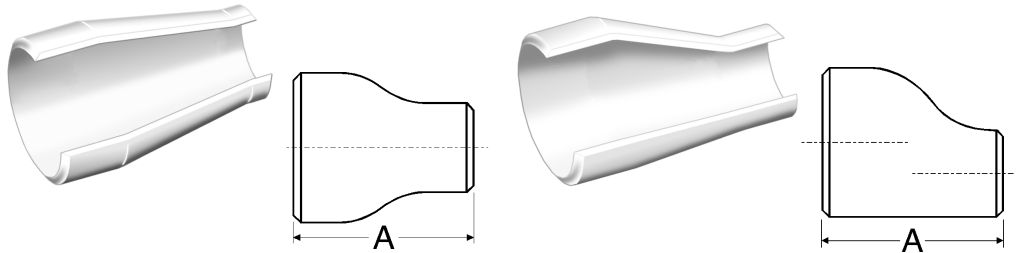


Concentric and Eccentric Reducers - ANSI B16.9









Dimensions (based on ASME/ANSI B16.9) and example weights for reducers

| Nominal Pipe Size | Large End | | Small End | | End to End | | Weight |
|---|-------------|-----|-------------|-----|------------|-----|----------------------|
| | OD at Bevel | | OD at Bevel | | Dimension | | 40S/STD ¹ |
| | in | mm | in | mm | in | mm | kg/piece |
| $\frac{3}{4} \Rightarrow \frac{1}{2}$ | 1.05 | 27 | 0.84 | 21 | 1.50 | 38 | 0.06 |
| $\frac{3}{4} \Rightarrow \frac{3}{8}$ | 1.05 | 27 | 0.68 | 17 | 1.50 | 38 | - |
| $1 \Rightarrow \frac{3}{4}$ | 1.32 | 33 | 1.05 | 27 | 2.00 | 51 | 0.12 |
| $1 \Rightarrow \frac{1}{2}$ | 1.32 | 32 | 0.84 | 21 | 2.00 | 51 | 0.11 |
| $1\frac{1}{4} \Rightarrow 1$ | 1.66 | 42 | 1.32 | 33 | 2.00 | 51 | 0.16 |
| $1\frac{1}{4} \Rightarrow \frac{3}{4}$ | 1.66 | 42 | 1.05 | 27 | 2.00 | 51 | 0.14 |
| $1\frac{1}{4} \Rightarrow \frac{1}{2}$ | 1.66 | 42 | 0.84 | 21 | 2.00 | 51 | 0.13 |
| $1\frac{1}{2} \Rightarrow 1\frac{1}{4}$ | 1.90 | 48 | 1.66 | 42 | 2.50 | 64 | 0.24 |
| $1\frac{1}{2} \Rightarrow 1$ | 1.90 | 48 | 1.32 | 33 | 2.50 | 64 | 0.22 |
| $1\frac{1}{2} \Rightarrow \frac{3}{4}$ | 1.90 | 48 | 1.05 | 27 | 2.50 | 64 | 0.20 |
| $1\frac{1}{2} \Rightarrow \frac{1}{2}$ | 1.90 | 48 | 0.84 | 21 | 2.50 | 64 | 0.18 |
| $2 \Rightarrow 1\frac{1}{2}$ | 2.38 | 60 | 1.90 | 48 | 3.00 | 76 | 0.37 |
| $2 \Rightarrow 1\frac{1}{4}$ | 2.38 | 60 | 1.66 | 42 | 3.00 | 76 | 0.35 |
| $2 \Rightarrow 1$ | 2.38 | 60 | 1.32 | 33 | 3.00 | 76 | 0.32 |
| $2 \Rightarrow \frac{3}{4}$ | 2.38 | 60 | 1.05 | 27 | 3.00 | 76 | 0.30 |
