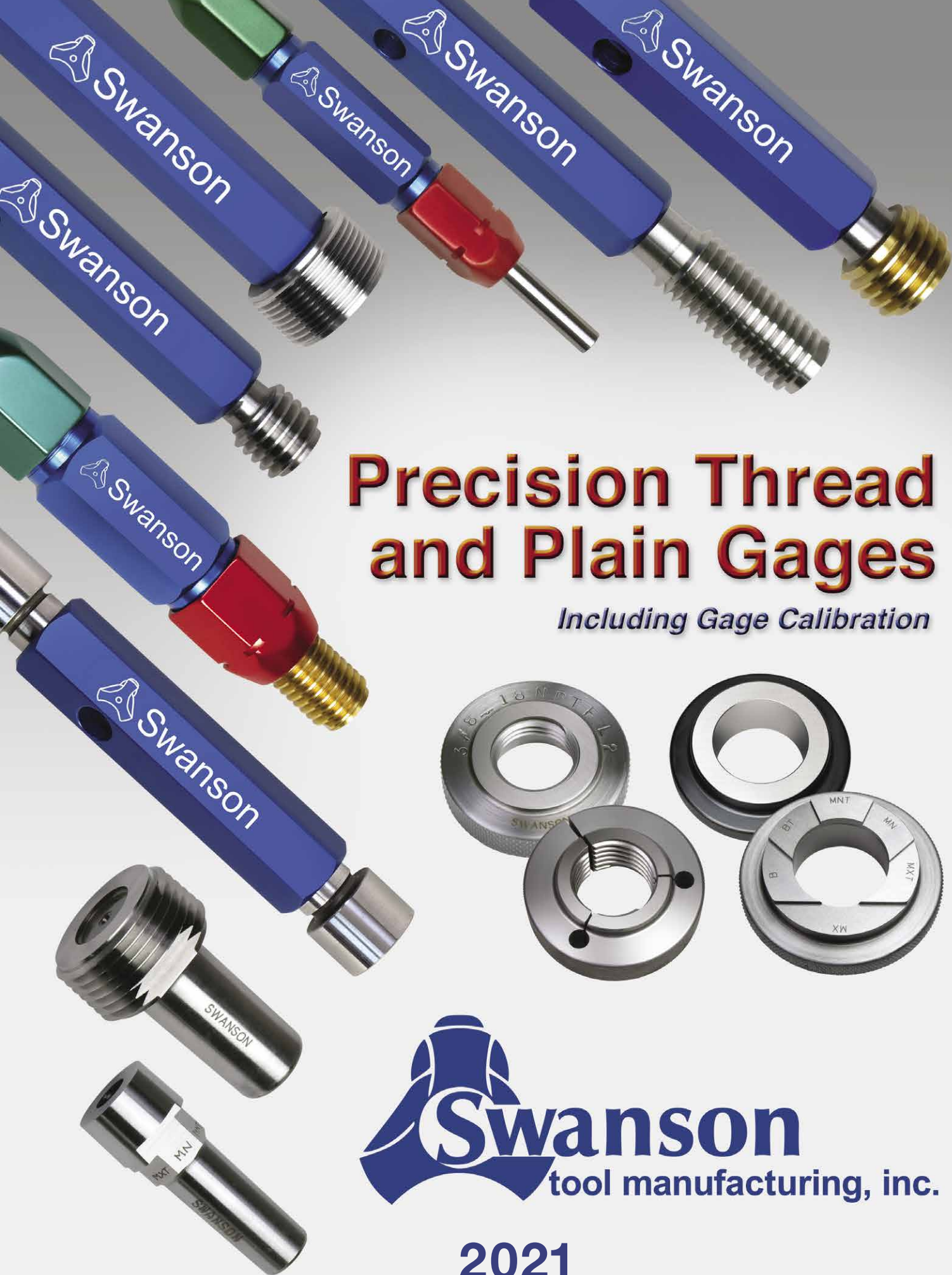




# Precision Thread and Plain Gages

*Including Gage Calibration*



2021

# Gage Calibration Service

## New Swanson Gages

### THREAD GAGES

Certification of Compliance to Class (Short Form)..... No Charge  
 Certification of Calibration to Size (Long Form) .....\$15.00 / member

### TAPER PIPE GAGES

Certification of Compliance to Class (Short Form)..... No Charge  
 Certification of Calibration to Size (Long Form).....\$25.00 / member

#### **CERTIFICATE OF COMPLIANCE** (Short Form)

*Certificate indicates the gage complies with applicable H28 and ANSI standards.*

#### **CERTIFICATE OF CALIBRATION** (Long Form)

*Certificate indicates actual measurements of pitch diameter, major diameter, minor diameter, flank angles and lead where they apply.*

## Customer Supplied Gages

### THREAD PLUG GAGES: Work or Setting

Sizes #0 to 1-1/2" (M1.6 to M39) .....\$25.00 / member  
 Sizes 1-9/16" to 8" (M40 to M203).....\$30.00 / member

**NOTE:** As the centerline (axis) of Trilock plug gages cannot be accurately located, the lead cannot be calibrated and half-angle relation to axis cannot be accurately calibrated. The flank angles can be calibrated for included angle only.

### THREAD RING GAGES:

Standard sizes to 1-1/2" (M39) .....\$35.00 / member  
 Non-standard sizes #0 to 5" (M1.6 to M127).....\$45.00 / member  
 Non-standard sizes over 5" to 8" (over M127 to M203) .....\$80.00 / member

**NOTE:** For non-standard ring sizes where a set plug is not in our stock or is not furnished, a special tooling charge applies and will be quoted prior to processing.

### TAPER PIPE GAGES

|                          | <u>Plugs</u>     | <u>Rings</u>     |
|--------------------------|------------------|------------------|
| Sizes 1/16" to 3" .....  | \$38.00 / member | \$60.00 / member |
| Sizes 3-1/2" to 6" ..... | \$52.00 / member | \$72.00 / member |

### CYLINDRICAL GAGES

|                                                    | <u>Plugs</u>     | <u>Rings</u>     |
|----------------------------------------------------|------------------|------------------|
| Sizes .040" to .060" (M1.016 to M1.524).....       | \$80.00 / member | \$80.00 / member |
| Sizes .061" to .100" (M1.525 to M2.54).....        | \$64.00 / member | \$64.00 / member |
| Sizes .101" to 2.010" (M2.541 to M51.05).....      | \$55.00 / member | \$55.00 / member |
| Sizes 2.011" to 5.510" (M51.06 to M140.0).....     | \$64.00 / member | \$64.00 / member |
| Sizes below .040" and over 5.510" – call for quote |                  |                  |

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## PRICES SUBJECT TO CHANGE WITHOUT NOTICE

*All sales subject to and governed by the Terms and Conditions of Sale for Swanson Tool Manufacturing, Inc. located at [www.swansongage.com/terms.htm](http://www.swansongage.com/terms.htm)*





# Titanium Nitride Coated HSS Thread Plug Gages



**Class "X" Tolerance  
Precision Lapped**

| NOMINAL<br>SIZE | THREADS PER INCH |           |             | MEMBERS               |        | HANDLES |       | DOUBLE<br>END |
|-----------------|------------------|-----------|-------------|-----------------------|--------|---------|-------|---------------|
|                 | NC<br>UNC        | NF<br>UNF | NEF<br>UNEF | GO                    | NO GO  | NO.     | PRICE | 2B, 3B        |
|                 |                  |           |             | 1, 2, 3<br>1B, 2B, 3B | 2B, 3B |         |       |               |
| 0               |                  | 80        |             | 101.00                | 101.00 | 000     | 11.00 | 213.00        |
| 1               | 64               | 72        |             | 101.00                | 101.00 | 000     | 11.00 | 213.00        |
| 2               | 56               | 64        |             | 88.00                 | 88.00  | 000     | 11.00 | 187.00        |
| 3               | 48               | 56        |             | 88.00                 | 88.00  | 000     | 11.00 | 187.00        |
| 4               | 40               | 48        |             | 80.00                 | 80.00  | 00      | 11.00 | 171.00        |
| 5               | 40               | 44        |             | 80.00                 | 80.00  | 00      | 11.00 | 171.00        |
| 6               | 32               | 40        |             | 70.00                 | 70.00  | 00      | 11.00 | 151.00        |
| 8               | 32               | 36        |             | 70.00                 | 70.00  | 0       | 11.00 | 151.00        |
| 10              | 24               | 32        |             | 70.00                 | 70.00  | 0       | 11.00 | 151.00        |
| 12              | 24               | 28        |             | 70.00                 | 70.00  | 0       | 11.00 | 151.00        |
| 12              |                  |           | 32          | 151.00                | 151.00 | 0       | 11.00 | 313.00        |
| 1/4             | 20               | 28        |             | 60.00                 | 60.00  | 1       | 11.00 | 131.00        |
| 1/4             |                  |           | 32          | 151.00                | 151.00 | 1       | 11.00 | 313.00        |
| 5/16            | 18               | 24        |             | 60.00                 | 60.00  | 1       | 11.00 | 131.00        |
| 5/16            |                  |           | 32          | 155.00                | 155.00 | 1       | 11.00 | 321.00        |
| 3/8             | 16               | 24        |             | 64.00                 | 64.00  | 2       | 11.00 | 139.00        |
| 3/8             |                  |           | 32          | 161.00                | 161.00 | 2       | 11.00 | 333.00        |
| 7/16            | 14               | 20        |             | 64.00                 | 64.00  | 2       | 11.00 | 139.00        |
| 7/16            |                  |           | 28          | 148.00                | 148.00 | 2       | 11.00 | 307.00        |
| 1/2             | 13               | 20        |             | 71.00                 | 71.00  | 2       | 11.00 | 153.00        |
| 1/2             |                  |           | 28          | 148.00                | 148.00 | 2       | 11.00 | 307.00        |
| 9/16            | 12               | 18        |             | 86.00                 | 86.00  | 3       | 11.00 | 183.00        |
| 9/16            |                  |           | 24          | 157.00                | 157.00 | 3       | 11.00 | 325.00        |
| 5/8             | 11               | 18        |             | 91.00                 | 91.00  | 3       | 11.00 | 193.00        |
| 5/8             |                  |           | 24          | 169.00                | 169.00 | 3       | 11.00 | 349.00        |
| 11/16           |                  |           | 24          | 169.00                | 169.00 | 3       | 11.00 | 349.00        |
| 3/4             | 10               | 16        |             | 106.00                | 106.00 | 3       | 11.00 | 223.00        |
| 3/4             |                  |           | 20          | 181.00                | 181.00 | 3       | 11.00 | 373.00        |
| 13/16           |                  |           | 20          | 189.00                | 189.00 | 3       | 11.00 | 389.00        |
| 7/8             | 9                | 14        |             | 114.00                | 114.00 | 4       | 12.00 | 240.00        |
| 7/8             |                  |           | 20          | 198.00                | 198.00 | 4       | 12.00 | 408.00        |
| 15/16           |                  |           | 20          | 208.00                | 208.00 | 4       | 12.00 | 428.00        |
| 1"              | 8                | 12        | 14NS        | 148.00                | 148.00 | 4       | 12.00 | 308.00        |
| 1"              |                  |           | 20          | 208.00                | 208.00 | 4       | 12.00 | 428.00        |
| 1-1/16          |                  | 12        | 18          | 204.00                | 204.00 | 4       | 12.00 | 420.00        |
| 1-1/8           | 7                | 12        |             | 204.00                | 204.00 | 4       | 12.00 | 420.00        |
| 1-1/8           |                  |           | 18          | 219.00                | 219.00 | 4       | 12.00 | 450.00        |
| 1-3/16          |                  | 12        | 18          | 225.00                | 225.00 | 5       | 13.00 | 463.00        |
| 1-1/4           | 7                | 12        |             | 225.00                | 225.00 | 5       | 13.00 | 463.00        |
| 1-1/4           |                  |           | 18          | 244.00                | 244.00 | 5       | 13.00 | 501.00        |
| 1-5/16          |                  | 12        | 18          | 255.00                | 255.00 | 5       | 13.00 | 523.00        |
| 1-3/8           | 6                | 12        |             | 255.00                | 255.00 | 5       | 13.00 | 523.00        |
| 1-3/8           |                  |           | 18          | 276.00                | 276.00 | 5       | 13.00 | 565.00        |
| 1-7/16          |                  | 12        | 18          | 263.00                | 263.00 | 5       | 13.00 | 539.00        |
| 1-1/2           | 6                | 12        |             | 263.00                | 263.00 | 5       | 13.00 | 539.00        |
| 1-1/2           |                  |           | 18          | 293.00                | 293.00 | 5       | 13.00 | 599.00        |

For TiN coated METRIC PLUGS (see pg. 12), HELICAL COIL PLUGS (see pg. 9).  
For TiN coated PIPE PLUGS & SPECIALS call Swanson

## Advantages of TiN Coating:

- Greatly increased tool life
- Surface hardness greater than HSS
- Greater corrosion resistance
- Greater abrasion resistance
- Increased lubricity
- Visible sign of gage wear
- Lower gaging cost
- Increased productivity

# Taperlock Thread Plug Gages



**Class "X" Tolerance  
Precision Lapped**

| NOMINAL<br>SIZE | THREADS PER INCH |           |              | MEMBERS               |        | HANDLES |       | DOUBLE<br>END |
|-----------------|------------------|-----------|--------------|-----------------------|--------|---------|-------|---------------|
|                 | NC<br>UNC        | NF<br>UNF | NEF<br>UNE-F | GO                    | NO GO  | NO.     | PRICE | 2B, 3B        |
|                 |                  |           |              | 1, 2, 3<br>1B, 2B, 3B | 2B, 3B |         |       |               |
| 0               |                  | 80        |              | 48.00                 | 48.00  | 000     | 11.00 | 107.00        |
| 1               | 64               | 72        |              | 48.00                 | 48.00  | 000     | 11.00 | 107.00        |
| 2               | 56               | 64        |              | 46.00                 | 46.00  | 000     | 11.00 | 103.00        |
| 3               | 48               | 56        |              | 42.00                 | 42.00  | 000     | 11.00 | 95.00         |
| 4               | 40               | 48        |              | 40.00                 | 40.00  | 00      | 11.00 | 91.00         |
| 5               | 40               | 44        |              | 40.00                 | 40.00  | 00      | 11.00 | 91.00         |
| 6               | 32               | 40        |              | 34.00                 | 34.00  | 00      | 11.00 | 79.00         |
| 8               | 32               | 36        |              | 34.00                 | 34.00  | 0       | 11.00 | 79.00         |
| 10              | 24               | 32        |              | 34.00                 | 34.00  | 0       | 11.00 | 79.00         |
| 12              | 24               | 28        |              | 34.00                 | 34.00  | 0       | 11.00 | 79.00         |
| 12              |                  |           | 32           | 61.00                 | 61.00  | 0       | 11.00 | 133.00        |
| 1/4             | 20               | 28        |              | 31.00                 | 31.00  | 1       | 11.00 | 73.00         |
| 1/4             |                  |           | 32           | 58.00                 | 58.00  | 1       | 11.00 | 127.00        |
| 5/16            | 18               | 24        |              | 31.00                 | 31.00  | 1       | 11.00 | 73.00         |
| 5/16            |                  |           | 32           | 58.00                 | 58.00  | 1       | 11.00 | 127.00        |
| 3/8             | 16               | 24        |              | 32.00                 | 32.00  | 2       | 11.00 | 75.00         |
| 3/8             |                  |           | 32           | 66.00                 | 66.00  | 2       | 11.00 | 143.00        |
| 7/16            | 14               | 20        |              | 32.00                 | 32.00  | 2       | 11.00 | 75.00         |
| 7/16            |                  |           | 28           | 66.00                 | 66.00  | 2       | 11.00 | 143.00        |
| 1/2             | 13               | 20        |              | 34.00                 | 34.00  | 2       | 11.00 | 79.00         |
| 1/2             |                  |           | 28           | 68.00                 | 68.00  | 2       | 11.00 | 147.00        |
| 9/16            | 12               | 18        |              | 43.00                 | 43.00  | 3       | 11.00 | 97.00         |
| 9/16            |                  |           | 24           | 74.00                 | 74.00  | 3       | 11.00 | 159.00        |
| 5/8             | 11               | 18        |              | 44.00                 | 44.00  | 3       | 11.00 | 99.00         |
| 5/8             |                  |           | 24           | 74.00                 | 74.00  | 3       | 11.00 | 159.00        |
| 11/16           |                  |           | 24           | 75.00                 | 75.00  | 3       | 11.00 | 161.00        |
| 3/4             | 10               | 16        |              | 49.00                 | 49.00  | 3       | 11.00 | 109.00        |
| 3/4             |                  |           | 20           | 77.00                 | 77.00  | 3       | 11.00 | 165.00        |
| 13/16           |                  |           | 20           | 88.00                 | 88.00  | 3       | 11.00 | 187.00        |
| 7/8             | 9                | 14        |              | 54.00                 | 54.00  | 4       | 12.00 | 120.00        |
| 7/8             |                  |           | 20           | 88.00                 | 88.00  | 4       | 12.00 | 188.00        |
| 15/16           |                  |           | 20           | 89.00                 | 89.00  | 4       | 12.00 | 190.00        |
| 1"              | 8                | 12        | 14NS         | 62.00                 | 62.00  | 4       | 12.00 | 136.00        |
| 1"              |                  |           | 20           | 99.00                 | 99.00  | 4       | 12.00 | 210.00        |
| 1-1/16          |                  | 12        | 18           | 101.00                | 101.00 | 4       | 12.00 | 214.00        |
| 1-1/8           | 7                | 12        |              | 77.00                 | 77.00  | 4       | 12.00 | 166.00        |
| 1-1/8           |                  |           | 18           | 100.00                | 100.00 | 4       | 12.00 | 212.00        |
| 1-3/16          |                  | 12        | 18           | 110.00                | 110.00 | 5       | 13.00 | 233.00        |
| 1-1/4           | 7                | 12        |              | 80.00                 | 80.00  | 5       | 13.00 | 173.00        |
| 1-1/4           |                  |           | 18           | 106.00                | 106.00 | 5       | 13.00 | 225.00        |
| 1-5/16          |                  | 12        | 18           | 120.00                | 120.00 | 5       | 13.00 | 253.00        |
| 1-3/8           | 6                | 12        |              | 92.00                 | 92.00  | 5       | 13.00 | 197.00        |
| 1-3/8           |                  |           | 18           | 125.00                | 125.00 | 5       | 13.00 | 263.00        |
| 1-7/16          |                  | 12        | 18           | 130.00                | 130.00 | 5       | 13.00 | 273.00        |
| 1-1/2           | 6                | 12        |              | 102.00                | 102.00 | 5       | 13.00 | 217.00        |
| 1-1/2           |                  |           | 18           | 135.00                | 135.00 | 5       | 13.00 | 283.00        |

For chrome plate – add 30%.

