

# Hole Diameters for Tapping

| UNIFIED THREADS |   |   | METRIC THREADS |   |   |
|-----------------|---|---|----------------|---|---|
| TAP SIZE        | CUTTING TAPS<br>Based on 75% Thread (in.) | FORMING TAPS<br>Based on 65% Thread (in.) | TAP SIZE       | CUTTING TAPS<br>Based on 75% Thread (in.) | FORMING TAPS<br>Based on 65% Thread (in.) |
| 0-80            | 0.0478"                                   | 0.0545"                                   | M1.6 X 0.35    | 0.0496"                                   | 0.0569"                                   |
| 1-64            | 0.0578"                                   | 0.0661"                                   | M1.8 X 0.35    | 0.0574"                                   | 0.0648"                                   |
| 1-72            | 0.0595"                                   | 0.0669"                                   | M2 X 0.4       | 0.0634"                                   | 0.0718"                                   |
| 2-56            | 0.0686"                                   | 0.0781"                                   | M2.2 X 0.45    | 0.0694"                                   | 0.0788"                                   |
| 2-64            | 0.0708"                                   | 0.0791"                                   | M2.5 X 0.45    | 0.0812"                                   | 0.0906"                                   |
| 3-48            | 0.0787"                                   | 0.0898"                                   | M3 X 0.5       | 0.0989"                                   | 0.1094"                                   |
| 3-56            | 0.0816"                                   | 0.0911"                                   | M3.5 X 0.6     | 0.1148"                                   | 0.1274"                                   |
| 4-40            | 0.0876"                                   | 0.1010"                                   | M4 X 0.7       | 0.1306"                                   | 0.1453"                                   |
| 4-48            | 0.0917"                                   | 0.1028"                                   | M4.5 X 0.75    | 0.1484"                                   | 0.1641"                                   |
| 5-40            | 0.1006"                                   | 0.1140"                                   | M5 X 0.8       | 0.1662"                                   | 0.1829"                                   |
| 5-44            | 0.1029"                                   | 0.1150"                                   | M6 X 1.0       | 0.1979"                                   | 0.2188"                                   |
| 6-32            | 0.1076"                                   | 0.1242"                                   | M7 X 1.0       | 0.2372"                                   | 0.2582"                                   |
| 6-40            | 0.1136"                                   | 0.1270"                                   | M8 X 1.25      | 0.2670"                                   | 0.2932"                                   |
| 8-32            | 0.1336"                                   | 0.1502"                                   | M8 X 1.0       | 0.2766"                                   | 0.2976"                                   |
| 8-36            | 0.1369"                                   | 0.1517"                                   | M10 X 1.5      | 0.3362"                                   | 0.3676"                                   |
| 10-24           | 0.1494"                                   | 0.1716"                                   | M10 X 1.25     | 0.3458"                                   | 0.3719"                                   |
| 10-32           | 0.1596"                                   | 0.1762"                                   | M12 X 1.75     | 0.4053"                                   | 0.4420"                                   |
| 12-24           | 0.1754"                                   | 0.1976"                                   | M12 X 1.25     | 0.4245"                                   | 0.4507"                                   |
| 12-28           | 0.1812"                                   | 0.2002"                                   | M14 X 2.0      | 0.4745"                                   | 0.5164"                                   |
| 1/4-20          | 0.2013"                                   | 0.2279"                                   | M14 X 1.5      | 0.4936"                                   | 0.5251"                                   |
| 1/4-28          | 0.2152"                                   | 0.2342"                                   | M16 X 2.0      | 0.5532"                                   | 0.5951"                                   |
| 5/16-18         | 0.2584"                                   | 0.2879"                                   | M16 X 1.5      | 0.5724"                                   | 0.6038"                                   |
| 5/16-24         | 0.2719"                                   | 0.2941"                                   | M18 X 2.5      | 0.6128"                                   | 0.6652"                                   |
| 3/8-16          | 0.3141"                                   | 0.3474"                                   | M18 X 1.5      | 0.6511"                                   | 0.6826"                                   |
| 3/8-24          | 0.3344"                                   | 0.3566"                                   | M20 X 2.5      | 0.6915"                                   | 0.7439"                                   |
| 7/16-14         | 0.3679"                                   | 0.4059"                                   | M20 X 1.5      | 0.7299"                                   | 0.7613"                                   |
| 7/16-20         | 0.3888"                                   | 0.4154"                                   | M22 X 2.5      | 0.7702"                                   | 0.8226"                                   |
| 1/2-13          | 0.4251"                                   | 0.4660"                                   | M22 X 1.5      | 0.8086"                                   | 0.8400"                                   |
| 1/2-20          | 0.4513"                                   | 0.4779"                                   | M24 X 3.0      | 0.8298"                                   | 0.8927"                                   |
| 9/16-12         | 0.4813"                                   | 0.5257"                                   | M24 X 2.0      | 0.8682"                                   |   |
| 9/16-18         | 0.5084"                                   | 0.5379"                                   | M27 X 3.0      | 0.9479"                                   |   |
| 5/8-11          | 0.5364"                                   | 0.5848"                                   | M27 X 2.0      | 0.9863"                                   |   |
| 5/8-18          | 0.5709"                                   | 0.6004"                                   | M30 X 3.5      | 1.0469"                                   |   |
| 3/4-10          | 0.6526"                                   | 0.7058"                                   | M30 X 2.0      | 1.1044"                                   |   |
| 3/4-16          | 0.6891"                                   | 0.7224"                                   | M33 X 3.5      | 1.1650"                                   |   |
| 7/8-9           | 0.7668"                                   |   | M33 X 2.0      | 1.2225"                                   |   |
| 7/8-14          | 0.8054"                                   |   | M36 X 4.0      | 1.2639"                                   |   |
| 1-8             | 0.8782"                                   |   | M36 X 3.0      | 1.3023"                                   |   |
| 1-12            | 0.9188"                                   |   | M39 X 4.0      | 1.3820"                                   |   |
| 1-14            | 0.9304"                                   |   | M39 X 3.0      | 1.4204"                                   |   |

## Pipe Taps

| TAP SIZE | NPT**<br>HOLE SIZE | NPTF**<br>HOLE SIZE | NPS<br>HOLE SIZE | NPSF<br>HOLE SIZE |
|----------|--------------------|---------------------|------------------|-------------------|
| 1/16     | 0.2460"            | 0.2420"             | 0.2500"          | 0.2460"           |
| 1/8      | 0.3390"            | 0.3320"             | 0.3438"          | 0.3390"           |
| 1/4      | 0.4375"            | 0.4375"             | 0.4375"          | 0.4375"           |
| 3/8      | 0.5781"            | 0.5625"             | 0.5781"          | 0.5781"           |
| 1/2      | 0.7031"            | 0.7031"             | 0.7188"          | 0.7188"           |
| 3/4      | 0.9063"            | 0.9063"             | 0.9375"          | 0.9219"           |
| 1        | 1.1406"            | 1.1406"             | 1.1719"          | 1.1563"           |
| 1-1/4    | 1.4844"            | 1.4844"             | 1.5156"          |                   |
| 1-1/2    | 1.7344"            | 1.7344"             | 1.7500"          |                   |
| 2        | 2.2031"            | 2.1875"             | 2.2187"          |                   |
| 2-1/2    | 2.6250"            | 2.6250"             | 2.6563"          |                   |
| 3        | 3.2500"            | 3.2500"             |                  |                   |

\*\*For tapping without reaming

**NOTE:** Information in this chart is for reference only. We will not be held liable for any consequential damages or economic loss due to the use of information contained within this chart.