| $2\frac{1}{2} \Rightarrow 2$ | 2.88 | 73 | 2.38 | 60 | 3.50 | 89 | 0.72 |
| $2\frac{1}{2} \Rightarrow 1\frac{1}{2}$ | 2.88 | 73 | 1.90 | 48 | 3.50 | 89 | 0.66 |
| $2\frac{1}{2} \Rightarrow 1\frac{1}{4}$ | 2.88 | 73 | 1.66 | 42 | 3.50 | 89 | 0.63 |
| $2\frac{1}{2} \Rightarrow 1$ | 2.88 | 73 | 1.32 | 33 | 3.50 | 89 | - |
| $3 \Rightarrow 2\frac{1}{2}$ | 3.50 | 89 | 2.88 | 73 | 3.50 | 89 | 0.93 |
| $3 \Rightarrow 2$ | 3.50 | 89 | 2.38 | 60 | 3.50 | 89 | 0.85 |
| $3 \Rightarrow 1\frac{1}{2}$ | 3.50 | 89 | 1.90 | 48 | 3.50 | 89 | 0.78 |
| $3 \Rightarrow 1\frac{1}{4}$ | 3.50 | 89 | 1.66 | 42 | 3.50 | 89 | 0.75 |
| $3\frac{1}{2} \Rightarrow 3$ | 4.00 | 102 | 3.50 | 89 | 4.00 | 102 | - |
| $3\frac{1}{2} \Rightarrow 2\frac{1}{2}$ | 4.00 | 102 | 2.88 | 73 | 4.00 | 102 | - |
| $3\frac{1}{2} \Rightarrow 2$ | 4.00 | 102 | 2.38 | 60 | 4.00 | 102 | - |
| $3\frac{1}{2} \Rightarrow 1\frac{1}{2}$ | 4.00 | 102 | 1.90 | 48 | 4.00 | 102 | - |
| Reducers $3\frac{1}{2} \Rightarrow 1\frac{1}{4}$, and 4, 5, 6, & $8 \Rightarrow 3\frac{1}{2}$ are also available | | | | | | | |
| $4 \Rightarrow 3\frac{1}{2}$ | 4.50 | 114 | 4.00 | 102 | 4.00 | 102 | - |
| $4 \Rightarrow 3$ | 4.50 | 114 | 3.50 | 89 | 4.00 | 102 | 1.45 |
| $4 \Rightarrow 2\frac{1}{2}$ | 4.50 | 114 | 2.88 | 73 | 4.00 | 102 | 1.37 |
| $4 \Rightarrow 2$ | 4.50 | 114 | 2.38 | 60 | 4.00 | 102 | 1.27 |
| $4 \Rightarrow 1\frac{1}{2}$ | 4.50 | 114 | 1.90 | 48 | 4.00 | 102 | 1.18 |
| $5 \Rightarrow 4$ | 5.56 | 141 | 4.50 | 114 | 5.00 | 127 | 2.50 |
| $5 \Rightarrow 3$ | 5.56 | 141 | 3.50 | 89 | 5.00 | 127 | 2.27 |

