

## Thread Dimensions

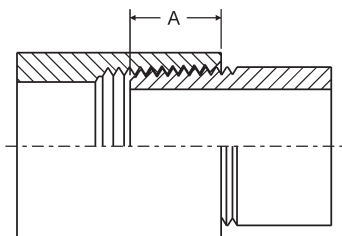
### Nominal Dimensions of Standard Threads

- ODM = Outside diameter of the male
- IDF = Inside diameter of the female
- TPI = Threads per inch
- GHT (3/4") – 1.0625 ODM, 11-1/2 TPI
- Female NPT (tapered pipe) thread is not available on hose swivel nuts

| Size   | Pipe O.D. | Tapered Threads |                   | Straight Threads |           |           |      |           |           |          |           |           |      |           |           |
|--------|-----------|-----------------|-------------------|------------------|-----------|-----------|------|-----------|-----------|----------|-----------|-----------|------|-----------|-----------|
|        |           | NPT             | BSPT <sub>r</sub> | NPSH             |           |           | NPSM |           |           | NST (NH) |           |           | BSPP |           |           |
|        |           | TPI             | TPI               | TPI              | ODM (max) | IDF (min) | TPI  | ODM (max) | IDF (min) | TPI      | ODM (max) | IDF (min) | TPI  | ODM (max) | IDF (min) |
| 1/8"   | .405      | 27.0            | 28                |                  |           |           | 27.0 | 0.397     | 0.358     |          |           |           |      | 0.383     | 0.337     |
| 1/4"   | .540      | 18.0            | 19                |                  |           |           | 18.0 | 0.526     | 0.468     |          |           |           |      | 0.516     | 0.450     |
| 3/8"   | .675      | 18.0            | 19                |                  |           |           | 18.0 | 0.662     | 0.603     |          |           |           |      | 0.656     | 0.588     |
| 1/2"   | .840      | 14.0            | 14                | 14.0             | 0.8248    | 0.7395    | 14.0 | 0.823     | 0.747     |          |           |           |      | 0.825     | 0.733     |
| 3/4"   | 1.050     | 14.0            | 14                | 14.0             | 1.0353    | 0.9500    | 14.0 | 1.034     | 0.958     |          |           |           |      | 1.041     | 0.950     |
| 1"     | 1.315     | 11.5            | 11                | 11.5             | 1.2951    | 1.1921    | 11.5 | 1.293     | 1.201     | 8.0      | 1.375     | 1.2246    | 11   | 1.309     | 1.193     |
| 1-1/4" | 1.660     | 11.5            | 11                | 11.5             | 1.6399    | 1.5369    | 11.5 | 1.638     | 1.546     |          |           |           | 11   | 1.650     | 1.534     |
| 1-1/2" | 1.900     | 11.5            | 11                | 11.5             | 1.8788    | 1.7758    | 11.5 | 1.877     | 1.785     | 9.0      | 1.990     | 1.8577    | 11   | 1.882     | 1.766     |
| 2"     | 2.375     | 11.5            | 11                | 11.5             | 2.3528    | 2.2498    | 11.5 | 2.351     | 2.259     |          |           |           | 11   | 2.347     | 2.231     |
| 2-1/2" | 2.875     | 8.0             | 11                | 8.0              | 2.8434    | 2.6930    | 8.0  | 2.841     | 2.708     | 7.5      | 3.068     | 2.9104    | 11   | 2.960     | 2.844     |
| 3"     | 3.500     | 8.0             | 11                |                  |           |           | 8.0  | 3.467     | 3.334     | 6.0      | 3.623     | 3.5306    | 11   | 3.460     | 3.344     |
| 4"     | 4.500     | 8.0             | 11                |                  |           |           | 8.0  | 4.466     | 4.333     | 4.0      | 5.010     | 4.7111    | 11   | 4.450     | 4.334     |
| 4-1/2" |           |                 |                   |                  |           |           |      |           |           | 4.0      | 5.760     | 5.4611    |      |           |           |
| 5"     | 5.563     | 8.0             | 11                |                  |           |           | 8.0  | 5.528     | 5.395     | 4.0      | 6.260     | 5.9602    | 11   | 5.450     | 5.359     |
| 6"     | 6.625     | 8.0             | 11                |                  |           |           | 8.0  | 6.585     | 6.452     | 4.0      | 7.025     | 6.7252    | 11   | 6.450     | 6.359     |
| 8"     | 8.625     | 8.0             |                   |                  |           |           |      |           |           |          |           |           |      |           |           |
| 10"    | 10.750    | 8.0             |                   |                  |           |           |      |           |           |          |           |           |      |           |           |
| 12"    | 12.750    | 8.0             |                   |                  |           |           |      |           |           |          |           |           |      |           |           |

### Normal Engagement Length of NPT Thread in Inches (A)

- Dimensions given do not allow for variations in tapping or threading.



| Thread Size | Dimension A |
|-------------|-------------|
| 1/8"        | 1/4"        |
| 1/4"        | 3/8"        |
| 3/8"        | 3/8"        |
| 1/2"        | 1/2"        |
| 3/4"        | 9/16"       |
| 1"          | 11/16"      |
| 1-1/4"      | 11/16"      |
| 1-1/2"      | 11/16"      |
| 2"          | 3/4"        |
| 2-1/2"      | 15/16"      |
| 3"          | 1"          |
| 4"          | 1-1/8"      |
| 5"          | 1-1/4"      |
| 6"          | 1-5/16"     |
| 8"          | 1-7/16"     |
| 10"         | 1-5/8"      |
| 12"         | 1-3/4"      |