

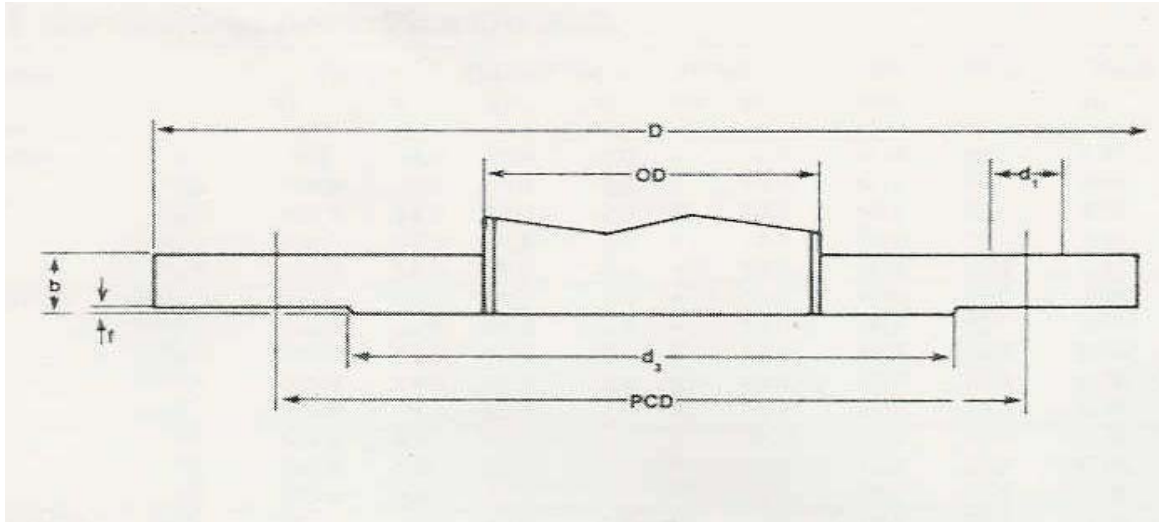
# Flanges

Steel Flanges

to BS 4504 Part 1:1969

SABS 1123:1977

BS 10:1962



| 15 mm Nominal Bore. Pipe OD 21,3 |           |        |      |                |     |       |                |           |      |         |
|----------------------------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|------|---------|
| Table                            |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD  | Mass kg |
|                                  |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |      |         |
| BS4504                           | 6/3       | 80,0   | 12,0 | 40,0           | 2,0 | 4     | 11,0           | M10       | 55,0 | 0,35    |
|                                  | 10/3      | 95,0   | 14,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,59    |
|                                  | 16/3      | 95,0   | 14,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,59    |
|                                  | 25/3      | 95,0   | 16,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,69    |
|                                  | 40/3      | 95,0   | 16,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,69    |
| SABS1123                         | 600/3     | 80,0   | 10,0 | 40,0           | 2,0 | 4     | 11,0           | M10       | 55,0 | 0,29    |
|                                  | 1000/3    | 95,0   | 10,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 55,0 | 0,42    |
|                                  | 1600/3    | 95,0   | 10,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,42    |
|                                  | 2500/3    | 95,0   | 14,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,60    |
|                                  | 4000/3    | 95,0   | 14,0 | 45,0           | 2,0 | 4     | 14,0           | M12       | 65,0 | 0,60    |
|                                  | BS 10 T/D | 95,3   | 4,8  | -              | -   | 4     | 14,3           | 12,7      | 66,7 | 0,67    |
|                                  | T/E       | 95,3   | 6,3  | -              | -   | 4     | 14,3           | 12,7      | 66,7 | 0,67    |
|                                  | T/F       | 95,3   | 9,5  | -              | -   | 4     | 14,3           | 12,7      | 66,7 | 0,67    |
| ANSI B 16,5                      | 150lb     | 88,9   | 11,1 | 34,9           | 1,6 | 4     | 15,9           | 12,7      | 60,3 | 0,89    |

E. & O.E.

**20 mm Nominal Bore. Pipe OD 26,9**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD  | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |      |         |
| BS4504      | 6/3       | 90,0   | 14,0 | 50,0           | 2,0 | 4     | 11,0           | M10       | 65,0 | 0,53    |
|             | 10/3      | 105,0  | 16,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,85    |
|             | 16/3      | 105,0  | 16,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,85    |
|             | 25/3      | 105,0  | 18,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,97    |
|             | 40/3      | 105,0  | 18,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,97    |
| SABS1123    | 600/3     | 90,0   | 10,0 | 50,0           | 2,0 | 4     | 11,0           | M10       | 65,0 | 0,38    |
|             | 1000/3    | 105,0  | 10,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,53    |
|             | 1600/3    | 105,0  | 10,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,53    |
|             | 2500/3    | 105,0  | 14,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,75    |
|             | 4000/3    | 105,0  | 14,0 | 58,0           | 2,0 | 4     | 14,0           | M12       | 75,0 | 0,75    |
|             | BS 10 T/D | 101,6  | 4,8  | -              | -   | 4     | 14,2           | 12,7      | 73,0 | 0,76    |
|             | T/E       | 101,6  | 6,3  | -              | -   | 4     | 14,2           | 12,7      | 73,0 | 0,76    |
|             | T/F       | 101,6  | 9,5  | -              | -   | 4     | 14,2           | 12,7      | 73,0 | 0,76    |
| ANSI B 16,5 | 150lb     | 98,4   | 12,7 | 42,9           | 1,6 | 4     | 15,8           | 12,7      | 69,8 | 0,89    |