# Adjustable Thread Ring Gages



**Class "X"  
Tolerance**

**Precision  
Lapped**

| NOMINAL<br>SIZE | THREADS PER INCH |           |             | MEMBERS            |        | (SET)      | HOLDERS |       |
|-----------------|------------------|-----------|-------------|--------------------|--------|------------|---------|-------|
|                 | NC<br>UNC        | NF<br>UNF | NEF<br>UNEF | GO                 | NO GO  | GO / NO GO | NO.     | PRICE |
|                 |                  |           |             | 2, 3<br>1A, 2A, 3A | 2A, 3A |            |         |       |
| 0               |                  | 80        |             | 148.00             | 148.00 | 296.00     | 1       | 19.00 |
| 1               | 64               | 72        |             | 135.00             | 135.00 | 270.00     | 1       | 19.00 |
| 2               | 56               | 64        |             | 122.00             | 122.00 | 244.00     | 1       | 19.00 |
| 3               | 48               | 56        |             | 122.00             | 122.00 | 244.00     | 1       | 19.00 |
| 4               | 40               | 48        |             | 113.00             | 113.00 | 226.00     | 1       | 19.00 |
| 5               | 40               | 44        |             | 99.00              | 99.00  | 198.00     | 1       | 19.00 |
| 6               | 32               | 40        |             | 99.00              | 99.00  | 198.00     | 1       | 19.00 |
| 8               | 32               | 36        |             | 96.00              | 96.00  | 192.00     | 1       | 19.00 |
| 10              | 24               | 32        |             | 96.00              | 96.00  | 192.00     | 1       | 19.00 |
| 12              | 24               | 28        |             | 96.00              | 96.00  | 192.00     | 1       | 19.00 |
| 12              |                  |           | 32          | 133.00             | 133.00 | 266.00     | 1       | 19.00 |
| 1/4             | 20               | 28        |             | 95.00              | 95.00  | 190.00     | 2       | 20.00 |
| 1/4             |                  |           | 32          | 133.00             | 133.00 | 266.00     | 2       | 20.00 |
| 5/16            | 18               | 24        |             | 95.00              | 95.00  | 190.00     | 2       | 20.00 |
| 5/16            |                  |           | 32          | 133.00             | 133.00 | 266.00     | 2       | 20.00 |
| 3/8             | 16               | 24        |             | 101.00             | 101.00 | 202.00     | 3       | 21.00 |
| 3/8             |                  |           | 32          | 136.00             | 136.00 | 272.00     | 3       | 21.00 |
| 7/16            | 14               | 20        |             | 101.00             | 101.00 | 202.00     | 3       | 21.00 |
| 7/16            |                  |           | 28          | 137.00             | 137.00 | 274.00     | 3       | 21.00 |
| 1/2             | 13               | 20        |             | 108.00             | 108.00 | 216.00     | 3       | 21.00 |
| 1/2             |                  |           | 28          | 138.00             | 138.00 | 276.00     | 3       | 21.00 |
| 9/16            | 12               | 18        |             | 123.00             | 123.00 | 246.00     | 4       | 25.00 |
| 9/16            |                  |           | 24          | 145.00             | 145.00 | 290.00     | 4       | 25.00 |
| 5/8             | 11               | 18        |             | 123.00             | 123.00 | 246.00     | 4       | 25.00 |
| 5/8             |                  |           | 24          | 152.00             | 152.00 | 304.00     | 4       | 25.00 |
| 11/16           |                  |           | 24          | 164.00             | 164.00 | 328.00     | 4       | 25.00 |
| 3/4             | 10               | 16        |             | 153.00             | 153.00 | 306.00     | 4       | 25.00 |
| 3/4             |                  |           | 20          | 190.00             | 190.00 | 380.00     | 4       | 25.00 |
| 13/16           |                  |           | 20          | 194.00             | 194.00 | 388.00     | 4       | 25.00 |
| 7/8             | 9                | 14        |             | 165.00             | 165.00 | 330.00     | 5       | 35.00 |
| 7/8             |                  |           | 20          | 201.00             | 201.00 | 402.00     | 5       | 35.00 |
| 15/16           |                  |           | 20          | 202.00             | 202.00 | 404.00     | 5       | 35.00 |
| 1"              | 8                | 12        | 14NS        | 205.00             | 205.00 | 410.00     | 5       | 35.00 |
| 1"              |                  |           | 20          | 230.00             | 230.00 | 460.00     | 5       | 35.00 |
| 1-1/16          |                  | 12        | 18          | 243.00             | 243.00 | 486.00     | 5       | 35.00 |
| 1-1/8           | 7                | 12        |             | 243.00             | 243.00 | 486.00     | 5       | 35.00 |
| 1-1/8           |                  |           | 18          | 259.00             | 259.00 | 518.00     | 5       | 35.00 |
| 1-3/16          |                  | 12        | 18          | 266.00             | 266.00 | 532.00     | 6       | 45.00 |
| 1-1/4           | 7                | 12        |             | 266.00             | 266.00 | 532.00     | 6       | 45.00 |
| 1-1/4           |                  |           | 18          | 273.00             | 273.00 | 546.00     | 6       | 45.00 |
| 1-5/16          |                  | 12        | 18          | 278.00             | 278.00 | 556.00     | 6       | 45.00 |
| 1-3/8           | 6                | 12        |             | 277.00             | 277.00 | 554.00     | 6       | 45.00 |
| 1-3/8           |                  |           | 18          | 296.00             | 296.00 | 592.00     | 6       | 45.00 |
| 1-7/16          |                  | 12        | 18          | 297.00             | 297.00 | 594.00     | 6       | 45.00 |
| 1-1/2           | 6                | 12        |             | 300.00             | 300.00 | 600.00     | 6       | 45.00 |
| 1-1/2           |                  |           | 18          | 317.00             | 317.00 | 634.00     | 6       | 45.00 |

Chrome Plate for 1/4" and larger – add 50%.

For "J" Conversion – Add \$50.00 to GO ring price.

# Truncated Setting Plug Gages



**Class "X" Pitch Diameters  
"W" Lead & Angles  
Precision Lapped**

| NOMINAL<br>SIZE | THREADS PER INCH |           |             | MEMBERS            |        | HANDLES |       | DOUBLE |
|-----------------|------------------|-----------|-------------|--------------------|--------|---------|-------|--------|
|                 | NC<br>UNC        | NF<br>UNF | NEF<br>UNEF | GO                 | NO GO  | NO.     | PRICE | END    |
|                 |                  |           |             | 2, 3<br>1A, 2A, 3A | 2A, 3A |         |       | 2A, 3A |
| 0               |                  | 80        |             | 96.00              | 96.00  | 000     | 11.00 | 203.00 |
| 1               | 64               | 72        |             | 96.00              | 96.00  | 000     | 11.00 | 203.00 |
| 2               | 56               | 64        |             | 96.00              | 96.00  | 000     | 11.00 | 203.00 |
| 3               | 48               | 56        |             | 87.00              | 87.00  | 000     | 11.00 | 185.00 |
| 4               | 40               | 48        |             | 87.00              | 87.00  | 00      | 11.00 | 185.00 |
| 5               | 40               | 44        |             | 82.00              | 82.00  | 00      | 11.00 | 175.00 |
| 6               | 32               | 40        |             | 82.00              | 82.00  | 00      | 11.00 | 175.00 |
| 8               | 32               | 36        |             | 82.00              | 82.00  | 0       | 11.00 | 175.00 |
| 10              | 24               | 32        |             | 82.00              | 82.00  | 0       | 11.00 | 175.00 |
| 12              | 24               | 28        |             | 87.00              | 87.00  | 0       | 11.00 | 185.00 |
| 12              |                  |           | 32          | 106.00             | 106.00 | 0       | 11.00 | 223.00 |
| 1/4             | 20               | 28        |             | 75.00              | 75.00  | 1       | 11.00 | 161.00 |
| 1/4             |                  |           | 32          | 109.00             | 109.00 | 1       | 11.00 | 229.00 |
| 5/16            | 18               | 24        |             | 75.00              | 75.00  | 1       | 11.00 | 161.00 |
| 5/16            |                  |           | 32          | 109.00             | 109.00 | 1       | 11.00 | 229.00 |
| 3/8             | 16               | 24        |             | 79.00              | 79.00  | 2       | 11.00 | 169.00 |
| 3/8             |                  |           | 32          | 122.00             | 122.00 | 2       | 11.00 | 255.00 |
| 7/16            | 14               | 20        |             | 82.00              | 82.00  | 2       | 11.00 | 175.00 |
| 7/16            |                  |           | 28          | 124.00             | 124.00 | 2       | 11.00 | 259.00 |
| 1/2             | 13               | 20        |             | 84.00              | 84.00  | 2       | 11.00 | 179.00 |
| 1/2             |                  |           | 28          | 135.00             | 135.00 | 2       | 11.00 | 281.00 |
| 9/16            | 12               | 18        |             | 96.00              | 96.00  | 3       | 11.00 | 203.00 |
| 9/16            |                  |           | 24          | 145.00             | 145.00 | 3       | 11.00 | 301.00 |
| 5/8             | 11               | 18        |             | 100.00             | 100.00 | 3       | 11.00 | 211.00 |
| 5/8             |                  |           | 24          | 150.00             | 150.00 | 3       | 11.00 | 311.00 |
| 11/16           |                  |           | 24          | 160.00             | 160.00 | 3       | 11.00 | 331.00 |
| 3/4             | 10               | 16        |             | 116.00             | 116.00 | 3       | 11.00 | 243.00 |
| 3/4             |                  |           | 20          | 158.00             | 158.00 | 3       | 11.00 | 327.00 |
| 13/16           |                  |           | 20          | 165.00             | 165.00 | 3       | 11.00 | 341.00 |
| 7/8             | 9                | 14        |             | 134.00             | 134.00 | 4       | 12.00 | 280.00 |
| 7/8             |                  |           | 20          | 168.00             | 168.00 | 4       | 12.00 | 348.00 |
| 15/16           |                  |           | 20          | 170.00             | 170.00 | 4       | 12.00 | 352.00 |
| 1"              | 8                | 12        | 14NS        | 154.00             | 154.00 | 4       | 12.00 | 320.00 |
| 1"              |                  |           | 20          | 178.00             | 178.00 | 4       | 12.00 | 368.00 |
| 1-1/16          |                  | 12        | 18          | 174.00             | 174.00 | 4       | 12.00 | 360.00 |
| 1-1/8           | 7                | 12        |             | 174.00             | 174.00 | 4       | 12.00 | 360.00 |
| 1-1/8           |                  |           | 18          | 186.00             | 186.00 | 4       | 12.00 | 384.00 |
| 1-3/16          |                  | 12        | 18          | 183.00             | 183.00 | 5       | 13.00 | 379.00 |
| 1-1/4           | 7                | 12        |             | 190.00             | 190.00 | 5       | 13.00 | 393.00 |
| 1-1/4           |                  |           | 18          | 218.00             | 218.00 | 5       | 13.00 | 449.00 |
| 1-5/16          |                  | 12        | 18          | 219.00             | 219.00 | 5       | 13.00 | 451.00 |
| 1-3/8           | 6                | 12        |             | 220.00             | 220.00 | 5       | 13.00 | 453.00 |
| 1-3/8           |                  |           | 18          | 230.00             | 230.00 | 5       | 13.00 | 473.00 |
| 1-7/16          |                  | 12        | 18          | 232.00             | 232.00 | 5       | 13.00 | 477.00 |
| 1-1/2           | 6                | 12        |             | 235.00             | 235.00 | 5       | 13.00 | 483.00 |
| 1-1/2           |                  |           | 18          | 245.00             | 245.00 | 5       | 13.00 | 503.00 |

For class "W" pitch diameters – add 25%.

# "8, 12 & 16" Pitch Thread Plug Gages



"UN" Class 2B & 3B  
Class "X" Tolerance

| NOMINAL SIZE & PITCH |    |    |    | MEMBERS      |                 | HANDLES |       | DOUBLE<br>END |
|----------------------|----|----|----|--------------|-----------------|---------|-------|---------------|
|                      |    |    |    | GO<br>2B, 3B | NO GO<br>2B, 3B | NO.     | PRICE |               |
| 11/16                |    |    | 16 | 106.00       | 106.00          | 3       | 11.00 | 223.00        |
| 13/16                |    |    | 16 | 109.00       | 109.00          | 3       | 11.00 | 229.00        |
| 7/8                  |    |    | 16 | 109.00       | 109.00          | 4       | 12.00 | 230.00        |
| 15/16                |    |    | 16 | 109.00       | 109.00          | 4       | 12.00 | 230.00        |
| 1"                   | ** | ** | 16 | 109.00       | 109.00          | 4       | 12.00 | 230.00        |
| 1-1/16               |    | ** | 16 | 109.00       | 109.00          | 4       | 12.00 | 230.00        |
| 1-1/8                | 8  | ** | 16 | 109.00       | 109.00          | 4       | 12.00 | 230.00        |
| 1-3/16               |    | ** | 16 | 115.00       | 115.00          | 5       | 13.00 | 243.00        |
| 1-1/4                | 8  | ** | 16 | 115.00       | 115.00          | 5       | 13.00 | 243.00        |
| 1-5/16               |    | ** | 16 | 129.00       | 129.00          | 5       | 13.00 | 271.00        |
| 1-3/8                | 8  | ** | 16 | 129.00       | 129.00          | 5       | 13.00 | 271.00        |
| 1-7/16               |    | ** | 16 | 133.00       | 133.00          | 5       | 13.00 | 279.00        |
| 1-1/2                | 8  | ** | 16 | 133.00       | 133.00          | 5       | 13.00 | 279.00        |
| 1-5/8                | 8  | 12 | 16 | 148.00       | 148.00          | 5-1/2   | 19.00 | 315.00        |
| 1-3/4                | 8  | 12 | 16 | 150.00       | 150.00          | 5-1/2   | 19.00 | 319.00        |
| 1-7/8                | 8  | 12 | 16 | 151.00       | 151.00          | 5-1/2   | 19.00 | 321.00        |
| 2"                   | 8  | 12 | 16 | 179.00       | 179.00          | 5-1/2   | 19.00 | 377.00        |
| 2-1/8                | 8  | 12 | 16 | 185.00       | 185.00          | 6       | 19.00 | 389.00        |
| 2-1/4                | 8  | 12 | 16 | 185.00       | 185.00          | 6       | 19.00 | 389.00        |
| 2-3/8                | 8  | 12 | 16 | 205.00       | 205.00          | 6       | 19.00 | 429.00        |
| 2-1/2                | 8  | 12 | 16 | 205.00       | 205.00          | 6       | 19.00 | 429.00        |
| 2-5/8                | 8  | 12 | 16 | 214.00       | 214.00          | 7       | 22.00 | 450.00        |
| 2-3/4                | 8  | 12 | 16 | 214.00       | 214.00          | 7       | 22.00 | 450.00        |
| 2-7/8                | 8  | 12 | 16 | 231.00       | 231.00          | 7       | 22.00 | 484.00        |
| 3"                   | 8  | 12 | 16 | 231.00       | 231.00          | 7       | 22.00 | 506.00*       |
| 3-1/4                | 8  | 12 | 16 | 251.00       | 251.00          | 7       | 22.00 | 546.00*       |
| 3-1/2                | 8  | 12 | 16 | 277.00       | 277.00          | 7       | 22.00 | 598.00*       |
| 3-3/4                | 8  | 12 | 16 | 284.00       | 284.00          | 7       | 22.00 | 612.00*       |
| 4"                   | 8  | 12 | 16 | 304.00       | 304.00          | 7       | 22.00 | 652.00*       |

\* 2 handles

\*\* 8 & 12 pitch for these sizes are standard – see page 4.

Sizes 11/16" to 1-1/2" are Taperlock.

Sizes 1-5/8" to 4" are Trilock.

For plug gages over 4" diameter – call Swanson.

For TiN coated thread plug gages – call Swanson.



## "8, 12 & 16" Pitch Thread Ring Gages



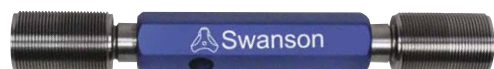
**"UN" Class 2A & 3A  
Class "X" Tolerance  
Precision Lapped**

For ring gages over  
2-1/2" – call Swanson.

| NOMINAL SIZE & PITCH |    |    |    | RING MEMBERS |                 | SET<br>GO / NO GO | HOLDER |       |
|----------------------|----|----|----|--------------|-----------------|-------------------|--------|-------|
|                      |    |    |    | GO<br>2A, 3A | NO GO<br>2A, 3A |                   | NO.    | PRICE |
| 11/16                |    |    | 16 | 288.00       | 288.00          | 576.00            | 4      | 25.00 |
| 13/16                |    |    | 16 | 293.00       | 293.00          | 586.00            | 4      | 25.00 |
| 7/8                  |    |    | 16 | 293.00       | 293.00          | 586.00            | 5      | 35.00 |
| 15/16                |    |    | 16 | 295.00       | 295.00          | 590.00            | 5      | 35.00 |
| 1"                   | ** | ** | 16 | 295.00       | 295.00          | 590.00            | 5      | 35.00 |
| 1-1/16               |    | ** | 16 | 300.00       | 300.00          | 600.00            | 5      | 35.00 |
| 1-1/8                | 8  | ** | 16 | 300.00       | 300.00          | 600.00            | 5      | 35.00 |
| 1-3/16               |    | ** | 16 | 311.00       | 311.00          | 622.00            | 6      | 45.00 |
| 1-1/4                | 8  | ** | 16 | 311.00       | 311.00          | 622.00            | 6      | 45.00 |
| 1-5/16               |    | ** | 16 | 323.00       | 323.00          | 646.00            | 6      | 45.00 |
| 1-3/8                | 8  | ** | 16 | 323.00       | 323.00          | 646.00            | 6      | 45.00 |
| 1-7/16               |    | ** | 16 | 345.00       | 345.00          | 690.00            | 6      | 45.00 |
| 1-1/2                | 8  | ** | 16 | 345.00       | 345.00          | 690.00            | 6      | 45.00 |
| 1-5/8                | 8  | 12 | 16 | 359.00       | 359.00          | 718.00            |        |       |
| 1-3/4                | 8  | 12 | 16 | 381.00       | 381.00          | 762.00            |        |       |
| 1-7/8                | 8  | 12 | 16 | 395.00       | 395.00          | 790.00            |        |       |
| 2"                   | 8  | 12 | 16 | 418.00       | 418.00          | 836.00            |        |       |
| 2-1/8                | 8  | 12 | 16 | 446.00       | 446.00          | 892.00            |        |       |
| 2-1/4                | 8  | 12 | 16 | 446.00       | 446.00          | 892.00            |        |       |
| 2-3/8                | 8  | 12 | 16 | 471.00       | 471.00          | 942.00            |        |       |
| 2-1/2                | 8  | 12 | 16 | 471.00       | 471.00          | 942.00            |        |       |

\*\* 8 & 12 pitch for these sizes are standard – see page 5.

## "8, 12 & 16" Pitch Truncated Setting Plug Gages



**"UN" Class 2A & 3A  
Class "X" Pitch Diameters  
"W" Lead & Angles  
Precision Lapped**

Sizes 11/16" to 1-1/2" are Taperlock.

Sizes 1-5/8" to 2-1/2" are Trilock.