Concentric and Eccentric Reducers - ANSI B16.9

Dimensions (based on ASME/ANSI B16.9) and example weights for reducers (Continued)

| Nominal Pipe Size | Large End | | Small End | | End to End | | Weight |
|----------------------|---|---|---|---|---|---|----------------------|
| | OD at Bevel | | OD at Bevel | | Dimension | | 40S/STD ¹ |
| |  |  |  |  |  |  | |
| | in | mm | in | mm | in | mm | kg/piece |
| 32↔26 | 32.00 | 813 | 26.00 | 660 | 24.00 | 610 | - |
| 32↔24 | 32.00 | 813 | 24.00 | 610 | 24.00 | 610 | - |
| 34↔32 | 34.00 | 864 | 32.00 | 813 | 24.00 | 610 | - |
| 34↔30 | 34.00 | 864 | 30.00 | 762 | 24.00 | 610 | - |
| 34↔26 | 34.00 | 864 | 26.00 | 660 | 24.00 | 610 | - |
| 34↔24 | 34.00 | 864 | 24.00 | 610 | 24.00 | 610 | - |
| 36↔34 | 36.00 | 914 | 34.00 | 864 | 24.00 | 610 | - |
| 36↔32 | 36.00 | 914 | 32.00 | 813 | 24.00 | 610 | - |
| 36↔30 | 36.00 | 914 | 30.00 | 762 | 24.00 | 610 | - |
| 36↔26 | 36.00 | 914 | 26.00 | 660 | 24.00 | 610 | - |
| 36↔24 | 36.00 | 914 | 24.00 | 610 | 24.00 | 610 | - |
| 38↔36 | 38.00 | 965 | 36.00 | 914 | 24.00 | 610 | - |
| 38↔34 | 38.00 | 965 | 34.00 | 864 | 24.00 | 610 | - |
| 38↔32 | 38.00 | 965 | 32.00 | 813 | 24.00 | 610 | - |
| 38↔30 | 38.00 | 965 | 30.00 | 762 | 24.00 | 610 | - |
| 38↔28 | 38.00 | 965 | 28.00 | 711 | 24.00 | 610 | - |
| 38↔26 | 38.00 | 965 | 26.00 | 660 | 24.00 | 610 | - |
| 40↔38 | 40.00 | 1016 | 38.00 | 965 | 24.00 | 610 | - |
| 40↔36 | 40.00 | 1016 | 36.00 | 914 | 24.00 | 610 | - |
| 40↔34 | 40.00 | 1016 | 34.00 | 864 | 24.00 | 610 | - |
| 40↔32 | 40.00 | 1016 | 32.00 | 813 | 24.00 | 610 | - |
| 40↔30 | 40.00 | 1016 | 30.00 | 762 | 24.00 | 610 | - |
| 42↔40 | 42.00 | 1067 | 40.00 | 1016 | 24.00 | 610 | - |
| 42↔38 | 42.00 | 1067 | 38.00 | 965 | 24.00 | 610 | - |
| 42↔36 | 42.00 | 1067 | 36.00 | 914 | 24.00 | 610 | - |
| 42↔34 | 42.00 | 1067 | 34.00 | 864 | 24.00 | 610 | - |
| 42↔32 | 42.00 | 1067 | 32.00 | 813 | 24.00 | 610 | - |
| 42↔30 | 42.00 | 1067 | 30.00 | 762 | 24.00 | 610 | - |
| 44↔42 | 44.00 | 1118 | 42.00 | 1067 | 24.00 | 610 | - |
| 44↔40 | 44.00 | 1118 | 40.00 | 1016 | 24.00 | 610 | - |
| 44↔38 | 44.00 | 1118 | 38.00 | 965 | 24.00 | 610 | - |
| 44↔36 | 44.00 | 1118 | 36.00 | 914 | 24.00 | 610 | - |
| 46↔44 | 46.00 | 1168 | 44.00 | 1118 | 28.00 | 711 | - |
| 46↔42 | 46.00 | 1168 | 42.00 | 1067 | 28.00 | 711 | - |
| 46↔40 | 46.00 | 1168 | 40.00 | 1016 | 28.00 | 711 | - |
| 46↔38 | 46.00 | 1168 | 38.00 | 965 | 28.00 | 711 | - |
| 48↔46 | 48.00 | 1219 | 46.00 | 1168 | 28.00 | 711 | - |
| 48↔44 | 48.00 | 1219 | 44.00 | 1118 | 28.00 | 711 | - |
| 48↔42 | 48.00 | 1219 | 42.00 | 1067 | 28.00 | 711 | - |
| 48↔40 | 48.00 | 1219 | 40.00 | 1016 | 28.00 | 711 | - |

Notes

- Dimensions quoted in mm are 'Nominal' values from B16.9 (i.e. rounded equivalents of the inch dimensions). Refer to B16.9 for additional 'Max' and 'Min' metric dimensions.
- For tolerances see page 6-2.
- Other sizes listed in B16.9 are 5↔2, 6↔2¹/₂, 10↔4, 12↔5, 14↔6, 16↔8, 18↔10, 20↔12, 22↔14 and 24↔16.
- 1 Weights are approximate and based on manufacturers' data (where available) for Schedule 40S/Standard fittings. See page 6-6 for further information.

Concentric and Eccentric Reducers - ANSI B16.9

Dimensions (based on ASME/ANSI B16.9) and example weights for reducers (Continued)