E. &amp; O.E.

**25 mm Nominal Bore. Pipe OD 33,7**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD  | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |      |         |
| BS4504      | 6/3       | 100,0  | 14,0 | 60,0           | 2,0 | 4     | 11,0           | M10       | 75,0 | 0,65    |
|             | 10/3      | 115,0  | 16,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,00    |
|             | 16/3      | 115,0  | 16,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,00    |
|             | 25/3      | 115,0  | 18,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,20    |
|             | 40/3      | 115,0  | 18,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,20    |
| SABS1123    | 600/3     | 100,0  | 10,0 | 60,0           | 2,0 | 4     | 11,0           | M10       | 75,0 | 0,46    |
|             | 1000/3    | 115,0  | 10,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 0,63    |
|             | 1600/3    | 115,0  | 10,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 0,63    |
|             | 2500/3    | 115,0  | 16,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,07    |
|             | 4000/3    | 115,0  | 16,0 | 68,0           | 2,0 | 4     | 14,0           | M12       | 85,0 | 1,07    |
|             | BS 10 T/D | 114,3  | 4,8  | -              | -   | 4     | 14,3           | 12,7      | 82,6 | 0,97    |
|             | T/E       | 114,3  | 7,1  | -              | -   | 4     | 14,3           | 12,7      | 82,6 | 0,94    |
|             | T/F       | 120,6  | 9,5  | -              | -   | 4     | 17,5           | 15,9      | 87,3 | 1,03    |
| ANSI B 16,5 | 150lb     | 107,9  | 14,3 | 50,8           | 1,6 | 4     | 15,9           | 12,7      | 79,4 | 1,03    |

E. &amp; O.E.

**32 mm Nominal Bore. Pipe OD 42,4**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 120,0  | 16,0 | 70,0           | 2,0 | 4     | 14,0           | M12       | 90,0  | 1,10    |
|             | 10/3      | 140,0  | 16,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,50    |
|             | 16/3      | 140,0  | 16,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,50    |
|             | 25/3      | 140,0  | 18,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,70    |
|             | 40/3      | 140,0  | 18,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,70    |
| SABS1123    | 600/3     | 120,0  | 10,0 | 70,0           | 2,0 | 4     | 14,0           | M12       | 90,0  | 0,69    |
|             | 1000/3    | 140,0  | 10,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 0,94    |
|             | 1600/3    | 140,0  | 10,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 0,94    |
|             | 2500/3    | 140,0  | 18,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,70    |
|             | 4000/3    | 140,0  | 18,0 | 78,0           | 2,0 | 4     | 18,0           | M16       | 100,0 | 1,70    |
|             | BS 10 T/D | 120,7  | 6,3  | -              | -   | 4     | 14,2           | 12,7      | 87,3  | 0,98    |
|             | T/E       | 120,7  | 7,9  | -              | -   | 4     | 14,2           | 12,7      | 87,3  | 0,98    |
|             | T/F       | 133,3  | 12,7 | -              | -   | 4     | 17,5           | 15,9      | 98,4  | 1,21    |
| ANSI B 16,5 | 150lb     | 117,5  | 15,9 | 73,0           | 1,6 | 4     | 15,9           | 12,7      | 88,9  | 1,11    |

E. &amp; O.E.

**40 mm Nominal Bore. Pipe OD 48,3**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 130,0  | 16,0 | 80,0           | 3,0 | 4     | 14,0           | M12       | 100,0 | 1,20    |
|             | 10/3      | 150,0  | 16,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 1,60    |
|             | 16/3      | 150,0  | 16,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 1,60    |
|             | 25/3      | 150,0  | 20,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 2,10    |
|             | 40/3      | 150,0  | 20,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 2,10    |
| SABS1123    | 600/3     | 130,0  | 10,0 | 80,0           | 3,0 | 4     | 14,0           | M12       | 100,0 | 0,75    |
|             | 1000/3    | 150,0  | 10,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 1,00    |
|             | 1600/3    | 150,0  | 10,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 1,00    |
|             | 2500/3    | 150,0  | 20,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 2,10    |
|             | 4000/3    | 150,0  | 20,0 | 88,0           | 3,0 | 4     | 18,0           | M16       | 110,0 | 2,10    |
|             | BS 10 T/D | 133,4  | 6,3  | -              | -   | 4     | 14,2           | 12,7      | 98,4  | 1,16    |
|             | T/E       | 133,4  | 8,7  | -              | -   | 4     | 14,2           | 12,7      | 98,4  | 1,16    |
|             | T/F       | 139,7  | 12,7 | -              | -   | 4     | 17,5           | 15,9      | 104,8 | 1,29    |
| ANSI B 16,5 | 150lb     | 127,0  | 17,5 | 73,0           | 1,6 | 4     | 15,9           | 12,7      | 98,4  | 1,34    |

E. &amp; O.E.

**50 mm Nominal Bore. Pipe OD 60,3**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 140,0  | 16,0 | 90,0           | 3,0 | 4     | 14,0           | M12       | 110,0 | 1,30    |
|             | 10/3      | 165,0  | 18,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 2,20    |
|             | 16/3      | 165,0  | 18,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 2,20    |
|             | 25/3      | 165,0  | 20,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 2,50    |
|             | 40/3      | 165,0  | 20,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 2,50    |
| SABS1123    | 600/3     | 140,0  | 10,0 | 90,0           | 3,0 | 4     | 14,0           | M12       | 110,0 | 0,81    |
|             | 1000/3    | 165,0  | 10,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 1,22    |
|             | 1600/3    | 165,0  | 12,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 1,47    |
|             | 2500/3    | 165,0  | 20,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 126,0 | 2,50    |
|             | 4000/3    | 165,0  | 20,0 | 102,0          | 3,0 | 4     | 18,0           | M16       | 125,0 | 2,50    |
|             | BS 10 T/D | 152,4  | 7,9  | -              | -   | 4     | 17,5           | 15,9      | 114,3 | 1,47    |
|             | T/E       | 152,4  | 9,5  | -              | -   | 4     | 17,5           | 15,9      | 114,3 | 1,47    |
|             | T/F       | 165,1  | 15,9 | -              | -   | 4     | 17,5           | 15,9      | 127,0 | 2,23    |
| ANSI B 16,5 | 150lb     | 152,4  | 19,0 | 92,0           | 1,6 | 4     | 19,0           | 15,9      | 120,6 | 2,23    |

