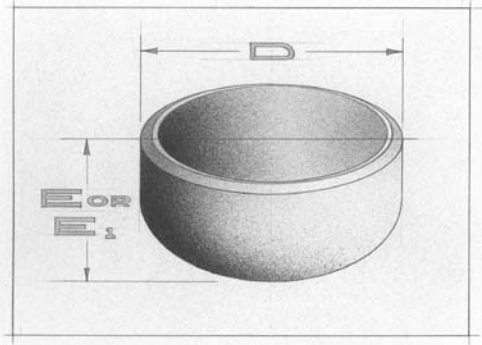


CAPS



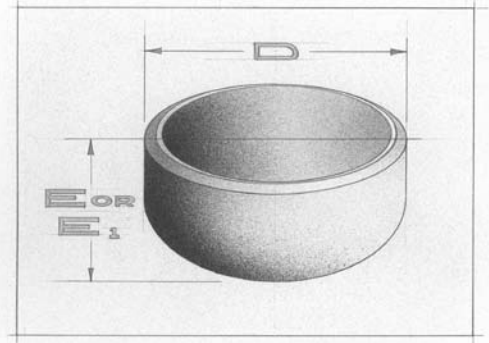
| <p style="text-align: center;">Key</p> | | | | | <p style="text-align: center;">Nominal Wall Thickness: inches mm Inside Diameter: inches mm Approximate Weight: Pounds (see page 3 for Kg)</p> | | | | | | | | | | | | | | | | |
|-----------------------------------------------|-------------------------------|----------------|--------------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|---------|---------|----|---------|---------|-----|---------|-----|---------|---------|--------|--------|-------|
| | | | | | Schedule | | | | | | | | | | | | | | | | |
| Nominal Pipe Size | "D" Outside Diameter at Bevel | "E" Length (1) | Limiting Wall Thickness for Length E | "E" Length (2) | L.W.G. | 10 | 20 | 30 | 40 | STD WT | 60 | XS | 80 | 100 | 120 | 140 | 160 | XXS | | | |
| inches mm | inches mm | inches mm | inches mm | inches mm | | | | | | | | | | | | | | | | | |
| ½" | .84 | 1.00 | 0.18 | 1.00 | - | - | - | - | .109 | .109 | - | .147 | .147 | - | - | - | - | .188 | .294 | | |
| | | | | | - | - | - | - | 2.769 | 2.769 | - | 3.734 | 3.734 | - | - | - | - | 4.775 | 7.468 | | |
| | | | | | - | - | - | - | .622 | .622 | - | .546 | .546 | - | - | - | - | .464 | .252 | | |
| | | | | | - | - | - | - | 15.799 | 15.799 | - | 13.868 | 13.868 | - | - | - | - | 11.786 | 6.401 | | |
| | | | | | | | | | 0.1 | 0.1 | | 0.1 | 0.1 | | | | - | 0.5 | | | |
| ¾" | 1.05 | 1.00 | 0.15 | 1.00 | - | - | - | - | .113 | .113 | - | .154 | .154 | - | - | - | - | .219 | .308 | | |
| | | | | | - | - | - | - | 2.870 | 2.870 | - | 3.912 | 3.912 | - | - | - | - | 5.563 | 7.823 | | |
| | | | | | - | - | - | - | .824 | .824 | - | .742 | .742 | - | - | - | - | .612 | .434 | | |
| | | | | | - | - | - | - | 20.930 | 20.930 | - | 18.847 | 18.847 | - | - | - | - | 15.545 | 11.024 | | |
| | | | | | | | | | 0.1 | 0.1 | | 0.2 | 0.2 | | | | - | - | | | |
| 1" | 1.32 | 1.50 | 0.18 | 1.50 | - | - | - | - | .133 | .133 | - | .179 | .179 | - | - | - | - | .250 | .358 | | |
| | | | | | - | - | - | - | 3.378 | 3.378 | - | 4.547 | 4.547 | - | - | - | - | 6.350 | 9.093 | | |
| | | | | | - | - | - | - | 1.049 | 1.049 | - | .957 | .957 | - | - | - | - | .815 | .599 | | |
| | | | | | - | - | - | - | 26.645 | 26.645 | - | 24.308 | 24.308 | - | - | - | - | 20.701 | 15.215 | | |