For class "W" pitch diameters –  
call Swanson.

For Setting Plug Gages over  
2-1/2" – call Swanson.

| NOMINAL SIZE & PITCH |    |    |    | MEMBERS      |                 | HOLDER |       | DOUBLE<br>END |
|----------------------|----|----|----|--------------|-----------------|--------|-------|---------------|
|                      |    |    |    | GO<br>2A, 3A | NO GO<br>2A, 3A | NO.    | PRICE |               |
| 11/16                |    |    | 16 | 143.00       | 143.00          | 3      | 11.00 | 297.00        |
| 13/16                |    |    | 16 | 156.00       | 156.00          | 3      | 11.00 | 323.00        |
| 7/8                  |    |    | 16 | 156.00       | 156.00          | 4      | 12.00 | 324.00        |
| 15/16                |    |    | 16 | 174.00       | 174.00          | 4      | 12.00 | 360.00        |
| 1"                   | ** | ** | 16 | 174.00       | 174.00          | 4      | 12.00 | 360.00        |
| 1-1/16               |    | ** | 16 | 183.00       | 183.00          | 4      | 12.00 | 378.00        |
| 1-1/8                | 8  | ** | 16 | 183.00       | 183.00          | 4      | 12.00 | 378.00        |
| 1-3/16               |    | ** | 16 | 210.00       | 210.00          | 5      | 13.00 | 433.00        |
| 1-1/4                | 8  | ** | 16 | 210.00       | 210.00          | 5      | 13.00 | 433.00        |
| 1-5/16               |    | ** | 16 | 228.00       | 228.00          | 5      | 13.00 | 469.00        |
| 1-3/8                | 8  | ** | 16 | 228.00       | 228.00          | 5      | 13.00 | 469.00        |
| 1-7/16               |    | ** | 16 | 238.00       | 238.00          | 5      | 13.00 | 489.00        |
| 1-1/2                | 8  | ** | 16 | 238.00       | 238.00          | 5      | 13.00 | 489.00        |
| 1-5/8                | 8  | 12 | 16 | 243.00       | 243.00          | 5-1/2  | 19.00 | 505.00        |
| 1-3/4                | 8  | 12 | 16 | 245.00       | 245.00          | 5-1/2  | 19.00 | 509.00        |
| 1-7/8                | 8  | 12 | 16 | 252.00       | 252.00          | 5-1/2  | 19.00 | 523.00        |
| 2"                   | 8  | 12 | 16 | 259.00       | 259.00          | 5-1/2  | 19.00 | 537.00        |
| 2-1/8                | 8  | 12 | 16 | 267.00       | 267.00          | 6      | 19.00 | 553.00        |
| 2-1/4                | 8  | 12 | 16 | 267.00       | 267.00          | 6      | 19.00 | 553.00        |
| 2-3/8                | 8  | 12 | 16 | 297.00       | 297.00          | 6      | 19.00 | 613.00        |
| 2-1/2                | 8  | 12 | 16 | 297.00       | 297.00          | 6      | 19.00 | 613.00        |

\*\* 8 & 12 pitch for these sizes are standard – see page 6.

# Helical Coil (STI) Thread Plug Gages



## Class "X" Tolerance Precision Lapped

| NOMINAL<br>SIZE | REGULAR TOOL STEEL |                 |                          | TiN COATED<br>HIGH SPEED STEEL |                 |                          | HANDLES |       |
|-----------------|--------------------|-----------------|--------------------------|--------------------------------|-----------------|--------------------------|---------|-------|
|                 | MEMBERS            |                 | DOUBLE<br>END<br>2B & 3B | MEMBERS                        |                 | DOUBLE<br>END<br>2B & 3B |         |       |
|                 | GO<br>2B, 3B       | NO GO<br>2B, 3B |                          | GO<br>2B, 3B                   | NO GO<br>2B, 3B |                          | NO.     | PRICE |
| 2-56            | 58.00              | 58.00           | 127.00                   | 113.00                         | 113.00          | 237.00                   | 00      | 11.00 |
| 4-40            | 53.00              | 53.00           | 117.00                   | 99.00                          | 99.00           | 209.00                   | 00      | 11.00 |
| 4-48            | 53.00              | 53.00           | 117.00                   | 160.00                         | 160.00          | 331.00                   | 00      | 11.00 |
| 5-40            | 53.00              | 53.00           | 117.00                   | 160.00                         | 160.00          | 331.00                   | 0       | 11.00 |
| 6-32            | 53.00              | 53.00           | 117.00                   | 99.00                          | 99.00           | 209.00                   | 0       | 11.00 |
| 6-40            | 53.00              | 53.00           | 117.00                   | 151.00                         | 151.00          | 313.00                   | 0       | 11.00 |
| 8-32            | 50.00              | 50.00           | 111.00                   | 96.00                          | 96.00           | 203.00                   | 0       | 11.00 |
| 8-36            | 50.00              | 50.00           | 111.00                   | 151.00                         | 151.00          | 313.00                   | 0       | 11.00 |
| 10-24           | 50.00              | 50.00           | 111.00                   | 151.00                         | 151.00          | 313.00                   | 0       | 11.00 |
| 10-32           | 50.00              | 50.00           | 111.00                   | 96.00                          | 96.00           | 203.00                   | 0       | 11.00 |
| 12-24           | 50.00              | 50.00           | 111.00                   | 148.00                         | 148.00          | 307.00                   | 1       | 11.00 |
| 1/4-20          | 48.00              | 48.00           | 107.00                   | 148.00                         | 148.00          | 307.00                   | 1       | 11.00 |
| 1/4-28          | 48.00              | 48.00           | 107.00                   | 94.00                          | 94.00           | 199.00                   | 1       | 11.00 |
| 5/16-18         | 48.00              | 48.00           | 107.00                   | 148.00                         | 148.00          | 307.00                   | 2       | 11.00 |
| 5/16-24         | 48.00              | 48.00           | 107.00                   | 94.00                          | 94.00           | 199.00                   | 1       | 11.00 |
| 3/8-16          | 50.00              | 50.00           | 111.00                   | 137.00                         | 137.00          | 285.00                   | 2       | 11.00 |
| 3/8-24          | 50.00              | 50.00           | 111.00                   | 96.00                          | 96.00           | 203.00                   | 2       | 11.00 |
| 7/16-14         | 52.00              | 52.00           | 115.00                   | 137.00                         | 137.00          | 285.00                   | 3       | 11.00 |
| 7/16-20         | 52.00              | 52.00           | 115.00                   | 148.00                         | 148.00          | 307.00                   | 2       | 11.00 |
| 1/2-13          | 56.00              | 56.00           | 123.00                   | 139.00                         | 139.00          | 289.00                   | 3       | 11.00 |
| 1/2-20          | 56.00              | 56.00           | 123.00                   | 157.00                         | 157.00          | 325.00                   | 3       | 11.00 |
| 9/16-12         | 64.00              | 64.00           | 139.00                   | 154.00                         | 154.00          | 319.00                   | 3       | 11.00 |
| 9/16-18         | 64.00              | 64.00           | 139.00                   | 154.00                         | 154.00          | 319.00                   | 3       | 11.00 |
| 5/8-11          | 64.00              | 64.00           | 139.00                   | 166.00                         | 166.00          | 343.00                   | 3       | 11.00 |
| 5/8-18          | 64.00              | 64.00           | 139.00                   | 166.00                         | 166.00          | 343.00                   | 3       | 11.00 |
| 3/4-10          | 71.00              | 71.00           | 154.00                   | 182.00                         | 182.00          | 376.00                   | 4       | 12.00 |
| 3/4-16          | 71.00              | 71.00           | 153.00                   | 182.00                         | 182.00          | 375.00                   | 3       | 11.00 |

For class "W" pitch diameters – call Swanson.

For chrome plate (on regular steel only) – add 30%.

## Left Hand Thread Work Plugs 2B & 3B



| NOMINAL<br>SIZE | THREADS PER INCH |     | MEMBERS      |                 | HANDLES |       | DOUBLE<br>END |
|-----------------|------------------|-----|--------------|-----------------|---------|-------|---------------|
|                 | UNC              | UNF | GO<br>2B, 3B | NO GO<br>2B, 3B | NO.     | PRICE |               |
| 4               | 40               | 48  | 108.00       | 108.00          | 00      | 11.00 | 227.00        |
| 5               | 40               | 44  | 108.00       | 108.00          | 00      | 11.00 | 227.00        |
| 6               | 32               | 40  | 108.00       | 108.00          | 00      | 11.00 | 227.00        |
| 8               | 32               | 36  | 100.00       | 100.00          | 0       | 11.00 | 211.00        |
| 10              | 24               | 32  | 100.00       | 100.00          | 0       | 11.00 | 211.00        |
| 12              | 24               | 28  | 100.00       | 100.00          | 0       | 11.00 | 211.00        |
| 1/4             | 20               | 28  | 98.00        | 98.00           | 1       | 11.00 | 207.00        |
| 5/16            | 18               | 24  | 98.00        | 98.00           | 1       | 11.00 | 207.00        |
| 3/8             | 16               | 24  | 98.00        | 98.00           | 2       | 11.00 | 207.00        |
| 7/16            | 14               | 20  | 90.00        | 90.00           | 2       | 11.00 | 191.00        |
| 1/2             | 13               | 20  | 90.00        | 90.00           | 2       | 11.00 | 191.00        |
| 9/16            | 12               | 18  | 90.00        | 90.00           | 3       | 11.00 | 191.00        |
| 5/8             | 11               | 18  | 100.00       | 100.00          | 3       | 11.00 | 211.00        |
| 3/4             | 10               | 16  | 106.00       | 106.00          | 3       | 11.00 | 223.00        |

For chrome plate – add 30%.

For TiN coated prices – call Swanson.

## Left Hand Thread Rings 2A & 3A



| NOMINAL<br>SIZE | THREADS PER INCH |     | MEMBERS      |                 | SET<br>PRICE | HOLDERS |       |
|-----------------|------------------|-----|--------------|-----------------|--------------|---------|-------|
|                 | UNC              | UNF | GO<br>2A, 3A | NO GO<br>2A, 3A |              | NO.     | PRICE |
| 4               | 40               | 48  | 273.00       | 273.00          | 546.00       | 1       | 19.00 |
| 5               | 40               | 44  | 258.00       | 258.00          | 516.00       | 1       | 19.00 |
| 6               | 32               | 40  | 257.00       | 257.00          | 514.00       | 1       | 19.00 |
| 8               | 32               | 36  | 237.00       | 237.00          | 474.00       | 1       | 19.00 |
| 10              | 24               | 32  | 237.00       | 237.00          | 474.00       | 1       | 19.00 |
| 12              | 24               | 28  | 237.00       | 237.00          | 474.00       | 1       | 19.00 |
| 1/4             | 20               | 28  | 271.00       | 271.00          | 542.00       | 2       | 20.00 |
| 5/16            | 18               | 24  | 271.00       | 271.00          | 542.00       | 2       | 20.00 |
| 3/8             | 16               | 24  | 273.00       | 273.00          | 546.00       | 3       | 21.00 |
| 7/16            | 14               | 20  | 273.00       | 273.00          | 546.00       | 3       | 21.00 |
| 1/2             | 13               | 20  | 273.00       | 273.00          | 546.00       | 3       | 21.00 |
| 9/16            | 12               | 18  | 282.00       | 282.00          | 564.00       | 4       | 25.00 |
| 5/8             | 11               | 18  | 288.00       | 288.00          | 576.00       | 4       | 25.00 |
| 3/4             | 10               | 16  | 288.00       | 288.00          | 576.00       | 4       | 25.00 |

Chrome plate for 1/4" & larger – add 25%.

## Left Hand Thread Setting Plugs 2A & 3A



| NOMINAL<br>SIZE | THREADS PER INCH |     | MEMBERS      |                 | HANDLES |       | DOUBLE<br>END |
|-----------------|------------------|-----|--------------|-----------------|---------|-------|---------------|
|                 | UNC              | UNF | GO<br>2A, 3A | NO GO<br>2A, 3A | NO.     | PRICE |               |
| 4               | 40               | 48  | 156.00       | 156.00          | 00      | 11.00 | 323.00        |
| 5               | 40               | 44  | 156.00       | 156.00          | 00      | 11.00 | 323.00        |
| 6               | 32               | 40  | 156.00       | 156.00          | 00      | 11.00 | 323.00        |
| 8               | 32               | 36  | 143.00       | 143.00          | 0       | 11.00 | 297.00        |
| 10              | 24               | 32  | 143.00       | 143.00          | 0       | 11.00 | 297.00        |
| 12              | 24               | 28  | 143.00       | 143.00          | 0       | 11.00 | 297.00        |
| 1/4             | 20               | 28  | 134.00       | 134.00          | 1       | 11.00 | 279.00        |
| 5/16            | 18               | 24  | 134.00       | 134.00          | 1       | 11.00 | 279.00        |
| 3/8             | 16               | 24  | 134.00       | 134.00          | 2       | 11.00 | 279.00        |
| 7/16            | 14               | 20  | 134.00       | 134.00          | 2       | 11.00 | 279.00        |
| 1/2             | 13               | 20  | 134.00       | 134.00          | 2       | 11.00 | 279.00        |
| 9/16            | 12               | 18  | 134.00       | 134.00          | 3       | 11.00 | 279.00        |
| 5/8             | 11               | 18  | 140.00       | 140.00          | 3       | 11.00 | 291.00        |
| 3/4             | 10               | 16  | 143.00       | 143.00          | 3       | 11.00 | 297.00        |

For class "W" pitch diameters – add 25%.

# Reversible Thread Plug Gages



**Class "X" Tolerance  
Precision Lapped**

| NOMINAL<br>SIZE | THREADS PER INCH |           | MEMBERS              |        | HANDLES |       | DOUBLE<br>END<br>2B, 3B |
|-----------------|------------------|-----------|----------------------|--------|---------|-------|-------------------------|
|                 | NC<br>UNC        | NF<br>UNF | GO                   | NO GO  | NO.     | PRICE |                         |
|                 |                  |           | 1, 2, 3<br>1B, 2B 3B | 2B, 3B |         |       |                         |
| 0               |                  | 80        | 62.00                | 62.00  | 1W      | 13.00 | 137.00                  |
| 1               | 64               | 72        | 62.00                | 62.00  | 1W      | 13.00 | 137.00                  |
| 2               | 56               | 64        | 62.00                | 62.00  | 2W      | 13.00 | 137.00                  |
| 3               | 48               | 56        | 57.00                | 57.00  | 2W      | 13.00 | 127.00                  |
| 4               | 40               | 48        | 57.00                | 57.00  | 2W      | 13.00 | 127.00                  |
| 5               | 40               | 44        | 49.00                | 49.00  | 2W      | 13.00 | 111.00                  |
| 6               | 32               | 40        | 49.00                | 49.00  | 2W      | 13.00 | 111.00                  |
| 8               | 32               | 36        | 49.00                | 49.00  | 2W      | 13.00 | 111.00                  |
| 10              | 24               | 32        | 49.00                | 49.00  | 3W      | 14.00 | 112.00                  |
| 12              | 24               | 28        | 49.00                | 49.00  | 3W      | 14.00 | 112.00                  |
| 1/4             | 20               | 28        | 46.00                | 46.00  | 3W      | 14.00 | 106.00                  |
| 5/16            | 18               | 24        | 46.00                | 46.00  | 4W      | 15.00 | 107.00                  |
| 3/8             | 16               | 24        | 48.00                | 48.00  | 4W      | 15.00 | 111.00                  |
| 7/16            | 14               | 20        | 48.00                | 48.00  | 5W      | 15.00 | 111.00                  |
| 1/2             | 13               | 20        | 49.00                | 49.00  | 5W      | 15.00 | 113.00                  |
| 9/16            | 12               | 18        | 57.00                | 57.00  | 6W      | 18.00 | 132.00                  |
| 5/8             | 11               | 18        | 60.00                | 60.00  | 6W      | 18.00 | 138.00                  |
| 3/4             | 10               | 16        | 65.00                | 65.00  | 7W      | 20.00 | 150.00                  |

For chrome plate – add 30%.

TiN coated available for #4 and larger.

# Metric Reversible Thread Plug Gages



**Class "X" Tolerance  
Precision Lapped**

| METRIC SIZE AND PITCH |      |      |      |      | MEMBERS |          | HANDLES |       | DOUBLE<br>END |
|-----------------------|------|------|------|------|---------|----------|---------|-------|---------------|
|                       |      |      |      |      | 6H GO   | 6H NO GO | NO.     | PRICE |               |
| M1.6                  | 0.35 |      |      |      | 90.00   | 90.00    | 1W      | 13.00 | 193.00        |
| M2                    | 0.40 |      |      |      | 89.00   | 89.00    | 2W      | 13.00 | 191.00        |
| M2.5                  | 0.45 |      |      |      | 89.00   | 89.00    | 2W      | 13.00 | 191.00        |
| M3                    | 0.50 |      |      |      | 72.00   | 72.00    | 2W      | 13.00 | 157.00        |
| M3.5                  | 0.60 |      |      |      | 65.00   | 65.00    | 2W      | 13.00 | 143.00        |
| M4                    | 0.70 |      |      |      | 65.00   | 65.00    | 2W      | 13.00 | 143.00        |
| M5                    | 0.80 |      |      |      | 65.00   | 65.00    | 3W      | 14.00 | 144.00        |
| M6                    | 1.00 |      |      |      | 60.00   | 60.00    | 3W      | 14.00 | 134.00        |
| M8                    | 1.25 | 1.00 |      |      | 56.00   | 56.00    | 4W      | 15.00 | 127.00        |
| M10                   | 1.50 | 1.25 |      |      | 58.00   | 58.00    | 4W      | 15.00 | 131.00        |
| M12                   | 1.75 | 1.50 | 1.25 | 1.00 | 59.00   | 59.00    | 5W      | 15.00 | 133.00        |
| M14                   | 2.00 | 1.50 |      |      | 68.00   | 68.00    | 6W      | 18.00 | 154.00        |
| M16                   | 2.00 | 1.50 |      |      | 70.00   | 70.00    | 7W      | 20.00 | 160.00        |
| M18                   | 1.50 |      |      |      | 78.00   | 78.00    | 7W      | 20.00 | 176.00        |

For chrome plate – add 30%.

TiN coated available for M3 and larger.