E. &amp; O.E.

**65 mm Nominal Bore. Pipe OD 76,1**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 160,0  | 16,0 | 110,0          | 3,0 | 4     | 14,0           | M12       | 130,0 | 1,60    |
|             | 10/3      | 185,0  | 18,0 | 122,0          | 3,0 | 4     | 18,0           | M16       | 145,0 | 2,70    |
|             | 16/3      | 185,0  | 18,0 | 122,0          | 3,0 | 4     | 18,0           | M16       | 145,0 | 2,70    |
|             | 25/3      | 185,0  | 22,0 | 122,0          | 3,0 | 8     | 18,0           | M16       | 145,0 | 3,20    |
|             | 40/3      | 185,0  | 22,0 | 122,0          | 3,0 | 8     | 18,0           | M16       | 145,0 | 3,20    |
| SABS1123    | 600/3     | 160,0  | 10,0 | 110,0          | 3,0 | 4     | 14,0           | M12       | 130,0 | 1,00    |
|             | 1000/3    | 185,0  | 12,0 | 122,0          | 3,0 | 4     | 18,0           | M16       | 145,0 | 1,80    |
|             | 1600/3    | 185,0  | 12,0 | 122,0          | 3,0 | 4     | 18,0           | M16       | 145,0 | 1,80    |
|             | 2500/3    | 185,0  | 22,0 | 122,0          | 3,0 | 8     | 18,0           | M16       | 145,0 | 3,20    |
|             | 4000/3    | 185,0  | 22,0 | 122,0          | 3,0 | 8     | 18,0           | M16       | 145,0 | 3,20    |
|             | BS 10 T/D | 165,1  | 7,9  | -              | -   | 4     | 17,5           | 15,9      | 127,0 | 1,65    |
|             | T/E       | 165,1  | 10,3 | -              | -   | 4     | 17,5           | 15,9      | 127,0 | 1,65    |
|             | T/F       | 184,1  | 15,9 | -              | -   | 8     | 17,5           | 15,9      | 146,0 | 2,68    |
| ANSI B 16,5 | 150lb     | 177,8  | 22,2 | 104,8          | 1,6 | 4     | 19,0           | 15,9      | 139,7 | 3,57    |

E. &amp; O.E.

**80 mm Nominal Bore. Pipe OD 88,9**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 190,0  | 18,0 | 128,0          | 3,0 | 4     | 18,0           | M16       | 150,0 | 2,60    |
|             | 10/3      | 200,0  | 20,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 3,30    |
|             | 16/3      | 200,0  | 20,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 3,30    |
|             | 25/3      | 200,0  | 24,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 4,00    |
|             | 40/3      | 200,0  | 24,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 4,00    |
| SABS1123    | 600/3     | 190,0  | 10,0 | 120,8          | 3,0 | 4     | 18,0           | M16       | 150,0 | 1,44    |
|             | 1000/3    | 200,0  | 12,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 1,98    |
|             | 1600/3    | 200,0  | 14,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 2,31    |
|             | 2500/3    | 200,0  | 22,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 3,67    |
|             | 4000/3    | 200,0  | 22,0 | 138,0          | 3,0 | 8     | 18,0           | M16       | 160,0 | 3,67    |
|             | BS 10 T/D | 184,1  | 9,5  | -              | -   | 4     | 17,5           | 15,9      | 146,0 | 1,96    |
|             | T/E       | 184,1  | 11,1 | -              | -   | 4     | 17,5           | 15,9      | 146,0 | 1,96    |
|             | T/F       | 203,2  | 15,9 | -              | -   | 8     | 17,5           | 15,9      | 165,1 | 3,17    |
| ANSI B 16,5 | 150lb     | 190,5  | 23,8 | 127,0          | 1,6 | 4     | 19,0           | 15,9      | 152,4 | 4,02    |

E. &amp; O.E.

**100 mm Nominal Bore. Pipe OD 114,3**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 210,0  | 18,0 | 148,0          | 3,0 | 4     | 18,0           | M16       | 170,0 | 2,90    |
|             | 10/3      | 220,0  | 20,0 | 158,0          | 3,0 | 8     | 18,0           | M16       | 180,0 | 3,60    |
|             | 16/3      | 220,0  | 20,0 | 158,0          | 3,0 | 8     | 18,0           | M16       | 180,0 | 3,60    |
|             | 25/3      | 235,0  | 26,0 | 162,0          | 3,0 | 8     | 22,0           | M20       | 190,0 | 5,70    |
|             | 40/3      | 235,0  | 26,0 | 162,0          | 3,0 | 8     | 22,0           | M20       | 190,0 | 5,70    |
| SABS1123    | 600/3     | 210,0  | 10,0 | 148,0          | 3,0 | 4     | 18,0           | M16       | 170,0 | 1,60    |
|             | 1000/3    | 220,0  | 12,0 | 158,0          | 3,0 | 8     | 18,0           | M16       | 180,0 | 2,16    |
|             | 1600/3    | 220,0  | 14,0 | 158,0          | 3,0 | 8     | 18,0           | M16       | 180,0 | 2,52    |
|             | 2500/3    | 235,0  | 25,0 | 162,0          | 3,0 | 8     | 22,0           | M20       | 190,0 | 5,48    |
|             | 4000/3    | 235,0  | 25,0 | 162,0          | 3,0 | 8     | 22,0           | M20       | 190,0 | 5,48    |
|             | BS 10 T/D | 215,9  | 9,5  | -              | -   | 4     | 17,5           | 15,9      | 177,8 | 2,25    |
|             | T/E       | 215,9  | 12,7 | -              | -   | 8     | 17,5           | 15,9      | 177,8 | 2,25    |
|             | T/F       | 228,6  | 19,0 | -              | -   | 8     | 17,5           | 15,9      | 190,5 | 4,46    |
| ANSI B 16,5 | 150lb     | 228,6  | 23,8 | 157,2          | 1,6 | 8     | 19,0           | 15,9      | 190,5 | 5,80    |