| | | | | | | | | | 0.2 | 0.2 | | 0.3 | 0.3 | | | | 0.4 | 1.0 | | | |
| 1¼" | 1.66 | 1.50 | 0.19 | 1.50 | - | - | - | - | .140 | .140 | - | .191 | .191 | - | - | - | - | .250 | .382 | | |
| | | | | | - | - | - | - | 3.556 | 3.556 | - | 4.851 | 4.851 | - | - | - | - | 6.350 | 9.703 | | |
| | | | | | - | - | - | - | 1.380 | 1.380 | - | 1.278 | 1.278 | - | - | - | - | 1.160 | .896 | | |
| | | | | | - | - | - | - | 35.052 | 35.052 | - | 32.461 | 32.461 | - | - | - | - | 29.464 | 22.758 | | |
| | | | | | | | | | 0.3 | 0.3 | | 0.4 | 0.4 | | | | 0.5 | 1.5 | | | |
| 1½" | 1.90 | 1.50 | 0.20 | 1.50 | - | - | - | - | .145 | .145 | - | .200 | .200 | - | - | - | - | .281 | .400 | | |
| | | | | | - | - | - | - | 3.683 | 3.683 | - | 5.080 | 5.080 | - | - | - | - | 7.137 | 10.160 | | |
| | | | | | - | - | - | - | 1.610 | 1.610 | - | 1.500 | 1.500 | - | - | - | - | 1.338 | 1.100 | | |
| | | | | | - | - | - | - | 40.894 | 40.894 | - | 38.100 | 38.100 | - | - | - | - | 33.985 | 27.940 | | |
| | | | | | | | | | 0.4 | 0.4 | | 0.5 | 0.5 | | | | 0.6 | 2.5 | | | |
| 2" | 2.38 | 1.50 | 0.22 | 1.75 | - | - | - | - | .154 | .154 | - | .218 | .218 | - | - | - | - | .344 | .436 | | |
| | | | | | - | - | - | - | 3.912 | 3.912 | - | 5.537 | 5.537 | - | - | - | - | 8.738 | 11.074 | | |
| | | | | | - | - | - | - | 2.067 | 2.067 | - | 1.939 | 1.939 | - | - | - | - | 1.687 | 1.503 | | |
| | | | | | - | - | - | - | 52.502 | 52.502 | - | 49.251 | 49.251 | - | - | - | - | 42.850 | 38.176 | | |
| | | | | | | | | | 0.6 | 0.6 | | 0.8 | 0.8 | | | | 1.3 | 3.0 | | | |
| 2½" | 2.88 | 1.50 | 0.28 | 2.00 | - | - | - | - | .203 | .203 | - | .276 | .276 | - | - | - | - | .375 | .552 | | |
| | | | | | - | - | - | - | 5.156 | 5.156 | - | 7.010 | 7.010 | - | - | - | - | 9.525 | 14.021 | | |
| | | | | | - | - | - | - | 2.469 | 2.469 | - | 2.323 | 2.323 | - | - | - | - | 2.125 | 1.771 | | |
| | | | | | - | - | - | - | 62.713 | 62.713 | - | 59.004 | 59.004 | - | - | - | - | 53.975 | 44.983 | | |
| | | | | | | | | | 0.9 | 0.9 | | 1.0 | 1.0 | | | | 1.8 | 4.0 | | | |
| 3" | 3.50 | 2.00 | 0.30 | 2.50 | - | - | - | - | .216 | .216 | - | .300 | .300 | - | - | - | - | .438 | .600 | | |
| | | | | | - | - | - | - | 5.486 | 5.486 | - | 7.620 | 7.620 | - | - | - | - | 11.125 | 15.240 | | |