# Metric Thread Plug Gages – Regular & TiN Coated



**Class "X" Tolerance  
Precision Lapped**

| METRIC SIZE AND PITCH |      |      |      |      | REGULAR TOOL STEEL |          |               | TIN COATED<br>HIGH SPEED STEEL |          |               | HANDLES |       |
|-----------------------|------|------|------|------|--------------------|----------|---------------|--------------------------------|----------|---------------|---------|-------|
|                       |      |      |      |      | MEMBERS            |          | DOUBLE<br>END | MEMBERS                        |          | DOUBLE<br>END |         |       |
|                       |      |      |      |      | 6H GO              | 6H NO GO |               | 6H GO                          | 6H NO GO |               | NO.     | PRICE |
| M1.6                  | 0.35 |      |      |      | 56.00              | 56.00    | 123.00        | 119.00                         | 119.00   | 249.00        | 000     | 11.00 |
| M1.8                  | 0.35 |      |      |      | 56.00              | 56.00    | 123.00        | 189.00                         | 189.00   | 389.00        | 000     | 11.00 |
| M2                    | 0.40 |      |      |      | 56.00              | 56.00    | 123.00        | 112.00                         | 112.00   | 235.00        | 000     | 11.00 |
| M2.2                  | 0.45 |      |      |      | 56.00              | 56.00    | 123.00        | 189.00                         | 189.00   | 389.00        | 000     | 11.00 |
| M2.5                  | 0.45 |      |      |      | 51.00              | 51.00    | 113.00        | 105.00                         | 105.00   | 221.00        | 000     | 11.00 |
| M3                    | 0.50 |      |      |      | 51.00              | 51.00    | 113.00        | 105.00                         | 105.00   | 221.00        | 00      | 11.00 |
| M3.5                  | 0.60 |      |      |      | 44.00              | 44.00    | 99.00         | 160.00                         | 160.00   | 331.00        | 00      | 11.00 |
| M4                    | 0.70 |      |      |      | 44.00              | 44.00    | 99.00         | 90.00                          | 90.00    | 191.00        | 0       | 11.00 |
| M4.5                  | 0.75 |      |      |      | 48.00              | 48.00    | 107.00        | 151.00                         | 151.00   | 313.00        | 0       | 11.00 |
| M5                    | 0.80 |      |      |      | 44.00              | 44.00    | 99.00         | 90.00                          | 90.00    | 191.00        | 0       | 11.00 |
| M6                    | 1.00 |      |      |      | 36.00              | 36.00    | 83.00         | 80.00                          | 80.00    | 171.00        | 1       | 11.00 |
| M7                    | 1.00 |      |      |      | 36.00              | 36.00    | 83.00         | 148.00                         | 148.00   | 307.00        | 1       | 11.00 |
| M8                    | 1.25 | 1.00 |      |      | 36.00              | 36.00    | 83.00         | 80.00                          | 80.00    | 171.00        | 1       | 11.00 |
| M10                   | 1.50 | 1.25 | 1.00 | 0.75 | 39.00              | 39.00    | 89.00         | 88.00                          | 88.00    | 187.00        | 2       | 11.00 |
| M12                   | 1.75 | 1.50 | 1.25 | 1.00 | 43.00              | 43.00    | 97.00         | 96.00                          | 96.00    | 203.00        | 2       | 11.00 |
| M14                   | 2.00 | 1.50 |      |      | 46.00              | 46.00    | 103.00        | 139.00                         | 139.00   | 289.00        | 3       | 11.00 |
| M15                   | 1.00 |      |      |      | 48.00              | 48.00    | 107.00        | 169.00                         | 169.00   | 349.00        | 3       | 11.00 |
| M16                   | 2.00 | 1.50 |      |      | 48.00              | 48.00    | 107.00        | 154.00                         | 154.00   | 319.00        | 3       | 11.00 |
| M17                   | 1.00 |      |      |      | 53.00              | 53.00    | 117.00        | 181.00                         | 181.00   | 373.00        | 3       | 11.00 |
| M18                   | 2.50 | 1.50 |      |      | 55.00              | 55.00    | 121.00        | 166.00                         | 166.00   | 343.00        | 3       | 11.00 |
| M20                   | 2.50 | 1.50 | 1.00 |      | 59.00              | 59.00    | 129.00        | 173.00                         | 173.00   | 357.00        | 3       | 11.00 |
| M22                   | 2.50 | 1.50 |      |      | 59.00              | 59.00    | 130.00        | 182.00                         | 182.00   | 376.00        | 4       | 12.00 |
| M24                   | 3.00 | 2.00 |      |      | 69.00              | 69.00    | 150.00        | 190.00                         | 190.00   | 392.00        | 4       | 12.00 |
| M27                   | 3.00 | 2.00 |      |      | 90.00              | 90.00    | 192.00        | 204.00                         | 204.00   | 420.00        | 4       | 12.00 |
| M30                   | 3.50 | 2.00 | 1.50 |      | 106.00             | 106.00   | 225.00        | 225.00                         | 225.00   | 463.00        | 5       | 13.00 |
| M33                   | 3.50 | 2.00 |      |      | 109.00             | 109.00   | 231.00        | 255.00                         | 255.00   | 523.00        | 5       | 13.00 |
| M35                   | 1.50 |      |      |      | 115.00             | 115.00   | 243.00        | 263.00                         | 263.00   | 539.00        | 5       | 13.00 |
| M36                   | 4.00 | 3.00 | 2.00 |      | 123.00             | 123.00   | 259.00        | 263.00                         | 263.00   | 539.00        | 5       | 13.00 |
| M39                   | 4.00 | 3.00 | 2.00 |      | 141.00             | 141.00   | 301.00        | 272.00                         | 272.00   | 563.00        | 5-1/2   | 19.00 |

Metric gages made to ANSI B1.16 dimensions.

Blanks conform to ANSI B47.1 dimensions.

For chrome plate (on regular steel) – add 30%.

# Metric Thread Ring Gages



**Class "X" Tolerance  
Precision Lapped**

| METRIC SIZE AND PITCH |      |      |      |      | MEMBERS |          | SET        | HOLDER |       |
|-----------------------|------|------|------|------|---------|----------|------------|--------|-------|
|                       |      |      |      |      | 6g GO   | 6g NO GO | GO / NO GO | NO.    | PRICE |
| M1.6                  | 0.35 |      |      |      | 169.00  | 169.00   | 338.00     | 1      | 19.00 |
| M1.8                  | 0.35 |      |      |      | 169.00  | 169.00   | 338.00     | 1      | 19.00 |
| M2                    | 0.40 |      |      |      | 152.00  | 152.00   | 304.00     | 1      | 19.00 |
| M2.2                  | 0.45 |      |      |      | 152.00  | 152.00   | 304.00     | 1      | 19.00 |
| M2.5                  | 0.45 |      |      |      | 152.00  | 152.00   | 304.00     | 1      | 19.00 |
| M3                    | 0.50 |      |      |      | 131.00  | 131.00   | 262.00     | 1      | 19.00 |
| M3.5                  | 0.60 |      |      |      | 131.00  | 131.00   | 262.00     | 1      | 19.00 |
| M4                    | 0.70 |      |      |      | 121.00  | 121.00   | 242.00     | 1      | 19.00 |
| M4.5                  | 0.75 |      |      |      | 121.00  | 121.00   | 242.00     | 1      | 19.00 |
| M5                    | 0.80 |      |      |      | 121.00  | 121.00   | 242.00     | 1      | 19.00 |
| M6                    | 1.00 |      |      |      | 112.00  | 112.00   | 224.00     | 2      | 20.00 |
| M7                    | 1.00 |      |      |      | 112.00  | 112.00   | 224.00     | 2      | 20.00 |
| M8                    | 1.25 | 1.00 |      |      | 112.00  | 112.00   | 224.00     | 2      | 20.00 |
| M10                   | 1.50 | 1.25 | 1.00 | 0.75 | 121.00  | 121.00   | 242.00     | 3      | 21.00 |
| M12                   | 1.75 | 1.50 | 1.25 | 1.00 | 130.00  | 130.00   | 260.00     | 3      | 21.00 |
| M14                   | 2.00 | 1.50 |      |      | 145.00  | 145.00   | 290.00     | 4      | 25.00 |
| M15                   | 1.00 |      |      |      | 145.00  | 145.00   | 290.00     | 4      | 25.00 |
| M16                   | 2.00 | 1.50 |      |      | 146.00  | 146.00   | 292.00     | 4      | 25.00 |
| M17                   | 1.00 |      |      |      | 189.00  | 189.00   | 378.00     | 4      | 25.00 |
| M18                   | 2.50 | 1.50 |      |      | 194.00  | 194.00   | 388.00     | 4      | 25.00 |
| M20                   | 2.50 | 1.50 | 1.00 |      | 240.00  | 240.00   | 480.00     | 4      | 25.00 |
| M22                   | 2.50 | 1.50 |      |      | 244.00  | 244.00   | 488.00     | 5      | 35.00 |
| M24                   | 3.00 | 2.00 |      |      | 282.00  | 282.00   | 564.00     | 5      | 35.00 |
| M27                   | 3.00 | 2.00 |      |      | 294.00  | 294.00   | 588.00     | 5      | 35.00 |
| M30                   | 3.50 | 2.00 | 1.50 |      | 298.00  | 298.00   | 596.00     | 6      | 45.00 |
| M33                   | 3.50 | 2.00 |      |      | 329.00  | 329.00   | 658.00     | 6      | 45.00 |
| M35                   | 1.50 |      |      |      | 348.00  | 348.00   | 696.00     | 6      | 45.00 |
| M36                   | 4.00 | 3.00 | 2.00 |      | 366.00  | 366.00   | 732.00     | 6      | 45.00 |
| M39                   | 4.00 | 3.00 | 2.00 |      | 374.00  | 374.00   | 748.00     | 6      | 45.00 |

Metric gages made to ANSI B1.16 dimensions.

Blanks conform to ANSI B47.1 dimensions.

For chrome plate for M6 and larger – add 50%.

# Metric Truncated Setting Plug Gages



**Class "X" Pitch Diameters  
"W" Lead & Angles  
Precision Lapped**

| METRIC SIZE AND PITCH |      |      |      |      | MEMBERS |          | HANDLES |       | DOUBLE<br>END |
|-----------------------|------|------|------|------|---------|----------|---------|-------|---------------|
|                       |      |      |      |      | 6g GO   | 6g NO GO | NO.     | PRICE |               |
| M1.6                  | 0.35 |      |      |      | 117.00  | 117.00   | 000     | 11.00 | 245.00        |
| M1.8                  | 0.35 |      |      |      | 117.00  | 117.00   | 000     | 11.00 | 245.00        |
| M2                    | 0.40 |      |      |      | 110.00  | 110.00   | 000     | 11.00 | 231.00        |
| M2.2                  | 0.45 |      |      |      | 110.00  | 110.00   | 000     | 11.00 | 231.00        |
| M2.5                  | 0.45 |      |      |      | 110.00  | 110.00   | 000     | 11.00 | 231.00        |
| M3                    | 0.50 |      |      |      | 106.00  | 106.00   | 00      | 11.00 | 223.00        |
| M3.5                  | 0.60 |      |      |      | 106.00  | 106.00   | 00      | 11.00 | 223.00        |
| M4                    | 0.70 |      |      |      | 104.00  | 104.00   | 0       | 11.00 | 219.00        |
| M4.5                  | 0.75 |      |      |      | 104.00  | 104.00   | 0       | 11.00 | 219.00        |
| M5                    | 0.80 |      |      |      | 104.00  | 104.00   | 0       | 11.00 | 219.00        |
| M6                    | 1.00 |      |      |      | 92.00   | 92.00    | 1       | 11.00 | 195.00        |
| M7                    | 1.00 |      |      |      | 92.00   | 92.00    | 1       | 11.00 | 195.00        |
| M8                    | 1.25 | 1.00 |      |      | 92.00   | 92.00    | 1       | 11.00 | 195.00        |
| M10                   | 1.50 | 1.25 | 1.00 | 0.75 | 98.00   | 98.00    | 2       | 11.00 | 207.00        |
| M12                   | 1.75 | 1.50 | 1.25 | 1.00 | 101.00  | 101.00   | 2       | 11.00 | 213.00        |
| M14                   | 2.00 | 1.50 |      |      | 120.00  | 120.00   | 3       | 11.00 | 251.00        |
| M15                   | 1.00 |      |      |      | 120.00  | 120.00   | 3       | 11.00 | 251.00        |
| M16                   | 2.00 | 1.50 |      |      | 120.00  | 120.00   | 3       | 11.00 | 251.00        |
| M17                   | 1.00 |      |      |      | 130.00  | 130.00   | 3       | 11.00 | 271.00        |
| M18                   | 2.50 | 1.50 |      |      | 130.00  | 130.00   | 3       | 11.00 | 271.00        |
| M20                   | 2.50 | 1.50 | 1.00 |      | 141.00  | 141.00   | 3       | 11.00 | 293.00        |
| M22                   | 2.50 | 1.50 |      |      | 180.00  | 180.00   | 4       | 12.00 | 372.00        |
| M24                   | 3.00 | 2.00 |      |      | 183.00  | 183.00   | 4       | 12.00 | 378.00        |
| M27                   | 3.00 | 2.00 |      |      | 196.00  | 196.00   | 4       | 12.00 | 408.00        |
| M30                   | 3.50 | 2.00 | 1.50 |      | 199.00  | 199.00   | 5       | 13.00 | 411.00        |
| M33                   | 3.50 | 2.00 |      |      | 215.00  | 215.00   | 5       | 13.00 | 443.00        |
| M35                   | 1.50 |      |      |      | 218.00  | 218.00   | 5       | 13.00 | 449.00        |
| M36                   | 4.00 | 3.00 | 2.00 |      | 238.00  | 238.00   | 5       | 13.00 | 494.00        |
| M39                   | 4.00 | 3.00 | 2.00 |      | 253.00  | 253.00   | 5-1/2   | 19.00 | 525.00        |

Metric gages made to ANSI B1.16 dimensions.

Blanks conform to ANSI B47.1 dimensions.

For class "W" pitch diameters – add 25%.

# Taper Pipe Plug Gages



| SIZE         | NPT<br>L1 | NPTF<br>L1 | NPTF<br>L3 | NPTF<br>6-STEP<br>PLAIN | ANPT<br>L1 | ANPT<br>L3 | ANPT<br>6-STEP<br>PLAIN | HANDLE |       |
|--------------|-----------|------------|------------|-------------------------|------------|------------|-------------------------|--------|-------|
|              |           |            |            |                         |            |            |                         | NO.    | PRICE |
| 1/16-27      | 86.00     | 112.00     | 117.00     | 173.00                  | 141.00     | 147.00     | 176.00                  | 1      | 11.00 |
| 1/8-27       | 57.00     | 77.00      | 83.00      | 173.00                  | 101.00     | 106.00     | 176.00                  | 2      | 11.00 |
| 1/4-18       | 69.00     | 94.00      | 98.00      | 173.00                  | 117.00     | 123.00     | 176.00                  | 3      | 11.00 |
| 3/8-18       | 77.00     | 112.00     | 118.00     | 173.00                  | 141.00     | 145.00     | 176.00                  | 3      | 11.00 |
| 1/2-14       | 87.00     | 129.00     | 133.00     | 173.00                  | 152.00     | 157.00     | 176.00                  | 4      | 12.00 |
| 3/4-14       | 100.00    | 142.00     | 149.00     | 185.00                  | 165.00     | 171.00     | 184.00                  | 4      | 12.00 |
| 1"-11 1/2    | 111.00    | 157.00     | 165.00     | 200.00                  | 189.00     | 194.00     | 210.00                  | 5      | 13.00 |
| 1 1/4-11 1/2 | 124.00    | 185.00     | 185.00     | 220.00                  | 205.00     | 205.00     | 223.00                  | 5      | 13.00 |
| 1 1/2-11 1/2 | 142.00    | 220.00     | 220.00     | 248.00                  | 231.00     | 231.00     | 243.00                  | 5      | 13.00 |
| 2"-11 1/2    | 172.00    | 255.00     | 255.00     | 335.00                  | 269.00     | 269.00     | 339.00                  | 5      | 13.00 |
| 2 1/2-8      | 209.00    | 371.00     | 371.00     | 515.00                  | 412.00     | 412.00     | 520.00                  | 6      | 19.00 |
| 3"-8         | 268.00    | 436.00     | 436.00     | 565.00                  | 486.00     | 486.00     | 620.00                  | 6      | 19.00 |
| 3 1/2-8      | 413.00    |            |            |                         |            |            |                         | 7      | 22.00 |
| 4"-8         | 468.00    |            |            |                         |            |            |                         | 7      | 22.00 |
| 5"-8         | 651.00    |            |            |                         |            |            |                         | 7      | 22.00 |
| 6"-8         | 776.00    |            |            |                         |            |            |                         | 7      | 22.00 |

NPT and NPTF plug gages are single step.

For NPT or NPTF 2-step or 3-step design – add \$35.00 per step.

ANPT L1 & L3 plug gages are 1-step design per SAE AS71051.

For TiN coated Pipe Plug prices – call Swanson.

# Taper Pipe Ring Gages



| SIZE         | NPT<br>L1 | NPTF<br>L1 THIN | NPTF<br>L2 THICK | NPTF<br>6-STEP<br>PLAIN | ANPT<br>L1 THIN | ANPT<br>L2 THICK | ANPT<br>6-STEP<br>PLAIN |
|--------------|-----------|-----------------|------------------|-------------------------|-----------------|------------------|-------------------------|
| 1/16-27      | 187.00    | 196.00          | 273.00           | 307.00                  | 276.00          | 323.00           | 359.00                  |
| 1/8-27       | 142.00    | 171.00          | 254.00           | 307.00                  | 243.00          | 294.00           | 359.00                  |
| 1/4-18       | 142.00    | 162.00          | 273.00           | 307.00                  | 235.00          | 304.00           | 359.00                  |
| 3/8-18       | 151.00    | 160.00          | 266.00           | 307.00                  | 235.00          | 296.00           | 359.00                  |
| 1/2-14       | 171.00    | 177.00          | 277.00           | 307.00                  | 212.00          | 307.00           | 359.00                  |
| 3/4-14       | 191.00    | 197.00          | 307.00           | 342.00                  | 229.00          | 339.00           | 402.00                  |
| 1"-11 1/2    | 218.00    | 230.00          | 334.00           | 342.00                  | 297.00          | 370.00           | 402.00                  |
| 1 1/4-11 1/2 | 241.00    | 245.00          | 363.00           | 373.00                  | 297.00          | 397.00           | 439.00                  |
| 1 1/2-11 1/2 | 286.00    | 294.00          | 397.00           | 429.00                  | 323.00          | 437.00           | 502.00                  |
| 2"-11 1/2    | 341.00    | 416.00          | 459.00           | 480.00                  | 459.00          | 507.00           | 563.00                  |
| 2 1/2-8      | 400.00    | 451.00          | 549.00           | 567.00                  | 499.00          | 605.00           | 665.00                  |
| 3"-8         | 503.00    | 513.00          | 650.00           | 695.00                  | 568.00          | 718.00           | 813.00                  |
| 3 1/2-8      | 719.00    |                 |                  |                         |                 |                  |                         |
| 4"-8         | 822.00    |                 |                  |                         |                 |                  |                         |
| 5"-8         | 993.00    |                 |                  |                         |                 |                  |                         |
| 6"-8         | 1172.00   |                 |                  |                         |                 |                  |                         |

N.P.T. – American National Pipe Thread Series

N.P.T.F. – National Taper Pipe Dryseal Series

A.N.P.T. – Aeronautical Tapered Pipe Thread Series

For Master Plug and Ring prices – call Swanson.