E. &amp; O.E.

**125 mm Nominal Bore. Pipe OD 139,7**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 240,0  | 20,0 | 178,0          | 3,0 | 8     | 18,0           | M16       | 200,0 | 3,90    |
|             | 10/3      | 250,0  | 22,0 | 188,0          | 3,0 | 8     | 18,0           | M16       | 210,0 | 5,00    |
|             | 16/3      | 250,0  | 22,0 | 188,0          | 3,0 | 8     | 18,0           | M16       | 210,0 | 5,00    |
|             | 25/3      | 270,0  | 28,0 | 188,0          | 3,0 | 8     | 26,0           | M24       | 220,0 | 7,70    |
|             | 40/3      | 270,0  | 28,0 | 188,0          | 3,0 | 8     | 26,0           | M24       | 220,0 | 7,70    |
| SABS1123    | 600/3     | 240,0  | 12,0 | 178,0          | 3,0 | 8     | 18,0           | M16       | 200,0 | 2,34    |
|             | 1000/3    | 250,0  | 14,0 | 188,0          | 3,0 | 8     | 18,0           | M16       | 210,0 | 3,18    |
|             | 1600/3    | 250,0  | 16,0 | 188,0          | 3,0 | 8     | 18,0           | M16       | 210,0 | 3,64    |
|             | 2500/3    | 270,0  | 28,0 | 188,0          | 3,0 | 8     | 26,0           | M24       | 220,0 | 7,70    |
|             | 4000/3    | 270,0  | 28,0 | 188,0          | 3,0 | 8     | 26,0           | M24       | 220,0 | 7,70    |
|             | BS 10 T/D | 254,0  | 12,7 | -              | -   | 8     | 17,5           | 15,9      | 209,6 | 3,48    |
|             | T/E       | 254,0  | 14,3 | -              | -   | 8     | 17,5           | 15,9      | 209,6 | 3,84    |
|             | T/F       | 279,4  | 22,2 | -              | -   | 8     | 22,2           | 19,0      | 234,9 | 7,81    |
| ANSI B 16,5 | 150lb     | 254,0  | 23,8 | 185,7          | 1,6 | 8     | 22,2           | 19,0      | 215,9 | 6,25    |

E. &amp; O.E.

**150 mm Nominal Bore. Pipe OD 168,3 OR 165,1 (To be specified)**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 265,0  | 20,0 | 202,0          | 3,0 | 8     | 18,0           | M16       | 225,0 | 4,40    |
|             | 10/3      | 285,0  | 22,0 | 212,0          | 3,0 | 8     | 22,0           | M20       | 240,0 | 6,00    |
|             | 16/3      | 285,0  | 22,0 | 212,0          | 3,0 | 8     | 22,0           | M20       | 240,0 | 6,00    |
|             | 25/3      | 300,0  | 30,0 | 218,0          | 3,0 | 8     | 26,0           | M24       | 250,0 | 9,70    |
|             | 40/3      | 300,0  | 30,0 | 218,0          | 3,0 | 8     | 26,0           | M24       | 250,0 | 9,70    |
| SABS1123    | 600/3     | 265,0  | 12,0 | 202,0          | 3,0 | 8     | 18,0           | M16       | 225,0 | 2,64    |
|             | 1000/3    | 285,0  | 16,0 | 212,0          | 3,0 | 8     | 22,0           | M20       | 240,0 | 4,36    |
|             | 1600/3    | 285,0  | 18,0 | 212,0          | 3,0 | 8     | 22,0           | M20       | 240,0 | 4,90    |
|             | 2500/3    | 300,0  | 30,0 | 218,0          | 3,0 | 8     | 26,0           | M24       | 250,0 | 9,70    |
|             | 4000/3    | 300,0  | 30,0 | 218,0          | 3,0 | 8     | 26,0           | M24       | 250,0 | 9,70    |
|             | BS 10 T/D | 279,4  | 12,7 | -              | -   | 8     | 17,5           | 15,9      | 235,0 | 3,88    |
|             | T/E       | 279,4  | 17,5 | -              | -   | 8     | 22,2           | 19,0      | 235,0 | 5,36    |
|             | T/F       | 304,8  | 22,2 | -              | -   | 12    | 22,2           | 19,0      | 260,4 | 8,71    |
| ANSI B 16,5 | 150lb     | 279,4  | 25,4 | 215,9          | 1,6 | 8     | 22,2           | 19,0      | 241,3 | 8,04    |

E. &amp; O.E.

**200 mm Nominal Bore. Pipe OD 219,1**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 320,0  | 22,0 | 258,0          | 3,0 | 8     | 18,0           | M16       | 280,0 | 6,40    |
|             | 10/3      | 340,0  | 24,0 | 268,0          | 3,0 | 8     | 22,0           | M20       | 295,0 | 8,70    |
|             | 16/3      | 340,0  | 24,0 | 268,0          | 3,0 | 12    | 22,0           | M20       | 295,0 | 8,40    |
|             | 25/3      | 360,0  | 28,0 | 278,0          | 3,0 | 12    | 26,0           | M24       | 310,0 | 12,00   |
|             | 40/3      | 375,0  | 34,0 | 285,0          | 3,0 | 12    | 30,0           | M27       | 320,0 | 16,00   |
| SABS1123    | 600/3     | 320,0  | 14,0 | 258,0          | 3,0 | 8     | 18,0           | M16       | 280,0 | 6,21    |
|             | 1000/3    | 340,0  | 18,0 | 268,0          | 3,0 | 8     | 22,0           | M20       | 295,0 | 6,53    |
|             | 1600/3    | 340,0  | 22,0 | 268,0          | 3,0 | 12    | 22,0           | M20       | 295,0 | 7,70    |
|             | 2500/3    | 360,0  | 28,0 | 278,0          | 3,0 | 12    | 26,0           | M24       | 310,0 | 12,00   |
|             | 4000/3    | 375,0  | 32,0 | 285,0          | 3,0 | 12    | 26,0           | M24       | 320,0 | 15,06   |
|             | BS 10 T/D | 336,6  | 12,7 | -              | -   | 8     | 17,5           | 15,9      | 292,1 | 4,91    |
|             | T/E       | 336,6  | 19,0 | -              | -   | 12    | 22,2           | 19,0      | 292,1 | 7,59    |
|             | T/F       | 368,3  | 25,4 | -              | -   | 12    | 22,2           | 19,0      | 323,9 | 13,39   |
| ANSI B 16,5 | 150lb     | 342,9  | 28,6 | 269,9          | 1,6 | 8     | 22,2           | 19,0      | 298,4 | 12,05   |