| | | | | | - | - | - | - | 3.068 | 3.068 | - | 2.900 | 2.900 | - | - | - | - | 2.624 | 2.300 | | |
| | | | | | - | - | - | - | 77.927 | 77.927 | - | 73.660 | 73.660 | - | - | - | - | 66.650 | 58.420 | | |
| | | | | | | | | | 1.5 | 1.5 | | 1.8 | 1.8 | | | | 2.9 | 6.0 | | | |
| 3½" | 4.00 | 2.50 | 0.32 | 3.00 | - | - | - | - | .226 | .226 | - | .318 | .318 | - | - | - | - | - | .636* | | |
| | | | | | - | - | - | - | 5.740 | 5.740 | - | 8.077 | 8.077 | - | - | - | - | - | - | 16.154 | |
| | | | | | - | - | - | - | 3.548 | 3.548 | - | 3.364 | 3.364 | - | - | - | - | - | - | - | 2.728 |
| | | | | | - | - | - | - | 90.119 | 90.119 | - | 85.446 | 85.446 | - | - | - | - | - | - | - | - |
| | | | | | | | | | 1.9 | 1.9 | | 2.8 | 2.8 | | | | - | 7.5 | | | |
| 4" | 4.50 | 2.50 | 0.34 | 3.00 | .188 | - | - | - | .237 | .237 | - | .337 | .337 | - | .438 | - | .531 | .674 | | | |
| | | | | | 4.775 | - | - | - | 6.020 | 6.020 | - | 8.560 | 8.560 | - | 11.125 | - | 13.487 | 17.120 | | | |
| | | | | | 4.124 | - | - | - | 4.026 | 4.026 | - | 3.826 | 3.826 | - | 3.438 | - | 3.438 | 3.152 | | | |
| | | | | | 104.749 | - | - | - | 102.260 | 102.260 | - | 97.180 | 97.180 | - | 92.050 | - | 87.325 | 80.061 | | | |
| | | | | | | | | | 2.5 | 2.5 | | 3.3 | 3.3 | | | | 5.9 | 9.0 | | | |
| 5" | 5.56 | 3.00 | 0.38 | 3.50 | - | - | - | - | .258 | .258 | - | .375 | .375 | - | .500 | - | .625 | .750 | | | |
| | | | | | - | - | - | - | 6.553 | 6.553 | - | 9.525 | 9.525 | - | 12.700 | - | 15.875 | 19.050 | | | |
| | | | | | - | - | - | - | 5.047 | 5.047 | - | 4.813 | 4.813 | - | 4.563 | - | 4.313 | 4.063 | | | |
| | | | | | - | - | - | - | 128.194 | 128.194 | - | 122.250 | 122.250 | - | 115.900 | - | 109.550 | 103.200 | | | |
| | | | | | | | | | 4.7 | 4.7 | | 5.5 | 5.5 | | | | 10.0 | 13.5 | | | |

GENERAL NOTES: The shape of these caps shall be ellipsoidal and shall conform to the shape requirements as given in the ASME Boiler and Pressure Vessel Code.

NOTES: (1) Length E applies for thickness not exceeding that given in column "Limiting Wall Thickness for Length E."

(2) Length E₁ applies for thickness greater than that given in column "Limiting Wall Thickness" for NPS 24 and smaller. For NPS 26 and larger, length E₁ shall be by agreement between manufacturer and purchaser.