# NPSM Straight Pipe Thread Gages



| SIZE         | WORK PLUGS<br>NPSM-2B |        |       |               | SET PLUGS<br>NPSM-2A |        |       |               | RINGS<br>NPSM-2A |                   |
|--------------|-----------------------|--------|-------|---------------|----------------------|--------|-------|---------------|------------------|-------------------|
|              | GO or<br>NO GO        | HANDLE |       | DOUBLE<br>END | GO or<br>NO GO       | HANDLE |       | DOUBLE<br>END | GO or<br>NO GO   | SET<br>GO & NO GO |
|              |                       | NO.    | PRICE |               |                      | NO.    | PRICE |               |                  |                   |
| 1/8-27       | 98.00                 | 2      | 11.00 | 207.00        | 134.00               | 2      | 11.00 | 279.00        | 273.00           | 546.00            |
| 1/4-18       | 98.00                 | 3      | 11.00 | 207.00        | 134.00               | 3      | 11.00 | 279.00        | 282.00           | 564.00            |
| 3/8-18       | 106.00                | 3      | 11.00 | 223.00        | 143.00               | 3      | 11.00 | 297.00        | 288.00           | 576.00            |
| 1/2-14       | 109.00                | 4      | 12.00 | 230.00        | 156.00               | 4      | 12.00 | 324.00        | 293.00           | 586.00            |
| 3/4-14       | 109.00                | 4      | 12.00 | 230.00        | 183.00               | 4      | 12.00 | 378.00        | 300.00           | 600.00            |
| 1"-11 1/2    | 129.00                | 5      | 13.00 | 271.00        | 228.00               | 5      | 13.00 | 469.00        | 323.00           | 646.00            |
| 1 1/4-11 1/2 | 150.00                | 5-1/2  | 19.00 | 319.00        | 245.00               | 5-1/2  | 19.00 | 509.00        | 381.00           | 762.00            |
| 1 1/2-11 1/2 | 179.00                | 5-1/2  | 19.00 | 377.00        | 259.00               | 5-1/2  | 19.00 | 537.00        | 418.00           | 836.00            |
| 2"-11 1/2    | 205.00                | 6      | 19.00 | 429.00        | 297.00               | 6      | 19.00 | 613.00        | 471.00           | 942.00            |
| 2 1/2-8      | 231.00                | 7      | 22.00 | 506.00*       | 337.00               | 7      | 22.00 | 718.00*       | 557.00           | 1114.00           |
| 3"-8         | 284.00                | 7      | 22.00 | 612.00*       | 417.00               | 7      | 22.00 | 878.00*       | 695.00           | 1390.00           |

For chrome plate: work plugs – add 30%.  
rings – add 50%.

\* 2 Handles

For TiN coated thread work plugs – call Swanson.

# NPSF Straight Pipe Thread Plug Gages



| SIZE      | GO or<br>NO GO | HANDLE |       | DOUBLE<br>END |
|-----------|----------------|--------|-------|---------------|
|           |                | NO.    | PRICE |               |
| 1/16-27   | 98.00          | 1      | 11.00 | 207.00        |
| 1/8-27    | 98.00          | 2      | 11.00 | 207.00        |
| 1/4-18    | 98.00          | 3      | 11.00 | 207.00        |
| 3/8-18    | 106.00         | 3      | 11.00 | 223.00        |
| 1/2-14    | 109.00         | 4      | 12.00 | 230.00        |
| 3/4-14    | 109.00         | 4      | 12.00 | 230.00        |
| 1"-11 1/2 | 129.00         | 5      | 13.00 | 271.00        |

For chrome plate – add 30%.

For TiN coated thread plug gages – call Swanson.

## British Standard Pipe – BSPP "Modified" (Non-Pressure Tight Joints)



| SIZE     | WORK PLUGS "G" (BSPP) |        |       |            | SET PLUGS "G" (BSPP) Class "B" |        |       |            | RINGS "G" (BSPP) Class "B" |                |
|----------|-----------------------|--------|-------|------------|--------------------------------|--------|-------|------------|----------------------------|----------------|
|          | GO or NO GO           | HANDLE |       | DOUBLE END | GO or NO GO                    | HANDLE |       | DOUBLE END | GO or NO GO                | SET GO & NO GO |
|          |                       | NO.    | PRICE |            |                                | NO.    | PRICE |            |                            |                |
| 1/16-28  | 98.00                 | 1      | 11.00 | 207.00     | 134.00                         | 1      | 11.00 | 279.00     | 271.00                     | 542.00         |
| 1/8-28   | 98.00                 | 2      | 11.00 | 207.00     | 134.00                         | 2      | 11.00 | 279.00     | 273.00                     | 546.00         |
| 1/4-19   | 98.00                 | 3      | 11.00 | 207.00     | 134.00                         | 3      | 11.00 | 279.00     | 298.00                     | 596.00         |
| 3/8-19   | 108.00                | 3      | 11.00 | 227.00     | 163.00                         | 3      | 11.00 | 337.00     | 300.00                     | 600.00         |
| 1/2-14   | 109.00                | 4      | 12.00 | 230.00     | 156.00                         | 4      | 12.00 | 324.00     | 293.00                     | 586.00         |
| 3/4-14   | 109.00                | 4      | 12.00 | 230.00     | 183.00                         | 4      | 12.00 | 378.00     | 300.00                     | 600.00         |
| 1"-11    | 129.00                | 5      | 13.00 | 271.00     | 228.00                         | 5      | 13.00 | 469.00     | 323.00                     | 646.00         |
| 1 1/4-11 | 150.00                | 5-1/2  | 19.00 | 319.00     | 245.00                         | 5-1/2  | 19.00 | 509.00     | 381.00                     | 762.00         |
| 1 1/2-11 | 179.00                | 5-1/2  | 19.00 | 377.00     | 259.00                         | 5-1/2  | 19.00 | 537.00     | 418.00                     | 836.00         |
| 2"-11    | 205.00                | 6      | 19.00 | 429.00     | 297.00                         | 6      | 19.00 | 613.00     | 471.00                     | 942.00         |
| 2 1/2-11 | 231.00                | 7      | 22.00 | 506.00*    | 337.00                         | 7      | 22.00 | 718.00*    | 557.00                     | 1114.00        |
| 3"-11    | 284.00                | 7      | 22.00 | 612.00*    | 417.00                         | 7      | 22.00 | 878.00*    | 695.00                     | 1390.00        |

### Note:

\* 2 Handles

- 55° Whitworth thread form, modified with truncated crest and cleared root, for the inspection of product threads to ISO228-1 or BS2779.
- G (internal and external straight).
- There are two classes of external threads: "A" (close fit) and "B" (free fit). Class "B" is used unless Class "A" is specified. Call for Class "A" ring and set plug gage pricing.

For TiN coated thread work plugs – call Swanson.

## British Standard Pipe – BSPT "Modified" (Pressure Tight Joints)



| SIZE     | WORK PLUGS "Rc" or "Rp" System "A" |        |       | RINGS<br>"R"<br>System "A"<br>(BSPT) |                            |
|----------|------------------------------------|--------|-------|--------------------------------------|----------------------------|
|          | WORK PLUG<br>ONLY<br>(BSPT)        | HANDLE |       |                                      | WORKPLUG<br>WITH<br>HANDLE |
|          |                                    | NO.    | PRICE |                                      |                            |
| 1/16-28  | 182.00                             | 1      | 11.00 | 193.00                               | 871.00                     |
| 1/8-28   | 182.00                             | 2      | 11.00 | 193.00                               | 871.00                     |
| 1/4-19   | 182.00                             | 3      | 11.00 | 193.00                               | 904.00                     |
| 3/8-19   | 197.00                             | 3      | 11.00 | 208.00                               | 916.00                     |
| 1/2-14   | 199.00                             | 4      | 12.00 | 211.00                               | 921.00                     |
| 3/4-14   | 199.00                             | 4      | 12.00 | 211.00                               | 943.00                     |
| 1"-11    | 229.00                             | 5      | 13.00 | 242.00                               | 1059.00                    |
| 1 1/4-11 | 260.00                             | 5      | 13.00 | 273.00                               | 1151.00                    |
| 1 1/2-11 | 304.00                             | 5      | 13.00 | 317.00                               | 1249.00                    |
| 2"-11    | 343.00                             | 5      | 13.00 | 356.00                               | 1471.00                    |
| 2 1/2-11 | 382.00                             | 6      | 19.00 | 401.00                               | 1735.00                    |
| 3"-11    | 504.00                             | 6      | 19.00 | 523.00                               | 1999.00                    |

### Note:

- 55° Whitworth thread form, modified with truncated crest and cleared root, to BS21. For the inspection of product threads to BS21, BS EN10226-1, and ISO7-1.
- Rc (internal taper), Rp (internal straight) and R (external taper).
- Call for system "B" gage pricing.
- Plug gages have one step at basic gage plane.

For TiN coated thread work plugs – call Swanson.

# Flexible Hole Location Gages



Hole Location Gages (also referred to as Centerline Hole Location Plugs, or Flex Plugs) are used to measure the location of a tapped hole in a part, typically with a CMM. They are also used to determine centerline to centerline distances of threaded holes.

- Slotted at 90° increments to ensure positive location on the thread flanks, regardless of hole size (sizes over #10 or M5)
- Sizes #10 (M5) and smaller are solid with a front tapered thread section to cover the entire product tolerance (class 2B or 6H)
- The .2500" +/- .0001" (6.35mm +/- .0025mm) shank is concentric to the threaded section within .0002 T.I.R. prior to slotting
- For inspecting the location of a threaded hole in a part
- For determining centerline to centerline distances of threaded holes

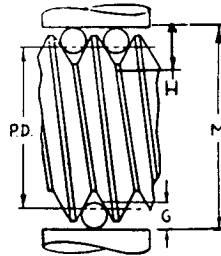
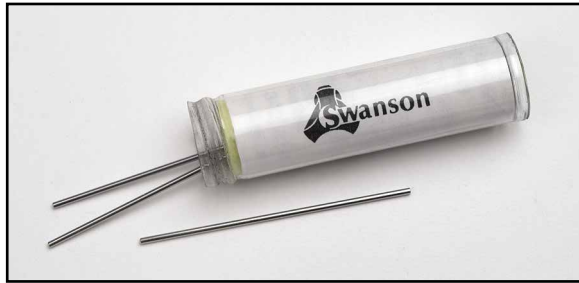
## Inch

| SIZE       | PRICE  | SIZE        | PRICE  |
|------------|--------|-------------|--------|
| 0-80 UNF   | 143.00 | 1/4-28 UNF  | 97.00  |
| 1-64 UNC   | 141.00 | 5/16-18 UNC | 97.00  |
| 1-72 UNF   | 141.00 | 5/16-24 UNF | 97.00  |
| 2-56 UNC   | 140.00 | 3/8-16 UNC  | 107.00 |
| 2-64 UNF   | 140.00 | 3/8-24 UNF  | 107.00 |
| 3-48 UNC   | 133.00 | 7/16-14 UNC | 107.00 |
| 3-56 UNF   | 133.00 | 7/16-20 UNF | 107.00 |
| 4-40 UNC   | 117.00 | 1/2-13 UNC  | 112.00 |
| 4-48 UNF   | 117.00 | 1/2-20 UNF  | 112.00 |
| 5-40 UNC   | 118.00 | 9/16-12 UNC | 112.00 |
| 5-44 UNF   | 118.00 | 9/16-18 UNF | 112.00 |
| 6-32 UNC   | 122.00 | 5/8-11 UNC  | 116.00 |
| 6-40 UNF   | 122.00 | 5/8-18 UNF  | 116.00 |
| 8-32 UNC   | 118.00 | 3/4-10 UNC  | 118.00 |
| 8-36 UNF   | 118.00 | 3/4-16 UNF  | 118.00 |
| 10-24 UNC  | 113.00 | 7/8-9 UNC   | 141.00 |
| 10-32 UNF  | 113.00 | 7/8-14 UNF  | 141.00 |
| 12-24 UNC  | 112.00 | 1"-8 UNC    | 193.00 |
| 12-28 UNF  | 112.00 | 1"-12 UNF   | 193.00 |
| 1/4-20 UNC | 97.00  |             |        |

## Metric

| SIZE        | PRICE  |
|-------------|--------|
| M1.6 x 0.35 | 185.00 |
| M2 x 0.4    | 179.00 |
| M2.5 x 0.45 | 179.00 |
| M3 x 0.5    | 172.00 |
| M3.5 x 0.6  | 172.00 |
| M4 x 0.7    | 166.00 |
| M5 x 0.8    | 154.00 |
| M6 x 1.0    | 138.00 |
| M8 x 1.25   | 136.00 |
| M8 x 1.0    | 136.00 |
| M10 x 1.5   | 142.00 |
| M10 x 1.25  | 144.00 |
| M10 x 0.75  | 195.00 |
| M12 x 1.75  | 151.00 |
| M12 x 1.5   | 151.00 |
| M12 x 1.25  | 154.00 |
| M12 x 1.0   | 154.00 |
| M14 x 2.0   | 162.00 |
| M14 x 1.5   | 162.00 |
| M15 x 1.0   | 162.00 |
| M16 x 2.0   | 162.00 |
| M16 x 1.5   | 166.00 |
| M17 x 1.0   | 168.00 |
| M18 x 1.5   | 168.00 |
| M20 x 2.5   | 168.00 |
| M20 x 1.5   | 172.00 |
| M20 x 1.0   | 172.00 |
| M22 x 2.5   | 189.00 |
| M22 x 1.5   | 189.00 |
| M24 x 3.0   | 205.00 |
| M24 x 2.0   | 205.00 |

# Calibrated Thread Measuring Wires



Measured Pitch Diameter (PD) =  
Measurement over Wires (M) -  
Constant (C)

## 60° Threads

| (n)<br>THREADS<br>PER<br>INCH | (G)<br>NOMINAL<br>BEST<br>WIRE<br>DIAMETER | (C)<br>NOMINAL<br>CONSTANT | PRICE<br>SET<br>OF<br>THREE |
|-------------------------------|--------------------------------------------|----------------------------|-----------------------------|
| 120                           | .00481"                                    | .00722"                    | 157.00                      |
| 100                           | .00577                                     | .00866                     | 157.00                      |
| 96                            | .00601                                     | .00902                     | 157.00                      |
| 90                            | .00642                                     | .00962                     | 157.00                      |
| 80                            | .00722                                     | .01083                     | 157.00                      |
| 72                            | .00802                                     | .01203                     | 157.00                      |
| 64                            | .00902                                     | .01353                     | 157.00                      |
| 56                            | .01031                                     | .01546                     | 157.00                      |
| 50                            | .01155                                     | .01732                     | 157.00                      |
| 48                            | .01203                                     | .01804                     | 99.00                       |
| 44                            | .01312                                     | .01968                     | 99.00                       |
| 40                            | .01443                                     | .02165                     | 99.00                       |
| 36                            | .01604                                     | .02406                     | 99.00                       |
| 32                            | .01804                                     | .02706                     | 99.00                       |
| 30                            | .01925                                     | .02887                     | 99.00                       |
| 28                            | .02062                                     | .03093                     | 99.00                       |
| 27                            | .02138                                     | .03208                     | 99.00                       |
| 26                            | .02221                                     | .03331                     | 99.00                       |
| 24                            | .02406                                     | .03608                     | 99.00                       |
| 22                            | .02624                                     | .03936                     | 99.00                       |
| 20                            | .02887                                     | .04330                     | 99.00                       |
| 18                            | .03208                                     | .04811                     | 99.00                       |
| 16                            | .03608                                     | .05413                     | 99.00                       |
| 14                            | .04124                                     | .06186                     | 99.00                       |
| 13                            | .04441                                     | .06662                     | 99.00                       |
| 12                            | .04811                                     | .07217                     | 99.00                       |
| 11-1/2                        | .05020                                     | .07531                     | 99.00                       |
| 11                            | .05249                                     | .07873                     | 99.00                       |
| 10                            | .05774                                     | .08660                     | 99.00                       |
| 9                             | .06415                                     | .09623                     | 99.00                       |
| 8                             | .07217                                     | .10825                     | 99.00                       |
| 7-1/2                         | .07698                                     | .11547                     | 99.00                       |
| 7                             | .08248                                     | .12372                     | 99.00                       |
| 6                             | .09623                                     | .14434                     | 99.00                       |
| 5-1/2                         | .10497                                     | .15746                     | 150.00                      |
| 5                             | .11547                                     | .17321                     | 152.00                      |
| 4-1/2                         | .12830                                     | .19245                     | 152.00                      |
| 4                             | .14434                                     | .21651                     | 153.00                      |
| 3-1/2                         | .16496                                     | .24744                     | 153.00                      |
| 3-1/4                         | .17765                                     | .26647                     | 153.00                      |
| 3                             | .19245                                     | .28868                     | 153.00                      |
| 2-3/4                         | .20995                                     | .31492                     | 153.00                      |
| 2                             | .28868                                     | .43301                     | 159.00                      |

## 60° Metric Threads

| PITCH<br>mm | NOMINAL<br>BEST WIRE<br>DIAMETER<br>mm | NOMINAL<br>CONSTANT<br>mm | PRICE<br>SET<br>OF<br>THREE |
|-------------|----------------------------------------|---------------------------|-----------------------------|
| .2          | .1155                                  | .1732                     | 159.00                      |
| .225        | .1299                                  | .1949                     | 159.00                      |
| .25         | .1443                                  | .2165                     | 159.00                      |
| .3          | .1732                                  | .2598                     | 159.00                      |
| .35         | .2021                                  | .3031                     | 159.00                      |
| .4          | .2309                                  | .3464                     | 159.00                      |
| .45         | .2598                                  | .3897                     | 159.00                      |
| .5          | .2887                                  | .4330                     | 159.00                      |
| .6          | .3464                                  | .5196                     | 152.00                      |
| .7          | .4041                                  | .6062                     | 152.00                      |
| .75         | .4330                                  | .6495                     | 120.00                      |
| .8          | .4619                                  | .6928                     | 120.00                      |
| .9          | .5196                                  | .7794                     | 120.00                      |
| 1.0         | .5774                                  | .8660                     | 99.00                       |
| 1.25        | .7217                                  | 1.0825                    | 99.00                       |
| 1.5         | .8660                                  | 1.2990                    | 99.00                       |
| 1.75        | 1.0104                                 | 1.5155                    | 99.00                       |
| 2.0         | 1.1547                                 | 1.7321                    | 99.00                       |
| 2.5         | 1.4434                                 | 2.1651                    | 99.00                       |
| 3.0         | 1.7321                                 | 2.5981                    | 99.00                       |
| 3.5         | 2.0207                                 | 3.0311                    | 99.00                       |
| 4.0         | 2.3094                                 | 3.4641                    | 99.00                       |
| 4.5         | 2.5981                                 | 3.8971                    | 112.00                      |
| 5.0         | 2.8868                                 | 4.3301                    | 152.00                      |
| 5.5         | 3.1754                                 | 4.7631                    | 152.00                      |
| 6.0         | 3.4641                                 | 5.1962                    | 152.00                      |
| 7.0         | 4.0415                                 | 6.0622                    | 153.00                      |
| 8.0         | 4.6188                                 | 6.9282                    | 153.00                      |
| 9.0         | 5.1962                                 | 7.7942                    | 153.00                      |
| 10.0        | 5.7735                                 | 8.6603                    | 159.00                      |