E. &amp; O.E.

**250 mm Nominal Bore. Pipe OD 273**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 375,0  | 24,0 | 312,0          | 3,0 | 12    | 18,0           | M16       | 335,0 | 8,50    |
|             | 10/3      | 395,0  | 26,0 | 320,0          | 3,0 | 12    | 22,0           | M20       | 350,0 | 11,00   |
|             | 16/3      | 405,0  | 26,0 | 320,0          | 3,0 | 12    | 26,0           | M24       | 355,0 | 12,00   |
|             | 25/3      | 425,0  | 32,0 | 335,0          | 3,0 | 12    | 30,0           | M27       | 370,0 | 17,50   |
|             | 40/3      | 450,0  | 42,0 | 345,0          | 3,0 | 12    | 33,0           | M30       | 385,0 | 28,50   |
| SABS1123    | 600/3     | 375,0  | 16,0 | 312,0          | 3,0 | 12    | 18,0           | M16       | 335,0 | 5,67    |
|             | 1000/3    | 395,0  | 20,0 | 320,0          | 3,0 | 12    | 22,0           | M20       | 350,0 | 8,46    |
|             | 1600/3    | 405,0  | 25,0 | 320,0          | 3,0 | 12    | 26,0           | M24       | 355,0 | 11,54   |
|             | 2500/3    | 425,0  | 30,0 | 335,0          | 3,0 | 12    | 26,0           | M24       | 370,0 | 16,41   |
|             | 4000/3    | 450,0  | 38,0 | 345,0          | 3,0 | 12    | 33,0           | M30       | 385,0 | 25,79   |
|             | BS 10 T/D | 406,4  | 15,9 | -              | -   | 8     | 19,0           | 19,0      | 355,6 | 8,70    |
|             | T/E       | 406,4  | 22,2 | -              | -   | 12    | 19,0           | 19,0      | 355,6 | 12,05   |
|             | T/F       | 431,8  | 28,6 | -              | -   | 12    | 22,2           | 22,2      | 381,0 | 19,20   |
| ANSI B 16,5 | 150lb     | 406,4  | 30,2 | 323,8          | 1,6 | 12    | 22,2           | 22,2      | 361,9 | 16,52   |

E. &amp; O.E.

**300 mm Nominal Bore. Pipe OD 323,9**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 440,0  | 24,0 | 365,0          | 4,0 | 12    | 22,0           | M20       | 395,0 | 11,00   |
|             | 10/3      | 445,0  | 26,0 | 370,0          | 4,0 | 12    | 22,0           | M20       | 400,0 | 12,50   |
|             | 16/3      | 460,0  | 28,0 | 378,0          | 4,0 | 12    | 26,0           | M24       | 410,0 | 15,50   |
|             | 25/3      | 485,0  | 38,0 | 395,0          | 4,0 | 16    | 30,0           | M27       | 430,0 | 25,50   |
|             | 40/3      | 515,0  | 50,0 | 410,0          | 4,0 | 16    | 33,0           | M30       | 450,0 | 42,00   |
| SABS1123    | 600/3     | 440,0  | 20,0 | 365,0          | 4,0 | 12    | 22,0           | M20       | 395,0 | 9,17    |
|             | 1000/3    | 445,0  | 22,0 | 370,0          | 4,0 | 12    | 22,0           | M20       | 400,0 | 10,58   |
|             | 1600/3    | 460,0  | 28,0 | 378,0          | 4,0 | 12    | 26,0           | M24       | 710,0 | 15,5    |
|             | 2500/3    | 485,0  | 32,0 | 395,0          | 4,0 | 16    | 26,0           | M24       | 430,0 | 21,47   |
|             | 4000/3    | 515,0  | 40,0 | 410,0          | 4,0 | 16    | 33,0           | M30       | 450,0 | 33,60   |
|             | BS 10 T/D | 457,2  | 19,0 | -              | -   | 12    | 22,2           | 19,0      | 406,4 | 12,05   |
|             | T/E       | 457,2  | 25,4 | -              | -   | 12    | 25,4           | 22,2      | 406,4 | 16,07   |
|             | T/F       | 489,0  | 31,8 | -              | -   | 16    | 25,4           | 22,2      | 438,2 | 25,45   |
| ANSI B 16,5 | 150lb     | 482,6  | 31,7 | 381,0          | 1,6 | 12    | 25,4           | 22,2      | 431,8 | 26,34   |

E. &amp; O.E.

**350 mm Nominal Bore. Pipe OD 335,6**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 490,0  | 26,0 | 415,0          | 4,0 | 12    | 22,0           | M20       | 445,0 | 15,50   |
|             | 10/3      | 505,0  | 28,0 | 430,0          | 4,0 | 16    | 22,0           | M20       | 460,0 | 19,50   |
|             | 16/3      | 520,0  | 32,0 | 438,0          | 4,0 | 16    | 26,0           | M24       | 470,0 | 24,50   |
|             | 25/3      | 555,0  | 42,0 | 450,0          | 4,0 | 16    | 33,0           | M30       | 490,0 | 40,50   |
|             | 40/3      | 580,0  | 56,0 | 465,0          | 4,0 | 16    | 36,0           | M33       | 510,0 | 63,00   |
| SABS1123    | 600/3     | 490,0  | 22,0 | 415,0          | 4,0 | 12    | 22,0           | M20       | 445,0 | 13,12   |
|             | 1000/3    | 505,0  | 25,0 | 430,0          | 4,0 | 16    | 22,0           | M20       | 460,0 | 17,41   |
|             | 1600/3    | 520,0  | 30,0 | 438,0          | 4,0 | 16    | 26,0           | M24       | 470,0 | 22,97   |
|             | 2500/3    | 555,0  | 35,0 | 450,0          | 4,0 | 16    | 33,0           | M30       | 490,0 | 33,75   |
|             | 4000/3    | 580,0  | 45,0 | 465,0          | 4,0 | 16    | 33,0           | M30       | 510,0 | 50,62   |
|             | BS 10 T/D | 527,1  | 22,2 | -              | -   | 12    | 25,4           | 22,2      | 469,9 | 18,75   |
|             | T/E       | 527,1  | 28,6 | -              | -   | 12    | 25,4           | 22,2      | 469,9 | 25,89   |
|             | T/F       | 552,5  | 34,9 | -              | -   | 16    | 28,6           | 25,4      | 495,3 | 36,16   |
| ANSI B 16,5 | 150lb     | 533,4  | 34,9 | 412,8          | 1,6 | 12    | 28,6           | 25,4      | 476,2 | 35,71   |