CAPS



| Key | | | | | Nominal Wall Thickness: inches mm Inside Diameter: inches mm Approximate Weight: Pounds (see page 3 for Kg) | | | | | | | | | | | | | | | | |
|-------------------|-------------------------------|----------------|--------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|---|
| | | | | | Schedule | | | | | | | | | | | | | | | | |
| Nominal Pipe Size | "D" Outside Diameter at Bevel | "E" Length (1) | Limiting Wall Thickness for Length E | "E" Length (2) | L.W.G. | 10 | 20 | 30 | 40 | STD WT | 60 | XS | 80 | 100 | 120 | 140 | 160 | XXS | | | |
| inches mm | inches mm | inches mm | inches mm | inches mm | | | | | | | | | | | | | | | | | |
| 6" | 6.63 | 3.50 | 0.43 | 4.00 | .219 | - | - | - | .280 | .280 | - | .432 | .432 | - | .562 | - | .719 | .864 | | | |
| | | | | | 5.563 | - | - | 7.112 | 7.112 | - | 10.973 | 10.973 | - | 14.275 | - | 18.263 | 21.946 | | | | |
| | | | | | 6.187 | - | - | 6.065 | 6.065 | - | 5.761 | 5.761 | - | 5.501 | - | 5.187 | 4.897 | | | | |
| | | | | | 157.150 | - | - | 154.051 | 154.051 | - | 146.329 | 146.329 | - | 139.725 | - | 131.750 | 124.384 | | | | |
| | | | | | 5.3 | - | - | - | 6.5 | 6.5 | - | 9.3 | 9.3 | - | 12.9 | - | 15.0 | 18.0 | | | |
| 8" | 8.63 | 4.00 | 0.50 | 5.00 | .219 | - | .250 | .277 | .322 | .322 | .406 | .500 | .500 | .594 | .719 | .812 | .906 | .875 | | | |
| | | | | | 5.563 | - | 6.350 | 7.036 | 8.179 | 8.179 | 10.312 | 12.700 | 15.088 | 18.263 | 20.625 | 23.012 | 22.225 | | | | |
| | | | | | 8.187 | - | 8.125 | 7.981 | 7.981 | 7.981 | 7.813 | 7.625 | 7.625 | 7.437 | 7.187 | 7.001 | 6.813 | 6.875 | | | |
| | | | | | 203.20 | - | 206.375 | 205.003 | 202.717 | 202.717 | 198.450 | 193.675 | 188.900 | 182.550 | 177.825 | 173.050 | 174.625 | | | | |
| | | | | | 207.949 | - | 7.3 | 9.5 | 11.8 | 11.8 | 14.2 | 16.7 | 18.9 | 23.7 | 25.4 | 31.0 | 31.0 | 31.0 | | | |
| 10" | 10.75 | 5.00 | 0.50 | 6.00 | .219 | - | .250 | .307 | .365 | .365 | .500 | .500 | .594 | .719 | .844 | 1.000 | 1.125 | 1.000 | | | |
| | | | | | 5.563 | - | 6.350 | 7.798 | 9.271 | 9.271 | 12.700 | 12.700 | 15.088 | 18.263 | 21.438 | 25.400 | 28.575 | 25.400 | | | |
| | | | | | 10.312 | - | 10.250 | 10.136 | 10.020 | 10.020 | 9.750 | 9.750 | 9.562 | 9.312 | 9.062 | 8.750 | 8.500 | 8.750 | | | |
| | | | | | 254.00 | - | 260.350 | 257.454 | 254.508 | 254.508 | 247.650 | 247.650 | 242.875 | 236.525 | 230.175 | 222.250 | 215.900 | 215.900 | | | |
| | | | | | 261.925 | - | 14.1 | 17.9 | 22.0 | 22.0 | 26.7 | 26.7 | 29.4 | 33.8 | 46.0 | 52.5 | 57.0 | - | | | |
| 12" | 12.75 | 6.00 | 0.50 | 7.00 | .250 | - | .250 | .330 | .406 | .375 | .562 | .500 | .688 | .844 | 1.000 | 1.125 | 1.312 | 1.000 | | | |
| | | | | | 6.350 | - | 6.350 | 8.382 | 10.312 | 9.525 | 14.275 | 12.700 | 17.475 | 21.438 | 25.400 | 28.575 | 33.325 | 25.400 | | | |