| Nominal Pipe Size | Large End | | Small End | | End to End | | Weight |
|-------------------|-------------|-----|-------------|-----|------------|-----|----------------------|
| | OD at Bevel | | OD at Bevel | | Dimension | | 40S/STD ¹ |
| | in | mm | in | mm | in | mm | kg/piece |
| 5⇒2½ | 5.56 | 141 | 2.88 | 73 | 5.00 | 127 | 2.16 |
| 6⇒5 | 6.62 | 168 | 5.56 | 141 | 5.50 | 140 | 3.57 |
| 6⇒4 | 6.62 | 168 | 4.50 | 114 | 5.50 | 140 | 3.30 |
| 6⇒3 | 6.62 | 168 | 3.50 | 89 | 5.50 | 140 | 3.04 |
| 8⇒6 | 8.62 | 219 | 6.62 | 168 | 6.00 | 152 | 5.71 |
| 8⇒5 | 8.62 | 219 | 5.56 | 141 | 6.00 | 152 | 5.40 |
| 8⇒4 | 8.62 | 219 | 4.50 | 114 | 6.00 | 152 | 5.10 |
| 10⇒8 | 10.75 | 273 | 8.62 | 219 | 7.00 | 178 | 9.58 |
| 10⇒6 | 10.75 | 273 | 6.62 | 168 | 7.00 | 178 | 8.78 |
| 10⇒5 | 10.75 | 273 | 5.56 | 141 | 7.00 | 178 | 8.42 |
| 12⇒10 | 12.75 | 324 | 10.75 | 273 | 8.00 | 203 | 13.6 |
| 12⇒8 | 12.75 | 324 | 8.62 | 219 | 8.00 | 203 | 12.7 |
| 12⇒6 | 12.75 | 324 | 6.62 | 168 | 8.00 | 203 | 11.8 |
| 14⇒12 | 14.00 | 356 | 12.75 | 324 | 13.00 | 330 | 25.4 |
| 14⇒10 | 14.00 | 356 | 10.75 | 273 | 13.00 | 330 | 23.6 |
| 14⇒8 | 14.00 | 356 | 8.62 | 219 | 13.00 | 330 | 21.8 |
| 16⇒14 | 16.00 | 406 | 14.00 | 356 | 14.00 | 356 | 31.0 |
| 16⇒12 | 16.00 | 406 | 12.75 | 324 | 14.00 | 356 | 29.6 |
| 16⇒10 | 16.00 | 406 | 10.75 | 273 | 14.00 | 356 | 27.8 |
| 18⇒16 | 18.00 | 457 | 16.00 | 406 | 15.00 | 381 | 37.8 |
| 18⇒14 | 18.00 | 457 | 14.00 | 356 | 15.00 | 381 | 35.7 |
| 18⇒12 | 18.00 | 457 | 12.75 | 324 | 15.00 | 381 | 34.3 |
| 20⇒18 | 20.00 | 508 | 18.00 | 457 | 20.00 | 508 | 56.4 |
| 20⇒16 | 20.00 | 508 | 16.00 | 406 | 20.00 | 508 | 53.5 |
| 20⇒14 | 20.00 | 508 | 14.00 | 356 | 20.00 | 508 | 50.8 |
| 22⇒20 | 22.00 | 559 | 20.00 | 508 | 20.00 | 508 | 62.6 |
| 22⇒18 | 22.00 | 559 | 18.00 | 457 | 20.00 | 508 | 59.7 |
| 22⇒16 | 22.00 | 559 | 16.00 | 406 | 20.00 | 508 | 57.1 |
| 24⇒22 | 24.00 | 610 | 22.00 | 559 | 20.00 | 508 | 68.6 |
| 24⇒20 | 24.00 | 610 | 20.00 | 508 | 20.00 | 508 | 65.7 |
| 24⇒18 | 24.00 | 610 | 18.00 | 457 | 20.00 | 508 | 63.0 |
| 26⇒24 | 26.00 | 600 | 24.00 | 610 | 24.00 | 610 | - |
| 26⇒22 | 26.00 | 600 | 22.00 | 559 | 24.00 | 610 | - |
| 26⇒20 | 26.00 | 600 | 20.00 | 508 | 24.00 | 610 | - |
| 26⇒18 | 26.00 | 600 | 18.00 | 457 | 24.00 | 610 | - |
| 28⇒26 | 28.00 | 711 | 26.00 | 660 | 24.00 | 610 | - |
| 28⇒24 | 28.00 | 711 | 24.00 | 610 | 24.00 | 610 | - |
| 28⇒20 | 28.00 | 711 | 20.00 | 508 | 24.00 | 610 | - |
| 28⇒18 | 28.00 | 711 | 18.00 | 457 | 24.00 | 610 | - |
| 30⇒28 | 30.00 | 762 | 28.00 | 711 | 24.00 | 610 | - |
| 30⇒26 | 30.00 | 762 | 26.00 | 660 | 24.00 | 610 | - |
| 30⇒24 | 30.00 | 762 | 24.00 | 610 | 24.00 | 610 | - |
| 30⇒20 | 30.00 | 762 | 20.00 | 508 | 24.00 | 610 | - |
| 32⇒30 | 32.00 | 813 | 30.00 | 762 | 24.00 | 610 | - |
| 32⇒28 | 32.00 | 813 | 28.00 | 711 | 24.00 | 610 | - |