E. &amp; O.E.



**400 mm Nominal Bore. Pipe OD 406,4**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 540,0  | 28,0 | 465,0          | 4,0 | 16    | 22,0           | M20       | 495,0 | 19,00   |
|             | 10/3      | 565,0  | 32,0 | 482,0          | 4,0 | 16    | 26,0           | M24       | 515,0 | 26,50   |
|             | 16/3      | 580,0  | 36,0 | 490,0          | 4,0 | 16    | 30,0           | M27       | 525,0 | 33,00   |
|             | 25/3      | 620,0  | 46,0 | 505,0          | 4,0 | 16    | 36,0           | M33       | 550,0 | 54,00   |
|             | 40/3      | 660,0  | 64,0 | 535,0          | 4,0 | 16    | 39,0           | M36       | 585,0 | 94,00   |
| SABS1123    | 600/3     | 540,0  | 22,0 | 465,0          | 4,0 | 16    | 22,0           | M20       | 495,0 | 14,92   |
|             | 1000/3    | 565,0  | 25,0 | 482,0          | 4,0 | 16    | 26,0           | M24       | 515,0 | 20,70   |
|             | 1600/3    | 580,0  | 35,0 | 490,0          | 4,0 | 16    | 26,0           | M24       | 525,0 | 32,08   |
|             | 2500/3    | 620,0  | 40,0 | 505,0          | 4,0 | 16    | 33,0           | M30       | 550,0 | 46,96   |
|             | 4000/3    | 660,0  | 50,0 | 535,0          | 4,0 | 16    | 39,0           | M36       | 585,0 | 73,44   |
|             | BS 10 T/D | 577,9  | 22,2 | -              | -   | 12    | 25,4           | 22,2      | 520,7 | 22,32   |
|             | T/E       | 577,9  | 31,8 | -              | -   | 12    | 25,4           | 22,2      | 520,7 | 32,59   |
|             | T/F       | 609,6  | 41,4 | -              | -   | 20    | 28,6           | 25,4      | 552,5 | 51,34   |
| ANSI B 16,5 | 150lb     | 596,9  | 36,5 | 470,0          | 1,6 | 16    | 28,6           | 25,4      | 539,7 | 45,09   |

E. &amp; O.E.

**450 mm Nominal Bore. Pipe OD 457,2**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 595,0  | 30,0 | 520,0          | 4,0 | 16    | 22,0           | M20       | 550,0 | 24,50   |
|             | 10/3      | 615,0  | 36,0 | 532,0          | 4,0 | 20    | 26,0           | M24       | 565,0 | 36,00   |
|             | 16/3      | 640,0  | 40,0 | 550,0          | 4,0 | 20    | 30,0           | M27       | 585,0 | 48,00   |
|             | 25/3      | 670,0  | 52,0 | 555,0          | 4,0 | 20    | 36,0           | M33       | 600,0 | 75,30   |
|             | 40/3      | 685,0  | 68,0 | 560,0          | 4,0 | 20    | 39,0           | M36       | 610,0 | 107,00  |
| SABS1123    | 600/3     | 595,0  | 25,0 | 520,0          | 4,0 | 16    | 22,0           | M20       | 550,0 | 20,42   |
|             | 1000/3    | 615,0  | 30,0 | 532,0          | 4,0 | 20    | 26,0           | M24       | 565,0 | 30,00   |
|             | 1600/3    | 640,0  | 40,0 | 550,0          | 4,0 | 20    | 26,0           | M24       | 585,0 | 48,00   |
|             | 2500/3    | 670,0  | 45,0 | 555,0          | 4,0 | 20    | 33,0           | M30       | 600,0 | 65,16   |
|             | 4000/3    | 685,0  | 60,0 | 575,0          | 4,0 | 20    | 39,0           | M36       | 610,0 | 100,31  |
|             | BS 10 T/D | 641,4  | 25,4 | -              | -   | 12    | 25,4           | 22,2      | 584,2 | 30,80   |
|             | T/E       | 641,4  | 34,9 | -              | -   | 16    | 25,4           | 22,2      | 584,2 | 42,86   |
|             | T/F       | 673,0  | 44,5 | -              | -   | 20    | 31,8           | 28,6      | 609,6 | 64,73   |
| ANSI B 16,5 | 150lb     | 635,0  | 39,7 | 533,4          | 1,6 | 16    | 31,7           | 28,6      | 577,8 | 50,00   |

E. &amp; O.E.

**500 mm Nominal Bore. Pipe OD 508**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 645,0  | 30,0 | 570,0          | 4,0 | 20    | 22,0           | M20       | 600,0 | 25,50   |
|             | 10/3      | 670,0  | 38,0 | 585,0          | 4,0 | 20    | 26,0           | M24       | 620,0 | 39,00   |
|             | 16/3      | 715,0  | 44,0 | 610,0          | 4,0 | 20    | 33,0           | M30       | 650,0 | 60,00   |
|             | 25/3      | 730,0  | 58,0 | 615,0          | 4,0 | 20    | 36,0           | M33       | 660,0 | 86,00   |
|             | 40/3      | 755,0  | 72,0 | 615,0          | 4,0 | 20    | 42,0           | M39       | 670,0 | 120,00  |
| SABS1123    | 600/3     | 645,0  | 25,0 | 570,0          | 4,0 | 20    | 22,0           | M20       | 600,0 | 21,25   |
|             | 1000/3    | 670,0  | 32,0 | 585,0          | 4,0 | 20    | 26,0           | M24       | 620,0 | 32,84   |
|             | 1600/3    | 715,0  | 40,0 | 610,0          | 4,0 | 20    | 33,0           | M30       | 650,0 | 54,55   |
|             | 2500/3    | 730,0  | 50,0 | 615,0          | 4,0 | 20    | 33,0           | M30       | 660,0 | 74,14   |
|             | 4000/3    | 755,0  | 70,0 | 615,0          | 4,0 | 20    | 39,0           | M36       | 670,0 | 116,67  |
|             | BS 10 T/D | 704,0  | 28,6 | -              | -   | 16    | 25,4           | 22,2      | 641,4 | 41,07   |
|             | T/E       | 704,9  | 38,1 | -              | -   | 16    | 25,4           | 22,2      | 641,4 | 55,80   |
|             | T/F       | 736,6  | 50,8 | -              | -   | 24    | 31,7           | 28,6      | 673,1 | 87,05   |
| ANSI B 16,5 | 150lb     | 698,5  | 42,9 | 584,2          | 1,6 | 20    | 31,7           | 28,6      | 635,0 | 62,94   |