| | | | | | 12.250 | - | 12.250 | 12.090 | 11.938 | 12.000 | 11.626 | 11.750 | 11.374 | 11.062 | 10.750 | 10.500 | 10.126 | 10.750 | | | |
| | | | | | 304.80 | - | 311.150 | 307.086 | 303.225 | 304.800 | 295.300 | 298.450 | 288.900 | 280.975 | 273.050 | 266.700 | 257.200 | 273.050 | | | |
| | | | | | 311.150 | - | 18.5 | 24.8 | 35.5 | 30.6 | 44.0 | 38.0 | 61.5 | 74.0 | 82.0 | 90.0 | 95.0 | - | | | |
| 14" | 14.00 | 6.50 | 0.50 | 7.50 | .250 | .250 | .312 | .375 | .438 | .375 | .594 | .500 | .750 | .938 | 1.094 | 1.250 | 1.406 | - | | | |
| | | | | | 6.350 | 6.350 | 7.925 | 9.525 | 11.125 | 9.525 | 15.088 | 12.700 | 19.050 | 23.825 | 27.788 | 31.750 | 35.712 | - | | | |
| | | | | | 13.500 | 13.500 | 13.376 | 13.250 | 13.124 | 13.250 | 12.812 | 13.000 | 12.500 | 12.124 | 11.812 | 11.500 | 11.188 | - | | | |
| | | | | | 355.60 | - | 342.900 | 342.900 | 339.750 | 336.550 | 333.350 | 336.550 | 325.425 | 330.200 | 317.500 | 307.950 | 300.025 | 292.100 | 284.175 | - | |
| | | | | | 342.900 | 26.0 | 29.8 | 36.8 | 43.5 | 36.8 | 54.7 | 47.0 | 74.6 | 102.0 | 146.0 | 179.0 | 200.0 | - | | | |
| 16" | 16.00 | 7.00 | 0.50 | 8.00 | .250 | .250 | .312 | .375 | .500 | .375 | .656 | .500 | .844 | 1.031 | 1.219 | 1.438 | 1.594 | - | | | |
| | | | | | 6.350 | 6.350 | 7.925 | 9.525 | 12.700 | 9.525 | 16.662 | 12.700 | 21.438 | 26.187 | 30.963 | 36.525 | 40.488 | - | | | |
| | | | | | 15.500 | 15.500 | 15.376 | 15.250 | 15.000 | 15.250 | 14.688 | 15.000 | 14.312 | 13.938 | 13.562 | 13.124 | 12.812 | - | | | |
| | | | | | 406.40 | - | 393.700 | 393.700 | 390.550 | 387.350 | 381.000 | 387.350 | 373.075 | 381.000 | 363.525 | 354.025 | 344.475 | 333.350 | 325.425 | - | |
| | | | | | 393.700 | 32.1 | 33.5 | 40.0 | 53.5 | 40.0 | 74.5 | 53.5 | 85.9 | 133.0 | 187.0 | 229.0 | 297.0 | - | | | |
| 18" | 18.00 | 8.00 | 0.50 | 9.00 | .250 | .250 | .312 | .438 | .562 | .375 | .750 | .500 | .938 | 1.156 | 1.375 | 1.562 | 1.781 | - | | | |
| | | | | | 6.350 | 6.350 | 7.925 | 11.125 | 14.275 | 9.525 | 19.050 | 12.700 | 23.825 | 29.362 | 34.925 | 39.675 | 45.237 | - | | | |
| | | | | | 17.500 | 17.500 | 17.376 | 17.124 | 16.876 | 17.250 | 16.500 | 17.000 | 16.124 | 15.688 | 15.250 | 14.876 | 14.438 | - | | | |
| | | | | | 457.20 | - | 444.500 | 444.500 | 441.350 | 434.950 | 428.650 | 438.150 | 419.100 | 431.800 | 409.550 | 398.475 | 387.350 | 377.850 | 366.725 | - | |
| | | | | | 444.500 | 42.6 | 43.5 | 64.8 | 117.0 | 54.0 | 154.0 | 72.0 | 190.0 | 254.0 | 317.0 | 423.0 | - | - | | | |
| 20" | 20.00 | 9.00 | 0.50 | 10.00 | .250 | .250 | .375 | .500 | .594 | .375 | .812 | .500 | 1.031 | 1.281 | 1.500 | 1.750 | 1.969 | - | | | |
| | | | | | 6.350 | 6.350 | 9.525 | 12.700 | 15.088 | 9.525 | 20.625 | 12.700 | 26.187 | 32.537 | 38.100 | 44.450 | 50.013 | - | | | |
