applications**

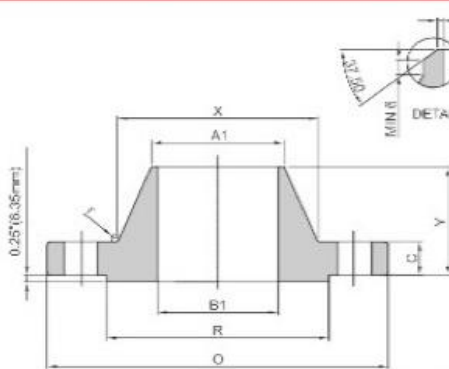
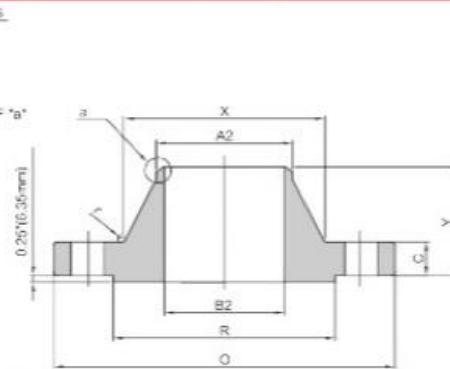
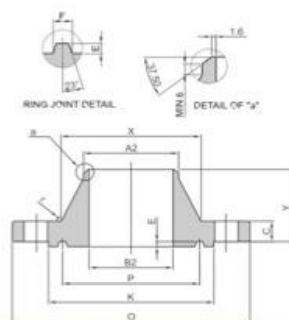
BS 3293 is a material and dimensional standard only and applies to forged carbon steel slip-on and welding neck flanges of nominal sizes 26 in and larger, for use in the petroleum industry. Drilling, bolting, facing and thickness dimensions are applicable also to integral end flanges of valve and fittings.

British Standard BS 3293 : 1960 - Carbon Steel Pipe Flanges (over 24 inches nominal size) for the Petroleum Industry, covers Class 150 lb to 600 lb weld neck and slip on flanges.

**BS 3293 Flange Types**

**Slip-On Flange**

**Weld Neck Flange**

**Weld Neck Ring Type Joint Flange**

**Slip-On Flange**

**Weld Neck Flange**

**Weld Neck Ring Type Joint Flange**

**BS 3293 Flange Class**

|                   |                   |
|-------------------|-------------------|
| Class 150 Flanges | Class 300 Flanges |
| Class 400 Flanges | Class 600 Flanges |