E. &amp; O.E.

**600 mm Nominal Bore. Pipe OD 609,6**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 755,5  | 32,0 | 670,0          | 5,0 | 20    | 26,0           | M24       | 705,0 | 33,00   |
|             | 10/3      | 780,0  | 42,0 | 685,0          | 5,0 | 20    | 30,0           | M27       | 725,0 | 53,00   |
|             | 16/3      | 840,0  | 52,0 | 725,0          | 5,0 | 20    | 36,0           | M33       | 770,0 | 94,00   |
|             | 25/3      | 845,0  | 66,0 | 720,0          | 5,0 | 20    | 39,0           | M36       | 770,0 | 120,00  |
|             | 40/3      | 890,0  | 84,0 | 735,0          | 5,0 | 20    | 48,0           | M45       | 795,0 | 193,00  |
| SABS1123    | 600/3     | 755,5  | 30,0 | 670,0          | 5,0 | 20    | 26,0           | M24       | 705,0 | 30,94   |
|             | 1000/3    | 780,0  | 38,0 | 685,0          | 5,0 | 20    | 26,0           | M24       | 725,0 | 47,95   |
|             | 1600/3    | 840,0  | 50,0 | 725,0          | 5,0 | 20    | 33,0           | M30       | 770,0 | 90,38   |
|             | 2500/3    | 845,0  | 60,0 | 720,0          | 5,0 | 20    | 39,0           | M36       | 770,0 | 109,09  |
|             | 4000/3    | -      | -    | -              | -   | -     | -              | -         | -     | -       |
|             | BS 10 T/D | 825,5  | 31,8 | -              | -   | 16    | 28,6           | 25,4      | 755,7 | 60,27   |
|             | T/E       | 825,5  | 47,6 | -              | -   | 16    | 31,8           | 28,6      | 755,7 | 89,29   |
|             | T/F       | 850,9  | 57,2 | -              | -   | 24    | 35,0           | 31,8      | 781,1 | 122,76  |
| ANSI B 16,5 | 150lb     | 812,8  | 47,6 | 692,2          | 1,6 | 20    | 34,9           | 31,7      | 749,3 | 87,94   |

E. &amp; O.E.

**700 mm Nominal Bore. Pipe OD 711,2**

| Table       |           | Flange |      | Raised Face    |     | Holes |                | Bolt size | PCD   | Mass kg |
|-------------|-----------|--------|------|----------------|-----|-------|----------------|-----------|-------|---------|
|             |           | D      | b    | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |       |         |
| BS4504      | 6/3       | 860,0  | 34,0 | 775,0          | 5,0 | 24    | 26,0           | M24       | 810,0 | 42,00   |
|             | 10/3      | 895,0  | 46,0 | 800,0          | 5,0 | 24    | 30,0           | M27       | 840,0 | 73,00   |
|             | 16/3      | 910,0  | 58,0 | 795,0          | 5,0 | 24    | 36,0           | M33       | 840,0 | 99,00   |
|             | 25/3      | 960,0  | 74,0 | 820,0          | 5,0 | 24    | 42,0           | M39       | 875,0 | 469,00  |
|             | 40/3      | 995,0  | 96,0 | 840,0          | 5,0 | 24    | 48,0           | M45       | 900,0 | 285,00  |
| SABS1123    | 600/3     | 860,0  | 35,0 | 775,0          | 5,0 | 24    | 26,0           | M24       | 810,0 | 43,25   |
|             | 1000/3    | 895,0  | 45,0 | 800,0          | 5,0 | 24    | 26,0           | M24       | 840,0 | 71,41   |
|             | 1600/3    | 910,0  | 55,0 | 795,0          | 5,0 | 24    | 33,0           | M30       | 840,0 | 93,88   |
|             | 2500/3    | -      | -    | -              | -   | -     | -              | -         | -     | -       |
|             | 4000/3    | -      | -    | -              | -   | -     | -              | -         | -     | -       |
|             | BS 10 T/D | 908,1  | 34,9 | -              | -   | 20    | 28,6           | 25,4      | 844,6 | -       |
|             | T/E       | 908,1  | 50,8 | -              | -   | 20    | 31,8           | 28,6      | 844,6 | -       |
|             | T/F       | -      | -    | -              | -   | -     | -              | -         | -     | -       |
| ANSI B 16,5 | 150lb     | -      | -    | -              | -   | -     | -              | -         | -     | -       |

E. &amp; O.E.

**800 mm Nominal Bore. Pipe OD 812,8**

| Table       |           | Flange |       | Raised Face    |     | Holes |                | Bolt size | PCD    | Mass kg |
|-------------|-----------|--------|-------|----------------|-----|-------|----------------|-----------|--------|---------|
|             |           | D      | b     | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |        |         |
| BS4504      | 6/3       | 975,0  | 38,0  | 880,0          | 5,0 | 24    | 30,0           | M27       | 920,0  | 58,00   |
|             | 10/3      | 1015,0 | 52,0  | 905,0          | 5,0 | 24    | 33,0           | M30       | 950,0  | 105,00  |
|             | 16/3      | 1025,0 | 64,0  | 900,0          | 5,0 | 24    | 39,0           | M36       | 950,0  | 135,00  |
|             | 25/3      | 1085,0 | 82,0  | 930,0          | 5,0 | 24    | 48,0           | M45       | 990,0  | 260,00  |
|             | 40/3      | 1140,0 | 108,0 | 960,0          | 5,0 | 24    | 45,0           | M52       | 1030,0 | 424,00  |
| SABS1123    | 600/3     | 975,0  | 38,0  | 880,0          | 5,0 | 24    | 26,0           | M24       | 920,0  | 58,00   |
|             | 1000/3    | 1015,0 | 50,0  | 905,0          | 5,0 | 24    | 33,0           | M30       | 950,0  | 100,96  |
|             | 1600/3    | 1025,0 | 65,0  | 900,0          | 5,0 | 24    | 39,0           | M36       | 950,0  | 137,11  |
|             | 2500/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | 4000/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | BS 10 T/D | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | T/E       | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | T/F       | -      | -     | -              | -   | -     | -              | -         | -      | -       |
| ANSI B 16,5 | 150lb     | -      | -     | -              | -   | -     | -              | -         | -      | -       |