**CERTIFICATE OF ACCURACY  
INCLUDED WITH EACH SET**

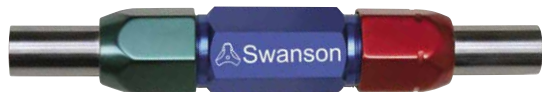
## Special Thread Measuring Wires +/- 20 millionths

| ABOVE - INCLUDING                    | SET OF 3        |
|--------------------------------------|-----------------|
| .004 - .005"<br>.1016mm - .1270mm    | CALL FOR PRICES |
| .005 - .007"<br>.1270mm - .1778mm    |                 |
| .007 - .010"<br>.1778mm - .2540mm    |                 |
| .010 - .0135"<br>.2540mm - 3.429mm   |                 |
| .135 - .260"<br>3.429mm - 6.604mm    |                 |
| .260 - .385"<br>6.604mm - 9.779mm    |                 |
| .385 - .510"<br>9.779mm - 12.954mm   |                 |
| .510 - .635"<br>12.954mm - 16.129mm  |                 |
| .635 - .760"<br>16.129mm - 19.304mm  |                 |
| .760 - 1.010"<br>19.304mm - 25.654mm |                 |

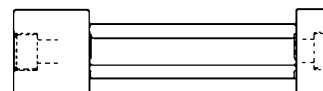
## 29° Acme Best Threads

| THREADS<br>PER<br>INCH<br>(n) | DIAMETER<br>BEST<br>SIZE<br>WIRE | PRICE<br>SET<br>OF<br>THREE |
|-------------------------------|----------------------------------|-----------------------------|
| 1                             | .51645"                          | 184.00                      |
| 1-1/3                         | .38734                           | 176.00                      |
| 1-1/2                         | .34430                           | 176.00                      |
| 1-3/4                         | .29511                           | 176.00                      |
| 2                             | .25823                           | 176.00                      |
| 2-1/2                         | .20658                           | 176.00                      |
| 3                             | .17215                           | 176.00                      |
| 3-1/2                         | .14756                           | 147.00                      |
| 4                             | .12911                           | 147.00                      |
| 4-1/2                         | .11477                           | 147.00                      |
| 5                             | .10329                           | 140.00                      |
| 5-1/2                         | .09390                           | 139.00                      |
| 6                             | .08608                           | 139.00                      |
| 7                             | .07378                           | 139.00                      |
| 8                             | .06456                           | 139.00                      |
| 9                             | .05738                           | 139.00                      |
| 10                            | .05164                           | 139.00                      |
| 12                            | .04304                           | 139.00                      |
| 14                            | .03689                           | 139.00                      |
| 16                            | .03228                           | 139.00                      |
| 18                            | .02869                           | 139.00                      |
| 20                            | .02582                           | 139.00                      |

# Cylindrical Plug Gages



## Reversible Style



## Trilock Style

| SIZE ABOVE – INCLUDING              | CLASS | TOL.   | GO OR NO GO LENGTH | HANDLE # |
|-------------------------------------|-------|--------|--------------------|----------|
| .010 to .075<br>.254mm to 1.91mm    | XX    | .00002 | 2"                 | 1W       |
|                                     | X     | .00004 |                    | 1W       |
|                                     | Y     | .00007 |                    | 1W       |
|                                     | Z     | .00010 |                    | 1W       |
| .075 to .180<br>1.91mm to 4.57mm    | XX    | .00002 | 2"                 | 2W       |
|                                     | X     | .00004 |                    | 2W       |
|                                     | Y     | .00007 |                    | 2W       |
|                                     | Z     | .00010 |                    | 2W       |
| .180 to .281<br>4.57mm to 7.14mm    | XX    | .00002 | 2"                 | 3W       |
|                                     | X     | .00004 |                    | 3W       |
|                                     | Y     | .00007 |                    | 3W       |
|                                     | Z     | .00010 |                    | 3W       |
| .281 to .406<br>7.14mm to 10.31mm   | XX    | .00002 | 2"                 | 4W       |
|                                     | X     | .00004 |                    | 4W       |
|                                     | Y     | .00007 |                    | 4W       |
|                                     | Z     | .00010 |                    | 4W       |
| .406 to .510<br>10.31mm to 12.95mm  | XX    | .00002 | 2"                 | 5W       |
|                                     | X     | .00004 |                    | 5W       |
|                                     | Y     | .00007 |                    | 5W       |
|                                     | Z     | .00010 |                    | 5W       |
| .510 to .635<br>12.95mm to 16.13mm  | XX    | .00002 | 2"                 | 6W       |
|                                     | X     | .00004 |                    | 6W       |
|                                     | Y     | .00007 |                    | 6W       |
|                                     | Z     | .00010 |                    | 6W       |
| .635 to .760<br>16.13mm to 19.30mm  | XX    | .00002 | 2"                 | 7W       |
|                                     | X     | .00004 |                    | 7W       |
|                                     | Y     | .00007 |                    | 7W       |
|                                     | Z     | .00010 |                    | 7W       |
| .760 to .825<br>19.30mm to 20.96mm  | XX    | .00002 | 2"                 | 8W       |
|                                     | X     | .00004 |                    | 8W       |
|                                     | Y     | .00007 |                    | 8W       |
|                                     | Z     | .00010 |                    | 8W       |
| .825 to 1.010<br>20.96mm to 25.65mm | XX    | .00003 | 2"                 | 8W       |
|                                     | X     | .00006 |                    | 8W       |
|                                     | Y     | .00009 |                    | 8W       |
|                                     | Z     | .00012 |                    | 8W       |

| SIZE ABOVE – INCLUDING                 | CLASS | TOL.    | GO LENGTH | NO GO LENGTH | HANDLE # |
|----------------------------------------|-------|---------|-----------|--------------|----------|
| .760 to .947<br>19.30mm to 24.05mm     | XX    | .00003  | 1-1/4"    | 3/4"         | 2-1/2    |
|                                        | X     | .00006  |           |              | 2-1/2    |
|                                        | Y     | .00009  |           |              | 2-1/2    |
|                                        | Z     | .00012  |           |              | 2-1/2    |
| .947 to 1.135<br>24.05mm to 28.83mm    | XX    | .00003  | 1-3/8"    | 3/4"         | 3-1/2    |
|                                        | X     | .00006  |           |              | 3-1/2    |
|                                        | Y     | .00009  |           |              | 3-1/2    |
|                                        | Z     | .00012  |           |              | 3-1/2    |
| 1.135 to 1.510<br>28.83mm to 38.35mm   | XX    | .00003  | 1-1/2"    | 3/4"         | 4-1/2    |
|                                        | X     | .00006  |           |              | 4-1/2    |
|                                        | Y     | .00009  |           |              | 4-1/2    |
|                                        | Z     | .00012  |           |              | 4-1/2    |
| 1.510 to 2.010<br>38.35mm to 51.05mm   | XX    | .00004  | 1-7/8"    | 7/8"         | 5-1/2    |
|                                        | X     | .00008  |           |              | 5-1/2    |
|                                        | Y     | .00012  |           |              | 5-1/2    |
|                                        | Z     | .00016  |           |              | 5-1/2    |
| 2.010 to 2.510<br>51.05mm to 63.75mm   | XX    | .00004  | 2"        | 7/8"         | 6        |
|                                        | X     | .00008  |           |              | 6        |
|                                        | Y     | .00012  |           |              | 6        |
|                                        | Z     | .00016  |           |              | 6        |
| 2.510 to 3.510<br>63.75mm to 89.15mm   | XX    | .00005  | 2"        | 1"           | 7        |
|                                        | X     | .00010  |           |              | 7        |
|                                        | Y     | .00015  |           |              | 7        |
|                                        | Z     | .00020  |           |              | 7        |
| 3.510 to 4.510<br>89.15mm to 114.55mm  | XX    | .00005  | 2-1/8"    | 1"           | 7        |
|                                        | X     | .00010  |           |              | 7        |
|                                        | Y     | .00015  |           |              | 7        |
|                                        | Z     | .00020  |           |              | 7        |
| 4.510 to 6.510<br>114.55mm to 165.35mm | XX    | .000065 | 2-1/8"    | 1"           | 7        |
|                                        | X     | .00013  |           |              | 7        |
|                                        | Y     | .00019  |           |              | 7        |
|                                        | Z     | .00025  |           |              | 7        |
| 6.510 to 8.010<br>165.35mm to 203.45mm | XX    | .00008  | 2-1/8"    | 1"           | 7        |
|                                        | X     | .00016  |           |              | 7        |
|                                        | Y     | .00024  |           |              | 7        |
|                                        | Z     | .00032  |           |              | 7        |

## Direction of Tolerances

GO – Unilateral (Plus)  
NO GO – Unilateral (Minus)

Chrome and Carbide  
also available

## How to Order

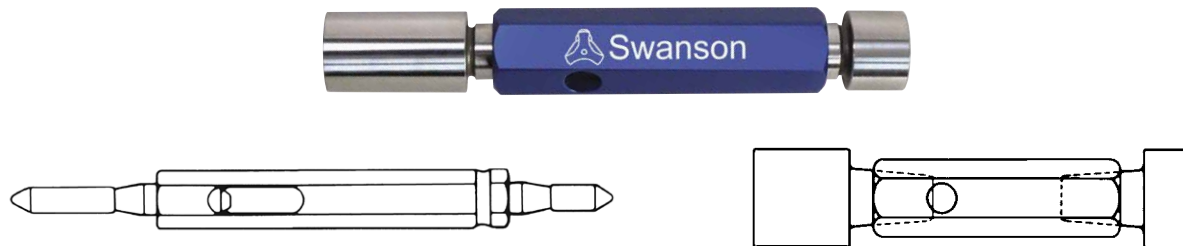
Please specify:

1. Quantity desired.
2. Exact diameter(s).
3. Tolerance.
4. GO or NO GO.
5. Handles (Single or Double End).
6. Marking.

**CALL SWANSON FOR PRICING**



# Taperlock Cylindrical Plug Gages



| SIZE<br>ABOVE - INCLUDING            | CLASS | TOL.   | GO<br>LENGTH | NO GO<br>LENGTH | HANDLE<br># |
|--------------------------------------|-------|--------|--------------|-----------------|-------------|
| .059 to .105<br>1.50mm to 2.67mm     | XX    | .00002 | 3/8"         | 3/16"           | 000         |
|                                      | X     | .00004 |              |                 | 000         |
|                                      | Y     | .00007 |              |                 | 000         |
|                                      | Z     | .00010 |              |                 | 000         |
| .105 to .150<br>2.67mm to 3.81mm     | XX    | .00002 | 3/8"         | 7/32"           | 00          |
|                                      | X     | .00004 |              |                 | 00          |
|                                      | Y     | .00007 |              |                 | 00          |
|                                      | Z     | .00010 |              |                 | 00          |
| .150 to .230<br>3.81mm to 5.84mm     | XX    | .00002 | 13/32"       | 9/32"           | 0           |
|                                      | X     | .00004 |              |                 | 0           |
|                                      | Y     | .00007 |              |                 | 0           |
|                                      | Z     | .00010 |              |                 | 0           |
| .230 to .365<br>5.84mm to 9.27mm     | XX    | .00002 | 3/4"         | 5/16"           | 1           |
|                                      | X     | .00004 |              |                 | 1           |
|                                      | Y     | .00007 |              |                 | 1           |
|                                      | Z     | .00010 |              |                 | 1           |
| .365 to .510<br>9.27mm to 12.95mm    | XX    | .00002 | 1"           | 3/8"            | 2           |
|                                      | X     | .00004 |              |                 | 2           |
|                                      | Y     | .00007 |              |                 | 2           |
|                                      | Z     | .00010 |              |                 | 2           |
| .510 to .825<br>12.95mm to 20.96mm   | XX    | .00002 | 1-1/4"       | 1/2"            | 3           |
|                                      | X     | .00004 |              |                 | 3           |
|                                      | Y     | .00007 |              |                 | 3           |
|                                      | Z     | .00010 |              |                 | 3           |
| .825 to 1.135<br>20.96mm to 28.83mm  | XX    | .00003 | 1-1/2"       | 5/8"            | 4           |
|                                      | X     | .00006 |              |                 | 4           |
|                                      | Y     | .00009 |              |                 | 4           |
|                                      | Z     | .00012 |              |                 | 4           |
| 1.135 to 1.510<br>28.83mm to 38.35mm | XX    | .00003 | 1-5/8"       | 3/4"            | 5           |
|                                      | X     | .00006 |              |                 | 5           |
|                                      | Y     | .00009 |              |                 | 5           |
|                                      | Z     | .00012 |              |                 | 5           |

## Direction of Tolerances

GO – Unilateral (Plus)  
NO GO – Unilateral (Minus)

Chrome and Carbide  
also available

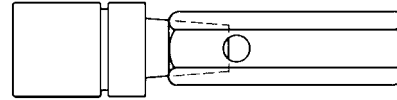
**CALL SWANSON FOR PRICING**

## How to Order

Please specify:

1. Quantity desired.
2. Exact diameter(s).
3. Tolerance.
4. GO or NO GO.
5. Handles (Single or Double End).
6. Marking.

# Progressive Cylindrical Plug Gages



## Taperlock Style

| SIZE<br>ABOVE - INCLUDING            | CLASS | TOL.   | MEMBER<br>LENGTH | GO<br>PORTION | NO GO<br>PORTION | HANDLE<br># |
|--------------------------------------|-------|--------|------------------|---------------|------------------|-------------|
| .105 to .150<br>2.67mm to 3.81mm     | XX    | .00002 | 23/32"           | 3/8"          | 7/32"            | 00          |
|                                      | X     | .00004 |                  |               |                  | 00          |
|                                      | Y     | .00007 |                  |               |                  | 00          |
|                                      | Z     | .00010 |                  |               |                  | 00          |
| .150 to .230<br>3.81mm to 5.84mm     | XX    | .00002 | 13/16"           | 13/32"        | 9/32"            | 0           |
|                                      | X     | .00004 |                  |               |                  | 0           |
|                                      | Y     | .00007 |                  |               |                  | 0           |
|                                      | Z     | .00010 |                  |               |                  | 0           |
| .230 to .365<br>5.84mm to 9.27mm     | XX    | .00002 | 1-3/16"          | 3/4"          | 5/16"            | 1           |
|                                      | X     | .00004 |                  |               |                  | 1           |
|                                      | Y     | .00007 |                  |               |                  | 1           |
|                                      | Z     | .00010 |                  |               |                  | 1           |
| .365 to .510<br>9.27mm to 12.95mm    | XX    | .00002 | 1-1/2"           | 1"            | 3/8"             | 2           |
|                                      | X     | .00004 |                  |               |                  | 2           |
|                                      | Y     | .00007 |                  |               |                  | 2           |
|                                      | Z     | .00010 |                  |               |                  | 2           |
| .510 to .825<br>12.95mm to 20.96mm   | XX    | .00002 | 1-7/8"           | 1-1/4"        | 1/2"             | 3           |
|                                      | X     | .00004 |                  |               |                  | 3           |
|                                      | Y     | .00007 |                  |               |                  | 3           |
|                                      | Z     | .00010 |                  |               |                  | 3           |
| .825 to 1.135<br>20.96mm to 28.83mm  | XX    | .00003 | 2-1/8"           | 1-3/8"        | 5/8"             | 4           |
|                                      | X     | .00006 |                  |               |                  | 4           |
|                                      | Y     | .00009 |                  |               |                  | 4           |
|                                      | Z     | .00012 |                  |               |                  | 4           |
| 1.135 to 1.510<br>28.83mm to 38.35mm | XX    | .00003 | 2-3/8"           | 1-1/2"        | 3/4"             | 5           |
|                                      | X     | .00006 |                  |               |                  | 5           |
|                                      | Y     | .00009 |                  |               |                  | 5           |
|                                      | Z     | .00012 |                  |               |                  | 5           |

The Progressive Style is a Single End Gage having GO and NO GO members combined to make complete inspection of a hole possible with one insertion.

## Direction of Tolerances

GO – Unilateral (Plus)  
NO GO – Unilateral (Minus)

## How to Order

Please specify:

1. Quantity desired.
2. Exact diameter(s).
3. Tolerance.
4. Handles.
5. Marking.

Chrome and Carbide  
also available

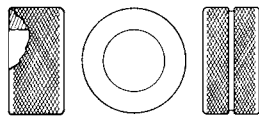
**CALL SWANSON  
FOR PRICING**

## Trilock Style

| SIZE<br>ABOVE - INCLUDING             | CLASS | TOL.   | MEMBER<br>LENGTH | GO<br>PORTION | NO GO<br>PORTION | HANDLE<br># |
|---------------------------------------|-------|--------|------------------|---------------|------------------|-------------|
| 1.510 to 2.010<br>38.35mm to 51.05mm  | XX    | .00004 | 2-7/8"           | 1-7/8"        | 7/8"             | 5-1/2       |
|                                       | X     | .00008 |                  |               |                  | 5-1/2       |
|                                       | Y     | .00012 |                  |               |                  | 5-1/2       |
|                                       | Z     | .00016 |                  |               |                  | 5-1/2       |
| 2.010 to 2.510<br>51.05mm to 63.75mm  | XX    | .00004 | 3"               | 2"            | 7/8"             | 6           |
|                                       | X     | .00008 |                  |               |                  | 6           |
|                                       | Y     | .00012 |                  |               |                  | 6           |
|                                       | Z     | .00016 |                  |               |                  | 6           |
| 2.510 to 3.510<br>63.75mm to 89.15mm  | XX    | .00005 | 3"               | 2"            | 7/8"             | 7           |
|                                       | X     | .00010 |                  |               |                  | 7           |
|                                       | Y     | .00015 |                  |               |                  | 7           |
|                                       | Z     | .00020 |                  |               |                  | 7           |
| 3.510 to 4.510<br>89.15mm to 114.55mm | XX    | .00005 | 3-1/8"           | 2-1/8"        | 7/8"             | 7           |
|                                       | X     | .00010 |                  |               |                  | 7           |
|                                       | Y     | .00015 |                  |               |                  | 7           |
|                                       | Z     | .00020 |                  |               |                  | 7           |