**BS 3293 Class 150 Flanges Dimensions**

| Size | O      | PCD    | R      | C    | X      | A      | Y1    | Y2    | r    | B1     | B2                           | N  | H    |
|------|--------|--------|--------|------|--------|--------|-------|-------|------|--------|------------------------------|----|------|
| 26   | 870.0  | 806.5  | 740.2  | 50.8 | 723.9  | 660.4  | 85.7  | 127.0 | 6.4  | 666.8  | To be specified by customer. | 24 | 34.9 |
| 28   | 927.1  | 863.6  | 793.8  | 52.4 | 781.1  | 711.2  | 87.3  | 128.6 | 6.4  | 717.6  |                              | 28 | 34.9 |
| 30   | 984.3  | 914.4  | 857.3  | 54.0 | 831.9  | 762.0  | 88.9  | 130.2 | 6.4  | 768.4  |                              | 28 | 34.9 |
| 32   | 1060.5 | 977.9  | 908.1  | 57.2 | 889.0  | 812.8  | 92.1  | 133.4 | 7.9  | 819.2  |                              | 28 | 41.3 |
| 34   | 1111.3 | 1028.7 | 958.9  | 58.7 | 939.8  | 863.6  | 93.7  | 134.9 | 7.9  | 870.0  |                              | 32 | 41.3 |
| 36   | 1168.4 | 1085.9 | 1022.4 | 60.3 | 997.0  | 914.4  | 95.3  | 136.5 | 7.9  | 920.8  |                              | 32 | 41.3 |
| 38   | 1238.3 | 1149.4 | 1073.2 | 60.3 | 1060.5 | 965.2  | 95.3  | 136.5 | 9.5  | 971.6  |                              | 32 | 41.3 |
| 40   | 1289.1 | 1200.2 | 1124.0 | 63.5 | 1111.3 | 1016.0 | 98.4  | 139.7 | 9.5  | 1022.4 |                              | 36 | 41.3 |
| 42   | 1346.2 | 1257.3 | 1193.8 | 66.7 | 1168.4 | 1066.8 | 101.6 | 142.9 | 9.5  | 1073.2 |                              | 36 | 41.3 |
| 44   | 1403.4 | 1314.5 | 1244.6 | 66.7 | 1219.2 | 1117.6 | 101.6 | 142.9 | 11.1 | 1124.0 |                              | 40 | 41.3 |
| 46   | 1454.2 | 1365.3 | 1295.4 | 68.3 | 1270.0 | 1168.4 | 103.2 | 144.5 | 11.1 | 1174.8 |                              | 40 | 41.3 |
| 48   | 1511.3 | 1422.4 | 1358.9 | 69.9 | 1327.2 | 1219.2 | 104.8 | 146.1 | 11.1 | 1225.6 |                              | 44 | 41.3 |

\* Dimensions in mm.

**BS 3293 Class 300 Flanges Dimensions**

| Size | O      | PCD    | R      | C     | C1    | X     | A1    | A2    | Y     | Y1    | r    | B1    | B2                           | N  | H    | P      | F    | E    | K      | RING NUMBER |
|------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|------------------------------|----|------|--------|------|------|--------|-------------|
| 26   | 971.6  | 876.3  | 749.3  | 79.4  | 103.2 | 720.7 | 687.4 | 666.8 | 184.2 | 182.6 | 9.5  | 666.8 | To be specified by customer. | 28 | 44.5 | 749.3  | 19.8 | 12.7 | 809.6  | R93         |
| 28   | 1035.1 | 939.8  | 800.1  | 85.7  | 109.5 | 774.7 | 739.8 | 717.6 | 196.9 | 195.3 | 11.1 | 717.6 |                              | 28 | 44.5 | 800.1  | 19.8 | 12.7 | 860.4  | R94         |
| 30   | 1092.2 | 997.0  | 857.3  | 92.1  | 115.9 | 825.5 | 792.2 | 768.4 | 209.6 | 208.0 | 11.1 | 768.4 |                              | 28 | 47.6 | 857.3  | 19.8 | 12.7 | 917.6  | R95         |
| 32   | 1149.4 | 1054.1 | 914.4  | 98.4  | 125.4 | 881.1 | 844.6 | 819.2 | 222.3 | 220.7 | 11.1 | 819.2 |                              | 28 | 50.8 | 914.4  | 23.0 | 14.3 | 984.3  | R96         |
| 34   | 1206.5 | 1104.9 | 965.2  | 101.6 | 128.6 | 936.6 | 896.9 | 871.5 | 231.8 | 230.2 | 12.7 | 870.0 |                              | 28 | 50.8 | 965.2  | 23.0 | 14.3 | 1035.1 | R97         |
| 36   | 1270.0 | 1168.4 | 1022.4 | 104.8 | 131.8 | 990.6 | 949.3 | 922.3 | 241.3 | 239.7 | 12.7 | 920.8 |                              | 32 | 54.0 | 1022.4 | 23.0 | 14.3 | 1092.2 | R98         |

\* Dimensions in mm.