| | | | | | 19.500 | 19.500 | 19.250 | 19.000 | 18.812 | 19.250 | 18.376 | 19.000 | 17.938 | 17.438 | 17.000 | 16.500 | 16.062 | - | | | |
| | | | | | 508.00 | - | 495.300 | 495.300 | 488.950 | 482.600 | 477.825 | 488.950 | 466.750 | 482.600 | 455.625 | 442.925 | 431.800 | 419.100 | 407.975 | - | |
| | | | | | 495.300 | 64.3 | 77.0 | 86.0 | 129.0 | 77.0 | 182.0 | 86.0 | 210.0 | 247.0 | 339.0 | 395.0 | - | - | | | |
| 22" | 22.00 | 10.00 | 0.50 | 10.00 | - | .250 | .375 | .500 | - | .375 | .875 | .500 | 1.125 | 1.375 | 1.625 | 1.875 | 2.125 | - | | | |
| | | | | | - | 6.350 | 9.525 | 12.700 | - | 9.525 | 22.225 | 12.700 | 28.575 | 34.925 | 41.275 | 47.625 | 53.975 | - | | | |
| | | | | | - | 21.500 | 21.250 | 21.000 | - | 21.250 | 20.250 | 21.000 | 19.750 | 19.250 | 18.750 | 18.250 | 17.750 | - | | | |
| | | | | | 558.80 | - | 546.100 | 539.750 | 533.400 | - | 539.750 | 514.350 | 533.400 | 501.650 | 488.950 | 476.250 | 463.550 | 450.850 | - | | |
| | | | | | - | 86.0 | 112.0 | - | 86.0 | - | 112.0 | - | - | - | - | - | - | - | | | |
| 24" | 24.00 | 10.50 | 0.50 | 12.00 | .250 | .250 | .375 | .562 | .688 | .375 | .969 | .500 | 1.219 | 1.531 | 1.812 | 2.062 | 2.344 | - | | | |
| | | | | | 6.350 | 6.350 | 9.525 | 14.275 | 17.475 | 9.525 | 24.613 | 12.700 | 30.963 | 38.887 | 46.025 | 52.375 | 59.538 | - | | | |
| | | | | | 23.500 | 23.500 | 23.250 | 22.876 | 22.624 | 23.250 | 22.062 | 23.000 | 21.562 | 20.938 | 20.376 | 19.876 | 19.312 | - | | | |
| | | | | | 609.60 | - | 596.900 | 596.900 | 590.550 | 581.050 | 574.650 | 590.550 | 560.375 | 584.200 | 547.675 | 531.825 | 517.550 | 504.850 | 490.525 | - | |
| | | | | | 596.900 | 88.5 | 88.5 | 92.0 | 148.0 | 208.0 | 284.0 | 129.0 | 337.0 | 485.0 | 562.0 | 697.0 | - | - | | | |
| 30" | 30.00 | 10.50 | - | - | - | .312 | .500 | .625 | - | .375 | - | .500 | - | - | - | - | - | - | | | |
| | | | | | - | 7.925 | 12.700 | 15.875 | - | 9.525 | - | 12.700 | - | - | - | - | - | - | - | - | |
| | | | | | - | 29.376 | 29.000 | 28.750 | - | 29.250 | - | 29.000 | - | - | - | - | - | - | - | - | - |
| | | | | | 762.00 | - | 746.150 | 736.600 | 730.250 | - | 742.950 | - | 736.600 | - | - | - | - | - | - | - | - |
| | | | | | - | 175.0 | 221.0 | - | 125.0 | - | 175.0 | - | - | - | - | - | - | - | | | |

GENERAL NOTES: The shape of these caps shall be ellipsoidal and shall conform to the shape requirements as given in the ASME Boiler and Pressure Vessel Code.
 NOTES: (1) Length E applies for thickness not exceeding that given in column "Limiting Wall Thickness for Length E."
 (2) Length E₁ applies for thickness greater than that given in column "Limiting Wall Thickness" for NPS 24 and smaller. For NPS 26 and larger, length E₁ shall be by agreement between manufacturer and purchaser.