# Cylindrical Ring Gages

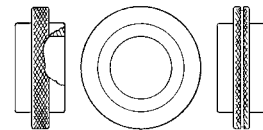
## Solid Type



Sizes .040" - 1.510" (1.02mm-38.35mm)

| SIZE ABOVE – INCLUDING               | CLASS | TOL.   | WIDTH   | O.D.   |
|--------------------------------------|-------|--------|---------|--------|
| .040 to .150<br>1.02mm to 3.81mm     | XX    | .00002 | 3/16"   | 15/16" |
|                                      | X     | .00004 |         |        |
|                                      | Y     | .00007 |         |        |
|                                      | Z     | .00010 |         |        |
| .150 to .230<br>3.81mm to 5.84mm     | XX    | .00002 | 3/8"    | 15/16" |
|                                      | X     | .00004 |         |        |
|                                      | Y     | .00007 |         |        |
|                                      | Z     | .00010 |         |        |
| .230 to .365<br>5.84mm to 9.27mm     | XX    | .00002 | 9/16"   | 1-1/8" |
|                                      | X     | .00004 |         |        |
|                                      | Y     | .00007 |         |        |
|                                      | Z     | .00010 |         |        |
| .365 to .510<br>9.27mm to 12.95mm    | XX    | .00002 | 3/4"    | 1-3/8" |
|                                      | X     | .00004 |         |        |
|                                      | Y     | .00007 |         |        |
|                                      | Z     | .00010 |         |        |
| .510 to .825<br>12.95mm to 20.96mm   | XX    | .00002 | 15/16"  | 1-3/4" |
|                                      | X     | .00004 |         |        |
|                                      | Y     | .00007 |         |        |
|                                      | Z     | .00010 |         |        |
| .825 to 1.135<br>20.96mm to 28.83mm  | XX    | .00003 | 1-1/8"  | 2-1/8" |
|                                      | X     | .00006 |         |        |
|                                      | Y     | .00009 |         |        |
|                                      | Z     | .00012 |         |        |
| 1.135 to 1.510<br>28.83mm to 38.35mm | XX    | .00003 | 1-5/16" | 2-1/2" |
|                                      | X     | .00006 |         |        |
|                                      | Y     | .00009 |         |        |
|                                      | Z     | .00012 |         |        |

## Flanged Type



Sizes Above 1.510" (38.35mm)

| SIZE ABOVE – INCLUDING                 | CLASS | TOL.    | WIDTH  | O.D.    |
|----------------------------------------|-------|---------|--------|---------|
| 1.510 to 2.010<br>38.35mm to 51.05mm   | XX    | .00004  | 1-1/2" | 4"      |
|                                        | X     | .00008  |        |         |
|                                        | Y     | .00012  |        |         |
|                                        | Z     | .00016  |        |         |
| 2.010 to 2.510<br>51.05mm to 63.75mm   | XX    | .00004  | 1-1/2" | 4-1/2"  |
|                                        | X     | .00008  |        |         |
|                                        | Y     | .00012  |        |         |
|                                        | Z     | .00016  |        |         |
| 2.510 to 3.010<br>63.75mm to 76.45mm   | XX    | .00005  | 1-1/2" | 5"      |
|                                        | X     | .00010  |        |         |
|                                        | Y     | .00015  |        |         |
|                                        | Z     | .00020  |        |         |
| 3.010 to 3.510<br>76.45mm to 89.15mm   | XX    | .00005  | 1-1/2" | 5-1/2"  |
|                                        | X     | .00010  |        |         |
|                                        | Y     | .00015  |        |         |
|                                        | Z     | .00020  |        |         |
| 3.510 to 4.010<br>89.15mm to 101.85mm  | XX    | .00005  | 1-1/2" | 6-3/8"  |
|                                        | X     | .00010  |        |         |
|                                        | Y     | .00015  |        |         |
|                                        | Z     | .00020  |        |         |
| 4.010 to 4.760<br>101.85mm to 120.90mm | XX    | .00005  | 1-1/2" | 7-1/4"  |
|                                        | X     | .00010  |        |         |
|                                        | Y     | .00015  |        |         |
|                                        | Z     | .00020  |        |         |
| 4.760 to 5.510<br>120.90mm to 139.95mm | XX    | .000065 | 1-1/2" | 8-1/4"  |
|                                        | X     | .00013  |        |         |
|                                        | Y     | .00019  |        |         |
|                                        | Z     | .00025  |        |         |
| 5.510 to 6.260<br>139.95mm to 159.00mm | XX    | .000065 | 1-1/2" | 9-1/4"  |
|                                        | X     | .00013  |        |         |
|                                        | Y     | .00019  |        |         |
|                                        | Z     | .00025  |        |         |
| 6.260 to 7.010<br>159.00mm to 178.05mm | XX    | .00008  | 1-1/2" | 10-1/4" |
|                                        | X     | .00016  |        |         |
|                                        | Y     | .00024  |        |         |
|                                        | Z     | .00032  |        |         |
| 7.010 to 7.760<br>178.05mm to 197.10mm | XX    | .00008  | 1-1/2" | 11-1/4" |
|                                        | X     | .00016  |        |         |
|                                        | Y     | .00024  |        |         |
|                                        | Z     | .00032  |        |         |
| 7.760 to 8.510<br>197.10mm to 216.15mm | XX    | .00008  | 1-1/2" | 12-1/4" |
|                                        | X     | .00016  |        |         |
|                                        | Y     | .00024  |        |         |
|                                        | Z     | .00032  |        |         |

Plain Cylindrical Ring Gages conform to established AGD specifications. GO and NO GO Rings are made from blanks of the same dimension. An annular groove in the periphery of the NO GO ring distinguishes it from the GO Ring.

### Direction of Tolerances

MASTER – Bilateral (Split)  
GO – Unilateral (Minus)  
NO GO – Unilateral (Plus)

Chrome and Carbide  
also available

### How to Order

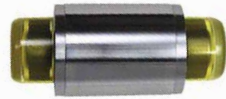
Please specify:

1. Quantity desired.
2. Exact diameter(s).
3. Tolerance.
4. GO or NO GO or MASTER.
5. Marking.

**CALL SWANSON FOR PRICING**

# Master Setting Discs

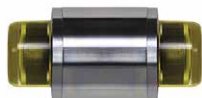
## Style #1



## Style #2



## Style #3



Master Setting Discs are used for setting comparators, snap gages and other precision gages and are furnished with insulating grips to prevent heat distortion.

### Direction of Tolerances

Unless otherwise specified, the gagemaker's tolerance will be applied bilaterally (split 1/2 plus 1/2 minus) on Styles #1 and #3. On Style #2 tolerances will be unilateral, minus on the "GO" section and plus on the "NO GO" section.

### How to Order

Please specify:

1. Quantity desired.
2. Exact diameter(s).\*
3. Style.
4. Tolerance and direction.
5. Marking.

\* Two diameters on Style #2

Chrome and Carbide  
also available

| SIZE<br>ABOVE –<br>INCLUDING              | CLASS | TOL.    | STYLE 1<br>LENGTH | STYLE 2<br>LENGTH | STYLE 3<br>LENGTH |
|-------------------------------------------|-------|---------|-------------------|-------------------|-------------------|
| .105 to .150<br>2.67mm to<br>3.81mm       | XX    | .00002  | 3/4"              | 3/4"              | 3/8"              |
|                                           | X     | .00004  |                   |                   |                   |
|                                           | Y     | .00007  |                   |                   |                   |
|                                           | Z     | .00010  |                   |                   |                   |
| .150 to .230<br>3.81mm to<br>5.84mm       | XX    | .00002  | 7/8"              | 7/8"              | 7/16"             |
|                                           | X     | .00004  |                   |                   |                   |
|                                           | Y     | .00007  |                   |                   |                   |
|                                           | Z     | .00010  |                   |                   |                   |
| .230 to .365<br>5.84mm to<br>9.27mm       | XX    | .00002  | 1"                | 1"                | 1/2"              |
|                                           | X     | .00004  |                   |                   |                   |
|                                           | Y     | .00007  |                   |                   |                   |
|                                           | Z     | .00010  |                   |                   |                   |
| .365 to .510<br>9.27mm to<br>12.95mm      | XX    | .00002  | 1-1/8"            | 1-1/8"            | 9/16"             |
|                                           | X     | .00004  |                   |                   |                   |
|                                           | Y     | .00007  |                   |                   |                   |
|                                           | Z     | .00010  |                   |                   |                   |
| .510 to .825<br>12.95mm to<br>20.96mm     | XX    | .00002  | 1-1/4"            | 1-1/4"            | 5/8"              |
|                                           | X     | .00004  |                   |                   |                   |
|                                           | Y     | .00007  |                   |                   |                   |
|                                           | Z     | .00010  |                   |                   |                   |
| .825 to 1.135<br>20.96mm to<br>28.83mm    | XX    | .00003  | 1-3/8"            | 1-3/8"            | 11/16"            |
|                                           | X     | .00006  |                   |                   |                   |
|                                           | Y     | .00009  |                   |                   |                   |
|                                           | Z     | .00012  |                   |                   |                   |
| 1.135 to 1.510<br>28.83mm to<br>38.35mm   | XX    | .00003  | 1-5/8"            | 1-5/8"            | 13/16"            |
|                                           | X     | .00006  |                   |                   |                   |
|                                           | Y     | .00009  |                   |                   |                   |
|                                           | Z     | .00012  |                   |                   |                   |
| 1.510 to 2.010<br>38.35mm to<br>51.05mm   | XX    | .00004  | 1-7/8"            | 1-7/8"            | 7/8"              |
|                                           | X     | .00008  |                   |                   |                   |
|                                           | Y     | .00012  |                   |                   |                   |
|                                           | Z     | .00016  |                   |                   |                   |
| 2.010 to 2.510<br>51.05mm to<br>63.75mm   | XX    | .00004  | 2"                | 2"                | 7/8"              |
|                                           | X     | .00008  |                   |                   |                   |
|                                           | Y     | .00012  |                   |                   |                   |
|                                           | Z     | .00016  |                   |                   |                   |
| 2.510 to 3.010<br>63.75mm to<br>76.45mm   | XX    | .00005  | 2-1/8"            | 2-1/8"            | 1"                |
|                                           | X     | .00010  |                   |                   |                   |
|                                           | Y     | .00015  |                   |                   |                   |
|                                           | Z     | .00020  |                   |                   |                   |
| 3.010 to 4.510<br>76.45mm to<br>114.55mm  | XX    | .00005  | 2-1/4"            | 2-1/4"            | 1"                |
|                                           | X     | .00010  |                   |                   |                   |
|                                           | Y     | .00015  |                   |                   |                   |
|                                           | Z     | .00020  |                   |                   |                   |
| 4.510 to 6.510<br>114.55mm to<br>165.35mm | XX    | .000065 | 2-1/4"            | 2-1/4"            | 1"                |
|                                           | X     | .00013  |                   |                   |                   |
|                                           | Y     | .00019  |                   |                   |                   |
|                                           | Z     | .00025  |                   |                   |                   |
| 6.510 to 8.010<br>165.35mm to<br>203.45mm | XX    | .00008  | 2-1/4"            | 2-1/4"            | 1"                |
|                                           | X     | .00016  |                   |                   |                   |
|                                           | Y     | .00024  |                   |                   |                   |
|                                           | Z     | .00032  |                   |                   |                   |

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# Pitch Diameters – Thread Plug Gages



**Table I**  
**Classes 2B, 3B**

| Nominal<br>Size | Go<br>Basic<br>All<br>Classes<br>All<br>Series | UNIFIED PITCH DIAMETERS |        |                               |                   |                           | Nominal<br>Size | Go<br>Basic<br>All<br>Classes<br>All<br>Series | UNIFIED PITCH DIAMETERS |        |                               |                   |                           |
|-----------------|------------------------------------------------|-------------------------|--------|-------------------------------|-------------------|---------------------------|-----------------|------------------------------------------------|-------------------------|--------|-------------------------------|-------------------|---------------------------|
|                 |                                                | No Go                   |        | X Tol.<br>Go = +<br>No Go = - | X<br>Lead<br>Tol. | X ±<br>Half Angle<br>Tol. |                 |                                                | No Go                   |        | X Tol.<br>Go = +<br>No Go = - | X<br>Lead<br>Tol. | X ±<br>Half Angle<br>Tol. |
|                 |                                                | CL. 2B                  | CL. 3B |                               |                   |                           |                 |                                                | CL. 2B                  | CL. 3B |                               |                   |                           |
| #0-80 UNF       | .0519                                          | .0542                   | .0536  | .0002                         | .0002             | 0°30'                     | 9/16-24 UNEF    | .5354                                          | .5405                   | .5392  | .0003                         | .0003             | 0°15'                     |
| #1-64 UNC       | .0629                                          | .0655                   | .0648  | .0002                         | .0002             | 0°30'                     | 5/8-11 UNC      | .5660                                          | .5732                   | .5714  | .0003                         | .0003             | 0°10'                     |
| #1-72 UNF       | .0640                                          | .0665                   | .0659  | .0002                         | .0002             | 0°30'                     | 5/8-18 UNF      | .5889                                          | .5949                   | .5934  | .0003                         | .0003             | 0°10'                     |
| #2-56 UNC       | .0744                                          | .0772                   | .0765  | .0002                         | .0002             | 0°30'                     | 5/8-24 UNEF     | .5979                                          | .6031                   | .6018  | .0003                         | .0003             | 0°15'                     |
| #2-64 UNF       | .0759                                          | .0786                   | .0779  | .0002                         | .0002             | 0°30'                     | 11/16-24 UNEF   | .6604                                          | .6656                   | .6643  | .0003                         | .0003             | 0°15'                     |
| #3-48 UNC       | .0855                                          | .0885                   | .0877  | .0002                         | .0002             | 0°30'                     | 3/4-10 UNC      | .6850                                          | .6927                   | .6907  | .0003                         | .0003             | 0°10'                     |
| #3-56 UNF       | .0874                                          | .0902                   | .0895  | .0002                         | .0002             | 0°30'                     | 3/4-16 UNF      | .7094                                          | .7159                   | .7143  | .0003                         | .0003             | 0°10'                     |
| #4-40 UNC       | .0958                                          | .0991                   | .0982  | .0002                         | .0002             | 0°20'                     | 3/4-20 UNEF     | .7175                                          | .7232                   | .7218  | .0003                         | .0003             | 0°15'                     |
| #4-48 UNF       | .0985                                          | .1016                   | .1008  | .0002                         | .0002             | 0°30'                     | 13/16-20 UNEF   | .7800                                          | .7857                   | .7843  | .0003                         | .0003             | 0°15'                     |
| #5-40 UNC       | .1088                                          | .1121                   | .1113  | .0002                         | .0002             | 0°20'                     | 7/8-9 UNC       | .8028                                          | .8110                   | .8089  | .0003                         | .0003             | 0°10'                     |
| #5-44 UNF       | .1102                                          | .1134                   | .1126  | .0002                         | .0002             | 0°20'                     | 7/8-14 UNF      | .8286                                          | .8356                   | .8339  | .0003                         | .0003             | 0°10'                     |
| #6-32 UNC       | .1177                                          | .1214                   | .1204  | .0003                         | .0003             | 0°15'                     | 7/8-20 UNEF     | .8425                                          | .8482                   | .8468  | .0003                         | .0003             | 0°15'                     |
| #6-40 UNF       | .1218                                          | .1252                   | .1243  | .0002                         | .0002             | 0°20'                     | 15/16-20 UNEF   | .9050                                          | .9109                   | .9094  | .0003                         | .0003             | 0°15'                     |
| #8-32 UNC       | .1437                                          | .1475                   | .1465  | .0003                         | .0003             | 0°15'                     | 1"-8 UNC        | .9188                                          | .9276                   | .9254  | .0004                         | .0004             | 0°05'                     |
| #8-36 UNF       | .1460                                          | .1496                   | .1487  | .0002                         | .0002             | 0°20'                     | 1"-12 UNF       | .9459                                          | .9535                   | .9516  | .0003                         | .0003             | 0°10'                     |
| #10-24 UNC      | .1629                                          | .1672                   | .1661  | .0003                         | .0003             | 0°15'                     | 1"-14 UNS       | .9536                                          | .9609                   | .9590  | .0003                         | .0003             | 0°10'                     |
| #10-32 UNF      | .1697                                          | .1736                   | .1726  | .0003                         | .0003             | 0°15'                     | 1"-20 UNEF      | .9675                                          | .9734                   | .9719  | .0003                         | .0003             | 0°15'                     |
| #12-24 UNC      | .1889                                          | .1933                   | .1922  | .0003                         | .0003             | 0°15'                     | 11/16-12 UN     | 1.0084                                         | 1.0158                  | 1.0139 | .0003                         | .0003             | 0°10'                     |
| #12-28 UNF      | .1928                                          | .1970                   | .1959  | .0003                         | .0003             | 0°15'                     | 11/16-18 UNEF   | 1.0264                                         | 1.0326                  | 1.0310 | .0003                         | .0003             | 0°10'                     |
| #12-32 UNEF     | .1957                                          | .1998                   | .1988  | .0003                         | .0003             | 0°15'                     | 11/8-7 UNC      | 1.0322                                         | 1.0416                  | 1.0393 | .0004                         | .0004             | 0°05'                     |
| 1/4-20 UNC      | .2175                                          | .2224                   | .2211  | .0003                         | .0003             | 0°15'                     | 1 1/8-12 UNF    | 1.0709                                         | 1.0787                  | 1.0768 | .0003                         | .0003             | 0°10'                     |
| 1/4-28 UNF      | .2268                                          | .2311                   | .2300  | .0003                         | .0003             | 0°15'                     | 1 1/8-18 UNEF   | 1.0889                                         | 1.0951                  | 1.0935 | .0003                         | .0003             | 0°10'                     |
| 1/4-32 UNEF     | .2297                                          | .2339                   | .2328  | .0003                         | .0003             | 0°15'                     | 13/16-12 UN     | 1.1334                                         | 1.1409                  | 1.1390 | .0003                         | .0003             | 0°10'                     |
| 5/16-18 UNC     | .2764                                          | .2817                   | .2803  | .0003                         | .0003             | 0°10'                     | 13/16-18 UNEF   | 1.1514                                         | 1.1577                  | 1.1561 | .0003                         | .0003             | 0°10'                     |
| 5/16-24 UNF     | .2854                                          | .2902                   | .2890  | .0003                         | .0003             | 0°15'                     | 1 1/4-7 UNC     | 1.1572                                         | 1.1668                  | 1.1644 | .0004                         | .0004             | 0°05'                     |
| 5/16-32 UNEF    | .2922                                          | .2964                   | .2953  | .0003                         | .0003             | 0°15'                     | 1 1/4-12 UNF    | 1.1959                                         | 1.2039                  | 1.2019 | .0003                         | .0003             | 0°10'                     |
| 3/8-16 UNC      | .3344                                          | .3401                   | .3387  | .0003                         | .0003             | 0°10'                     | 1 1/4-18 UNEF   | 1.2139                                         | 1.2202                  | 1.2186 | .0003                         | .0003             | 0°10'                     |
| 3/8-24 UNF      | .3479                                          | .3528                   | .3516  | .0003                         | .0003             | 0°15'                     | 15/16-12 UN     | 1.2584                                         | 1.2659                  | 1.2640 | .0003                         | .0003             | 0°10'                     |
| 3/8-32 UNEF     | .3547                                          | .3591                   | .3580  | .0003                         | .0003             | 0°15'                     | 15/16-18 UNEF   | 1.2764                                         | 1.2827                  | 1.2811 | .0003                         | .0003             | 0°10'                     |
| 7/16-14 UNC     | .3911                                          | .3972                   | .3957  | .0003                         | .0003             | 0°10'                     | 13/8-6 UNC      | 1.2667                                         | 1.2771                  | 1.2745 | .0004                         | .0004             | 0°05'                     |
| 7/16-20 UNF     | .4050                                          | .4104                   | .4091  | .0003                         | .0003             | 0°15'                     | 13/8-12 UNF     | 1.3209                                         | 1.3291                  | 1.3270 | .0003                         | .0003             | 0°10'                     |
| 7/16-28 UNEF    | .4143                                          | .4189                   | .4178  | .0003                         | .0003             | 0°15'                     | 13/8-18 UNEF    | 1.3389                                         | 1.3452                  | 1.3436 | .0003                         | .0003             | 0°10'                     |
| 1/2-13 UNC      | .4500                                          | .4565                   | .4548  | .0003                         | .0003             | 0°10'                     | 17/16-12 UN     | 1.3834                                         | 1.3910                  | 1.3891 | .0003                         | .0003             | 0°10'                     |
| 1/2-20 UNF      | .4675                                          | .4731                   | .4717  | .0003                         | .0003             | 0°15'                     | 17/16-18 UNEF   | 1.4014                                         | 1.4079                  | 1.4062 | .0003                         | .0003             | 0°10'                     |
| 1/2-28 UNEF     | .4768                                          | .4816                   | .4804  | .0003                         | .0003             | 0°15'                     | 1 1/2-6 UNC     | 1.3917                                         | 1.4022                  | 1.3996 | .0004                         | .0004             | 0°05'                     |
| 9/16-12 UNC     | .5084                                          | .5152                   | .5135  | .0003                         | .0003             | 0°10'                     | 1 1/2-12 UNF    | 1.4459                                         | 1.4542                  | 1.4522 | .0003                         | .0003             | 0°10'                     |
| 9/16-18 UNF     | .5264                                          | .5323                   | .5308  | .0003                         | .0003             | 0°10'                     | 1 1/2-18 UNEF   | 1.4639                                         | 1.4704                  | 1.4687 | .0003                         | .0003             | 0°10'                     |



