

DIMENSIONAL DATA

BA and Fractional Washers to BS 3410

Bright Steel, Stainless and Brass

| Bolt size BA | Table 1 | | Table 2 | | Bolt size Ins | Table 3 | | Table 4 | | Table 5 | | Table 6 | |
|--------------|---------|-----------|---------|-----------|----------------|---------|---------------|---------|---------------|---------|---------------|---------|-----------|
| | O/D Ins | Small SWG | O/D Ins | Large SWG | | O/D Ins | Light SWG | O/D Ins | Heavy SWG | O/D Ins | Normal SWG | O/D Ins | Large SWG |
| 0 | 0.500 | 19 | 0.625 | 17 | $\frac{1}{8}$ | 21 | $\frac{1}{8}$ | 19 | $\frac{1}{8}$ | 21 | | | |
| 1 | 0.443 | 20 | 0.565 | 18 | $\frac{3}{16}$ | 21 | $\frac{1}{8}$ | 18 | $\frac{1}{8}$ | 21 | | | |
| 2 | 0.391 | 21 | 0.500 | 18 | $\frac{1}{4}$ | 21 | $\frac{1}{8}$ | 18 | $\frac{1}{8}$ | 21 | | | |
| 3 | 0.341 | 22 | 0.432 | 19 | $\frac{5}{16}$ | 20 | $\frac{1}{8}$ | 17 | $\frac{1}{8}$ | 19 | $\frac{1}{8}$ | | |
| 4 | 0.301 | 22 | 0.378 | 19 | $\frac{3}{8}$ | 19 | $\frac{1}{8}$ | 15 | $\frac{1}{8}$ | 18 | $\frac{1}{8}$ | | |
| 5 | 0.268 | 23 | 0.335 | 20 | $\frac{7}{16}$ | 18 | $\frac{1}{8}$ | 15 | $\frac{1}{8}$ | 18 | $\frac{1}{8}$ | | |
| 6 | 0.233 | 23 | 0.288 | 20 | $\frac{1}{2}$ | 18 | $\frac{1}{8}$ | 13 | $\frac{1}{8}$ | 17 | $\frac{1}{8}$ | | |
| 7 | 0.208 | 24 | 0.257 | 22 | $\frac{5}{8}$ | 17 | $\frac{1}{8}$ | 13 | $\frac{1}{8}$ | 17 | $\frac{1}{8}$ | | |
| 8 | 0.185 | 25 | 0.228 | 25 | $\frac{1}{2}$ | 17 | $\frac{1}{8}$ | 12 | $\frac{1}{8}$ | 17 | $\frac{1}{8}$ | | |
| 9 | | | 0.197 | 27 | $\frac{3}{4}$ | 15 | $\frac{1}{8}$ | 11 | $\frac{1}{8}$ | 15 | $\frac{1}{8}$ | | |
| 10 | | | 0.176 | 27 | $\frac{7}{8}$ | 15 | $\frac{1}{8}$ | 11 | $\frac{1}{8}$ | 15 | $\frac{1}{8}$ | | |
| 12 | | | 0.130 | 27 | $\frac{1}{2}$ | 15 | $\frac{1}{8}$ | 10 | $\frac{1}{8}$ | 15 | $\frac{1}{8}$ | | |
| 14 | | | 0.097 | 27 | $\frac{1}{2}$ | 10 | $\frac{1}{8}$ | 10 | $\frac{1}{8}$ | 10 | $\frac{1}{8}$ | | |

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UNION TRADITIONAL WASHERS TO BS 3410

Bright Steel, Stainless and Brass

| Bolt size BA | Table 1 | | Table 2 | | Bolt size Ins | Table 3 | |
|--------------|---------|-----|---------|-----|---------------|---------|-----|
| | Small | SWG | Large | SWG | | Light | SWG |
| | O/D Ins | | O/D Ins | | | | |
| 0 | 0.500 | 19 | 0.625 | 17 | 1/2 | 21 | |
| 1 | 0.443 | 20 | 0.565 | 18 | 3/8 | 21 | |
| 2 | 0.391 | 21 | 0.500 | 18 | 1/2 | 21 | |
| 3 | 0.341 | 22 | 0.432 | 19 | 5/8 | 20 | |
| 4 | 0.301 | 22 | 0.378 | 19 | 3/4 | 19 | |
| 5 | 0.268 | 23 | 0.335 | 20 | 7/8 | 18 | |
| 6 | 0.233 | 23 | 0.288 | 20 | 1 1/8 | 18 | |
| 7 | 0.208 | 24 | 0.257 | 22 | 1 1/4 | 17 | |
| 8 | 0.185 | 25 | 0.228 | 25 | 1 3/8 | 17 | |
| 9 | | | 0.197 | 27 | 1 1/2 | 15 | |
| 10 | | | 0.176 | 27 | 1 3/4 | 15 | |
| 12 | | | 0.130 | 27 | 2 | 15 | |
| 14 | | | 0.097 | 27 | 2 1/8 | 15 | |

Table 4

| Heavy O/D Ins | SWG |
|------------------|-----|
| 19 | 19 |
| 18 | 18 |
| 18 | 18 |
| 17 | 17 |
| 15 | 15 |
| 15 | 15 |
| 15 | 15 |
| 13 | 13 |
| 13 | 13 |
| 13 | 13 |
| 12 | 12 |
| 11 | 11 |
| 10 | 10 |
| 9 | 9 |
| 8 | 8 |
| 7 | 7 |
| 7 | 7 |
| 6 | 6 |
| 6 | 6 |
| 5 | 5 |
| 5 | 5 |
| 3 | 3 |
| 3 | 3 |

| Light O/D Ins | SWG |
|------------------|-----|
| 21 | 21 |
| 21 | 21 |
| 21 | 21 |
| 19 | 19 |
| 18 | 18 |
| 18 | 18 |
| 18 | 18 |
| 17 | 17 |
| 17 | 17 |
| 17 | 17 |
| 15 | 15 |
| 15 | 15 |
| 15 | 15 |
| 13 | 13 |
| 13 | 13 |
| 12 | 12 |
| 11 | 11 |
| 10 | 10 |
| 10 | 10 |
| 10 | 10 |
| 10 | 10 |
| 10 | 10 |
| 4 | 4 |
| 4 | 4 |

| Heavy O/D Ins | SWG |
|------------------|-----|
| 18 | 18 |
| 18 | 18 |
| 17 | 17 |
| 17 | 17 |
| 15 | 15 |
| 15 | 15 |
| 15 | 15 |
| 13 | 13 |
| 13 | 13 |
| 13 | 13 |
| 12 | 12 |
| 12 | 12 |
| 11 | 11 |
| 11 | 11 |
| 10 | 10 |
| 9 | 9 |
| 8 | 8 |
| 7 | 7 |
| 7 | 7 |
| 6 | 6 |
| 6 | 6 |
| 5 | 5 |
| 5 | 5 |
| 5 | 5 |
| 4 | 4 |
| 4 | 4 |

Table 5

| Normal O/D ins | SWG |
|-------------------|-----|
| 16 | 16 |
| 15 | 15 |
| 14 | 14 |
| 13 | 13 |
| 12 | 12 |
| 10 | 10 |
| 9 | 9 |
| 8 | 8 |
| 6 | 6 |

Table 6

| Large O/D ins | SWG |
|------------------|-----|
| 16 | 16 |
| 14 | 14 |
| 13 | 13 |
| 12 | 12 |
| 11 | 11 |
| 10 | 10 |
| 9 | 9 |
| 8 | 8 |
| 6 | 6 |