**BS 3293 Class 400 Flanges Dimensions**

| Size | O      | PCD    | R      | C     | X      | A1    | A2    | Y     | r    | B1    | B2                           | N  | H    | P      | F    | E    | K      | RING NUMBER |
|------|--------|--------|--------|-------|--------|-------|-------|-------|------|-------|------------------------------|----|------|--------|------|------|--------|-------------|
| 26   | 971.6  | 876.3  | 749.3  | 88.9  | 727.1  | 693.7 | 668.3 | 193.7 | 11.1 | 666.8 | To be specified by customer. | 28 | 47.6 | 749.3  | 19.8 | 12.7 | 809.6  | R93         |
| 28   | 1035.1 | 939.8  | 800.1  | 95.3  | 782.6  | 746.1 | 719.1 | 206.4 | 12.7 | 717.6 |                              | 28 | 50.8 | 800.1  | 19.8 | 12.7 | 860.4  | R94         |
| 30   | 1092.2 | 997.0  | 857.3  | 101.6 | 836.6  | 800.1 | 769.9 | 219.1 | 12.7 | 768.4 |                              | 28 | 54.0 | 857.3  | 19.8 | 12.7 | 917.6  | R95         |
| 32   | 1149.4 | 1054.1 | 914.4  | 108.0 | 889.0  | 852.5 | 822.3 | 231.8 | 12.7 | 819.2 |                              | 28 | 54.0 | 914.4  | 23.0 | 14.3 | 984.3  | R96         |
| 34   | 1206.5 | 1104.9 | 965.2  | 111.1 | 944.6  | 904.9 | 873.1 | 241.3 | 14.3 | 870.0 |                              | 28 | 54.0 | 965.2  | 23.0 | 14.3 | 1035.1 | R97         |
| 36   | 1270.0 | 1168.4 | 1022.4 | 114.3 | 1000.1 | 958.9 | 925.5 | 250.8 | 14.3 | 920.8 |                              | 32 | 54.0 | 1022.4 | 23.0 | 14.3 | 1092.2 | R98         |

\* Dimensions in mm.

**BS 3293 Class 600 Flanges Dimensions**

| Size | O      | PCD    | R      | C     | X      | A1    | A2    | Y     | r    | B1    | B2                           | N  | H    | P      | F    | E    | K      | RING NUMBER |
|------|--------|--------|--------|-------|--------|-------|-------|-------|------|-------|------------------------------|----|------|--------|------|------|--------|-------------|
| 26   | 1016.0 | 914.4  | 749.3  | 108.0 | 747.7  | 706.4 | 671.5 | 222.3 | 14.3 | 666.8 | To be specified by customer. | 28 | 50.8 | 749.3  | 19.8 | 12.7 | 809.6  | R93         |
| 28   | 1073.2 | 965.2  | 800.1  | 111.1 | 803.3  | 760.4 | 723.9 | 235.0 | 15.9 | 717.6 |                              | 28 | 54.0 | 800.1  | 19.8 | 12.7 | 860.4  | R94         |
| 30   | 1130.3 | 1022.4 | 857.3  | 114.3 | 862.0  | 814.4 | 774.7 | 247.7 | 17.5 | 768.4 |                              | 28 | 54.0 | 857.3  | 19.8 | 12.7 | 917.6  | R95         |
| 32   | 1193.8 | 1079.5 | 914.4  | 117.5 | 917.6  | 868.4 | 825.5 | 260.4 | 17.5 | 819.2 |                              | 28 | 60.3 | 914.4  | 23.0 | 14.3 | 984.3  | R96         |
| 34   | 1244.6 | 1130.3 | 965.2  | 120.7 | 973.1  | 922.3 | 877.9 | 269.9 | 19.1 | 870.0 |                              | 28 | 60.3 | 965.2  | 23.0 | 14.3 | 1035.1 | R97         |
| 36   | 1314.5 | 1193.8 | 1022.4 | 123.8 | 1031.9 | 976.3 | 928.7 | 282.6 | 19.1 | 920.8 |                              | 28 | 66.7 | 1022.4 | 23.0 | 14.3 | 1092.2 | R98         |

\* Dimensions in mm.