E. &amp; O.E.

**900 mm Nominal Bore. Pipe OD 914,4**

| Table       |           | Flange |       | Raised Face    |     | Holes |                | Bolt size | PCD    | Mass kg |
|-------------|-----------|--------|-------|----------------|-----|-------|----------------|-----------|--------|---------|
|             |           | D      | b     | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |        |         |
| BS4504      | 6/3       | 1075,0 | 42,0  | 980,0          | 5,0 | 24    | 30,0           | M27       | 1020,0 | 72,00   |
|             | 10/3      | 1115,0 | 56,0  | 1005,0         | 5,0 | 28    | 33,0           | M30       | 1050,0 | 125,00  |
|             | 16/3      | 1125,0 | 72,0  | 1000,0         | 5,0 | 28    | 39,0           | M36       | 1050,0 | 165,00  |
|             | 25/3      | 1185,0 | 90,0  | 1030,0         | 5,0 | 28    | 48,0           | M45       | 1090,0 | 314,00  |
|             | 40/3      | 1250,0 | 120,0 | 1070,0         | 5,0 | 28    | 56,0           | M52       | 1140,0 | 535,00  |
| SABS1123    | 600/3     | 1075,0 | 40,0  | 980,0          | 5,0 | 24    | 26,0           | M24       | 1020,0 | 68,57   |
|             | 1000/3    | 1115,0 | 55,0  | 1005,0         | 5,0 | 28    | 33,0           | M30       | 1050,0 | 122,76  |
|             | 1600/3    | 1125,0 | 70,0  | 1000,0         | 5,0 | 28    | 39,0           | M36       | 1050,0 | 160,42  |
|             | 2500/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | 4000/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | BS 10 T/D | 1174,7 | 47,6  | -              | -   | 24    | 35,0           | 31,8      | 1092,2 | 156,25  |
|             | T/E       | 1174,7 | 63,5  | -              | -   | 24    | 35,0           | 31,8      | 1092,2 | 203,13  |
|             | T/F       | -      | -     | -              | -   | -     | -              | -         | -      | -       |
| ANSI B 16,5 | 150lb     | -      | -     | -              | -   | -     | -              | -         | -      | -       |

E. &amp; O.E.

**1000 mm Nominal Bore. Pipe OD 1016**

| Table       |           | Flange |       | Raised Face    |     | Holes |                | Bolt size | PCD    | Mass kg |
|-------------|-----------|--------|-------|----------------|-----|-------|----------------|-----------|--------|---------|
|             |           | D      | b     | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |        |         |
| BS4504      | 6/3       | 1175,0 | 46,0  | 1080,0         | 5,0 | 28    | 30,0           | M27       | 1120,0 | 86,00   |
|             | 10/3      | 1230,0 | 62,0  | 1110,0         | 5,0 | 28    | 36,0           | M33       | 1160,0 | 160,00  |
|             | 16/3      | 1255,0 | 78,0  | 1115,0         | 5,0 | 28    | 42,0           | M39       | 1170,0 | 230,00  |
|             | 25/3      | 1320,0 | 98,0  | 1140,0         | 5,0 | 28    | 56,0           | M52       | 1210,0 | 427,00  |
|             | 40/3      | 1360,0 | 132,0 | 1180,0         | 5,0 | 28    | 56,0           | M52       | 1250,0 | 662,00  |
| SABS1123    | 600/3     | 1175,0 | 45,0  | 1080,0         | 5,0 | 28    | 26,0           | M24       | 1120,0 | 84,13   |
|             | 1000/3    | 1230,0 | 60,0  | 1110,0         | 5,0 | 28    | 33,0           | M30       | 1160,0 | 154,84  |
|             | 1600/3    | 1255,0 | 75,0  | 1115,0         | 5,0 | 28    | 39,0           | M36       | 1170,0 | 221,15  |
|             | 2500/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | 4000/3    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | BS 10 T/D | 1257,3 | 50,8  | -              | -   | 24    | 35,0           | 31,8      | 1174,7 | 167,00  |
|             | T/E       | 1257,3 | 66,7  | -              | -   | 24    | 38,1           | 34,9      | 1174,7 | 214,00  |
|             | T/F       | -      | -     | -              | -   | -     | -              | -         | -      | -       |
| ANSI B 16,5 | 150lb     | -      | -     | -              | -   | -     | -              | -         | -      | -       |

E. &amp; O.E.

## 1200 mm Nominal Bore. Pipe OD 1220

| Table       |        | Flange |       | Raised Face    |     | Holes |                | Bolt size | PCD    | Mass kg |
|-------------|--------|--------|-------|----------------|-----|-------|----------------|-----------|--------|---------|
|             |        | D      | b     | d <sub>3</sub> | f   | No.   | d <sub>1</sub> |           |        |         |
| BS4504      | 6/3    | 1405,0 | 56,0  | 1295,0         | 5,0 | 32    | 33,0           | M30       | 1340,0 | 145,00  |
|             | 10/3   | 1455,0 | 74,0  | 1330,0         | 5,0 | 32    | 39,0           | M36       | 1380,0 | 255,00  |
|             | 16/3   | 1485,0 | 94,0  | 1330,0         | 5,0 | 32    | 48,0           | M45       | 1390,0 | 360,00  |
|             | 25/3   | 1530,0 | 116,0 | 1350,0         | 5,0 | 32    | 56,0           | M52       | 1420,0 | 607,00  |
|             | 40/3   | 1575,0 | 154,0 | 1380,0         | 5,0 | 32    | 62,0           | M56       | 1460,0 | 938,00  |
| SABS1123    | 600/3  | 1405,0 | 55,0  | 1295,0         | 5,0 | 32    | 33,0           | M30       | 1340,0 | 142,41  |
|             | 1000/3 | 1455,0 | 70,0  | 1330,0         | 5,0 | 32    | 39,0           | M36       | 1380,0 | 241,21  |
|             | 1600/3 | 1485,0 | 85,0  | 1330,0         | 5,0 | 32    | 45,0           | M42       | 1390,0 | 325,53  |
|             | 2500/3 | -      | -     | -              | -   | -     | -              | -         | -      | -       |
|             | 4000/3 | -      | -     | -              | -   | -     | -              | -         | -      | -       |
| BS 10 T/D   |        | 1492,2 | 60,3  | -              | -   | 32    | 35,0           | 31,8      | 1409,7 | 250,00  |
|             | T/E    | 1492,2 | 79,4  | -              | -   | 32    | 38,1           | 34,9      | 1409,7 | 321,42  |
|             | T/F    | -      | -     | -              | -   | -     | -              | -         | -      | -       |
| ANSI B 16,5 | 150lb  | -      | -     | -              | -   | -     | -              | -         | -      | -       |

E. & O.E.