# Pitch Diameters – Thread Ring & Setting Plug Gages



**Table II**  
**Classes 2A, 3A**

| Nominal<br>Size | UNIFIED PITCH DIAMETERS |       |          |       |                               | Nominal<br>Size | UNIFIED PITCH DIAMETERS |        |          |        |                               |
|-----------------|-------------------------|-------|----------|-------|-------------------------------|-----------------|-------------------------|--------|----------|--------|-------------------------------|
|                 | Class 2A                |       | Class 3A |       | X Tol.<br>Go = -<br>No Go = + |                 | Class 2A                |        | Class 3A |        | X Tol.<br>Go = -<br>No Go = + |
|                 | Go                      | No Go | Go       | No Go |                               |                 | Go                      | No Go  | Go       | No Go  |                               |
| #0-80 UNF       | .0514                   | .0496 | .0519    | .0506 | .0002                         | 9/16-24 UNEF    | .5342                   | .5303  | .5354    | .5325  | .0003                         |
| #1-64 UNC       | .0623                   | .0603 | .0629    | .0614 | .0002                         | 5/8-11 UNC      | .5644                   | .5589  | .5660    | .5619  | .0003                         |
| #1-72 UNF       | .0634                   | .0615 | .0640    | .0626 | .0002                         | 5/8-18 UNF      | .5875                   | .5828  | .5889    | .5854  | .0003                         |
| #2-56 UNC       | .0738                   | .0717 | .0744    | .0728 | .0002                         | 5/8-24 UNEF     | .5967                   | .5927  | .5979    | .5949  | .0003                         |
| #2-64 UNF       | .0753                   | .0733 | .0759    | .0744 | .0002                         | 11/16-24 UNEF   | .6592                   | .6552  | .6604    | .6574  | .0003                         |
| #3-48 UNC       | .0848                   | .0825 | .0855    | .0838 | .0002                         | 3/4-10 UNC      | .6832                   | .6773  | .6850    | .6806  | .0003                         |
| #3-56 UNF       | .0867                   | .0845 | .0874    | .0858 | .0002                         | 3/4-16 UNF      | .7079                   | .7029  | .7094    | .7056  | .0003                         |
| #4-40 UNC       | .0950                   | .0925 | .0958    | .0939 | .0002                         | 3/4-20 UNEF     | .7162                   | .7118  | .7175    | .7142  | .0003                         |
| #4-48 UNF       | .0978                   | .0954 | .0985    | .0967 | .0002                         | 13/16-20 UNEF   | .7787                   | .7743  | .7800    | .7767  | .0003                         |
| #5-40 UNC       | .1080                   | .1054 | .1088    | .1069 | .0002                         | 7/8-9 UNC       | .8009                   | .7946  | .8028    | .7981  | .0003                         |
| #5-44 UNF       | .1095                   | .1070 | .1102    | .1083 | .0002                         | 7/8-14 UNF      | .8270                   | .8216  | .8286    | .8245  | .0003                         |
| #6-32 UNC       | .1169                   | .1141 | .1177    | .1156 | .0003                         | 7/8-20 UNEF     | .8412                   | .8368  | .8425    | .8392  | .0003                         |
| #6-40 UNF       | .1210                   | .1184 | .1218    | .1198 | .0002                         | 15/16-20 UNEF   | .9036                   | .8991  | .9050    | .9016  | .0003                         |
| #8-32 UNC       | .1428                   | .1399 | .1437    | .1415 | .0003                         | 1"-8 UNC        | .9168                   | .9100  | .9188    | .9137  | .0004                         |
| #8-36 UNF       | .1452                   | .1424 | .1460    | .1439 | .0002                         | 1"-12 UNF       | .9441                   | .9382  | .9459    | .9415  | .0003                         |
| #10-24 UNC      | .1619                   | .1586 | .1629    | .1604 | .0003                         | 1"-14 UNS       | .9519                   | .9463  | .9536    | .9494  | .0003                         |
| #10-32 UNF      | .1688                   | .1658 | .1697    | .1674 | .0003                         | 1"-20 UNEF      | .9661                   | .9616  | .9675    | .9641  | .0003                         |
| #12-24 UNC      | .1879                   | .1845 | .1889    | .1863 | .0003                         | 11/16-12 UN     | 1.0067                  | 1.0010 | 1.0084   | 1.0042 | .0003                         |
| #12-28 UNF      | .1918                   | .1886 | .1928    | .1904 | .0003                         | 11/16-18 UNEF   | 1.0250                  | 1.0203 | 1.0264   | 1.0228 | .0003                         |
| #12-32 UNEF     | .1948                   | .1917 | .1957    | .1933 | .0003                         | 1 1/8-7 UNC     | 1.0300                  | 1.0228 | 1.0322   | 1.0268 | .0004                         |
| 1/4-20 UNC      | .2164                   | .2127 | .2175    | .2147 | .0003                         | 1 1/8-12 UNF    | 1.0691                  | 1.0631 | 1.0709   | 1.0664 | .0003                         |
| 1/4-28 UNF      | .2258                   | .2225 | .2268    | .2243 | .0003                         | 1 1/8-18 UNEF   | 1.0875                  | 1.0828 | 1.0889   | 1.0853 | .0003                         |
| 1/4-32 UNEF     | .2287                   | .2255 | .2297    | .2273 | .0003                         | 13/16-12 UN     | 1.1317                  | 1.1259 | 1.1334   | 1.1291 | .0003                         |
| 5/16-18 UNC     | .2752                   | .2712 | .2764    | .2734 | .0003                         | 13/16-18 UNEF   | 1.1499                  | 1.1450 | 1.1514   | 1.1478 | .0003                         |
| 5/16-24 UNF     | .2843                   | .2806 | .2854    | .2827 | .0003                         | 1 1/4-7 UNC     | 1.1550                  | 1.1476 | 1.1572   | 1.1517 | .0004                         |
| 5/16-32 UNEF    | .2912                   | .2880 | .2922    | .2898 | .0003                         | 1 1/4-12 UNF    | 1.1941                  | 1.1879 | 1.1959   | 1.1913 | .0003                         |
| 3/8-16 UNC      | .3331                   | .3287 | .3344    | .3311 | .0003                         | 1 1/4-18 UNEF   | 1.2124                  | 1.2075 | 1.2139   | 1.2103 | .0003                         |
| 3/8-24 UNF      | .3468                   | .3430 | .3479    | .3450 | .0003                         | 15/16-12 UN     | 1.2567                  | 1.2509 | 1.2584   | 1.2541 | .0003                         |
| 3/8-32 UNEF     | .3537                   | .3503 | .3547    | .3522 | .0003                         | 15/16-18 UNEF   | 1.2749                  | 1.2700 | 1.2764   | 1.2728 | .0003                         |
| 7/16-14 UNC     | .3897                   | .3850 | .3911    | .3876 | .0003                         | 13/8-6 UNC      | 1.2643                  | 1.2563 | 1.2667   | 1.2607 | .0004                         |
| 7/16-20 UNF     | .4037                   | .3995 | .4050    | .4019 | .0003                         | 13/8-12 UNF     | 1.3190                  | 1.3127 | 1.3209   | 1.3162 | .0003                         |
| 7/16-28 UNEF    | .4132                   | .4096 | .4143    | .4116 | .0003                         | 13/8-18 UNEF    | 1.3374                  | 1.3325 | 1.3389   | 1.3353 | .0003                         |
| 1/2-13 UNC      | .4485                   | .4435 | .4500    | .4463 | .0003                         | 17/16-12 UN     | 1.3816                  | 1.3757 | 1.3834   | 1.3790 | .0003                         |
| 1/2-20 UNF      | .4662                   | .4619 | .4675    | .4643 | .0003                         | 17/16-18 UNEF   | 1.3999                  | 1.3949 | 1.4014   | 1.3977 | .0003                         |
| 1/2-28 UNEF     | .4757                   | .4720 | .4768    | .4740 | .0003                         | 1 1/2-6 UNC     | 1.3893                  | 1.3812 | 1.3917   | 1.3856 | .0004                         |
| 9/16-12 UNC     | .5068                   | .5016 | .5084    | .5045 | .0003                         | 1 1/2-12 UNF    | 1.4440                  | 1.4376 | 1.4459   | 1.4411 | .0003                         |
| 9/16-18 UNF     | .5250                   | .5205 | .5264    | .5230 | .0003                         | 1 1/2-18 UNEF   | 1.4624                  | 1.4574 | 1.4639   | 1.4602 | .0003                         |

# Pitch Diameters – (STI) Screw Thread Insert Plug Gages



**Table III**  
**Classes 2B, 3B**

| Nominal<br>Size | PITCH DIAMETERS |          |          | X Tol.<br>Go = +<br>No Go = - |
|-----------------|-----------------|----------|----------|-------------------------------|
|                 | GO              | 2B NO GO | 3B NO GO |                               |
| #4-40 UNC       | .1283           | .1308    | .1299    | .0002                         |
| #4-48 UNF       | .1256           | .1279    | .1271    | .0002                         |
| #5-40 UNC       | .1413           | .1438    | .1430    | .0002                         |
| #6-32 UNC       | .1583           | .1611    | .1601    | .0003                         |
| #6-40 UNF       | .1543           | .1569    | .1560    | .0002                         |
| #8-32 UNC       | .1843           | .1872    | .1862    | .0003                         |
| #8-36 UNF       | .1821           | .1849    | .1840    | .0002                         |
| #10-24 UNC      | .2170           | .2203    | .2192    | .0003                         |
| #10-32 UNF      | .2103           | .2133    | .2123    | .0003                         |
| #12-24 UNC      | .2430           | .2464    | .2453    | .0003                         |
| 1/4-20 UNC      | .2825           | .2864    | .2851    | .0003                         |
| 1/4-28 UNF      | .2732           | .2765    | .2754    | .0003                         |
| 5/16-18 UNC     | .3486           | .3529    | .3515    | .0003                         |
| 5/16-24 UNF     | .3395           | .3433    | .3421    | .0003                         |
| 3/8-16 UNC      | .4156           | .4203    | .4189    | .0003                         |
| 3/8-24 UNF      | .4020           | .4059    | .4047    | .0003                         |
| 7/16-14 UNC     | .4839           | .4890    | .4875    | .0003                         |
| 7/16-20 UNF     | .4700           | .4744    | .4731    | .0003                         |
| 1/2-13 UNC      | .5499           | .5554    | .5537    | .0003                         |
| 1/2-20 UNF      | .5325           | .5371    | .5357    | .0003                         |
| 9/16-12 UNC     | .6167           | .6225    | .6208    | .0003                         |
| 9/16-18 UNF     | .5986           | .6035    | .6020    | .0003                         |
| 5/8-11 UNC      | .6841           | .6903    | .6885    | .0003                         |
| 5/8-18 UNF      | .6611           | .6661    | .6646    | .0003                         |
| 3/4-10 UNC      | .8149           | .8216    | .8196    | .0003                         |
| 3/4-16 UNF      | .7906           | .7961    | .7945    | .0003                         |

# Pitch Diameters – Metric Thread Gages



**Table IV (Internal)  
Thread Plug Gages**

| SIZE<br>mm | PITCH<br>mm | PITCH DIAMETERS |             |             |
|------------|-------------|-----------------|-------------|-------------|
|            |             | Go<br>(Basic)   | No Go<br>4H | No Go<br>6H |
| M1.6       | 0.35        | 1.373           | 1.426       | 1.458       |
| M1.8       | 0.35        | 1.573           | 1.626       | 1.658       |
| M2         | 0.4         | 1.740           | 1.796       | 1.830       |
| M2.2       | 0.45        | 1.908           | 1.968       | 2.003       |
| M2.5       | 0.45        | 2.208           | 2.268       | 2.303       |
| M3         | 0.5         | 2.675           | 2.738       | 2.775       |
| M3.5       | 0.6         | 3.110           | 3.181       | 3.222       |
| M4         | 0.7         | 3.545           | 3.620       | 3.663       |
| M4.5       | 0.75        | 4.013           | 4.088       | 4.131       |
| M5         | 0.8         | 4.480           | 4.560       | 4.605       |
| M6         | 1           | 5.350           | 5.445       | 5.500       |
| M7         | 1           | 6.350           | 6.445       | 6.500       |
| M8         | 1.25        | 7.188           | 7.288       | 7.348       |
| M8         | 1           | 7.350           | 7.445       | 7.500       |
| M10        | 1.5         | 9.026           | 9.138       | 9.206       |
| M10        | 1.25        | 9.188           | 9.288       | 9.348       |
| M12        | 1.75        | 10.863          | 10.988      | 11.063      |
| M12        | 1.25        | 11.188          | 11.300      | 11.368      |
| M14        | 2           | 12.701          | 12.833      | 12.913      |
| M14        | 1.5         | 13.026          | 13.144      | 13.216      |
| M16        | 2           | 14.701          | 14.833      | 14.913      |
| M16        | 1.5         | 15.026          | 15.144      | 15.216      |
| M18        | 2.5         | 16.376          | 16.516      | 16.600      |
| M18        | 1.5         | 17.026          | 17.144      | 17.216      |
| M20        | 2.5         | 18.376          | 18.516      | 18.600      |
| M20        | 1.5         | 19.026          | 19.144      | 19.216      |
| M22        | 2.5         | 20.376          | 20.516      | 20.600      |
| M22        | 1.5         | 21.026          | 21.144      | 21.216      |
| M24        | 3           | 22.051          | 22.221      | 22.316      |
| M24        | 2           | 22.701          | 22.841      | 22.925      |
| M27        | 3           | 25.051          | 25.221      | 25.316      |
| M27        | 2           | 25.701          | 25.841      | 25.925      |
| M30        | 3.5         | 27.727          | 27.907      | 28.007      |
| M30        | 2           | 28.701          | 28.841      | 28.925      |
| M33        | 3.5         | 30.727          | 30.907      | 31.007      |
| M33        | 2           | 31.701          | 31.841      | 31.925      |
| M36        | 4           | 33.402          | 33.592      | 33.702      |
| M36        | 3           | 34.051          | 34.221      | 34.316      |
| M39        | 4           | 36.402          | 36.592      | 36.702      |
| M39        | 3           | 37.051          | 37.221      | 37.316      |



**Table V (External)  
Thread Ring & Setting Plug Gages**

| SIZE<br>mm | PITCH<br>mm | PITCH DIAMETERS |             |             |
|------------|-------------|-----------------|-------------|-------------|
|            |             | Go<br>4g & 6g   | No Go<br>4g | No Go<br>6g |
| M1.6       | 0.35        | 1.354           | 1.314       | 1.291       |
| M1.8       | 0.35        | 1.554           | 1.514       | 1.491       |
| M2         | 0.4         | 1.721           | 1.679       | 1.654       |
| M2.2       | 0.45        | 1.888           | 1.843       | 1.817       |
| M2.5       | 0.45        | 2.188           | 2.143       | 2.117       |
| M3         | 0.5         | 2.655           | 2.607       | 2.580       |
| M3.5       | 0.6         | 3.089           | 3.036       | 3.004       |
| M4         | 0.7         | 3.523           | 3.467       | 3.433       |
| M4.5       | 0.75        | 3.991           | 3.935       | 3.901       |
| M5         | 0.8         | 4.456           | 4.396       | 4.361       |
| M6         | 1           | 5.324           | 5.253       | 5.212       |
| M7         | 1           | 6.324           | 6.253       | 6.212       |
| M8         | 1.25        | 7.160           | 7.085       | 7.042       |
| M8         | 1           | 7.324           | 7.253       | 7.212       |
| M10        | 1.5         | 8.994           | 8.909       | 8.862       |
| M10        | 1.25        | 9.160           | 9.085       | 9.042       |
| M12        | 1.75        | 10.829          | 10.734      | 10.679      |
| M12        | 1.25        | 11.160          | 11.075      | 11.028      |
| M14        | 2           | 12.663          | 12.563      | 12.503      |
| M14        | 1.5         | 12.994          | 12.904      | 12.854      |
| M16        | 2           | 14.663          | 14.563      | 14.503      |
| M16        | 1.5         | 14.994          | 14.904      | 14.854      |
| M18        | 2.5         | 16.334          | 16.228      | 16.164      |
| M18        | 1.5         | 16.994          | 16.904      | 16.854      |
| M20        | 2.5         | 18.334          | 18.228      | 18.164      |
| M20        | 1.5         | 18.994          | 18.904      | 18.854      |
| M22        | 2.5         | 20.334          | 20.228      | 20.164      |
| M22        | 1.5         | 20.994          | 20.904      | 20.854      |
| M24        | 3           | 22.003          | 21.878      | 21.803      |
| M24        | 2           | 22.663          | 22.557      | 22.493      |
| M27        | 3           | 25.003          | 24.878      | 24.803      |
| M27        | 2           | 25.663          | 25.557      | 25.493      |
| M30        | 3.5         | 27.674          | 27.542      | 27.462      |
| M30        | 2           | 28.663          | 28.557      | 28.493      |
| M33        | 3.5         | 30.674          | 30.542      | 30.462      |
| M33        | 2           | 31.663          | 31.557      | 31.493      |
| M36        | 4           | 33.342          | 33.202      | 33.118      |
| M36        | 3           | 34.003          | 33.878      | 33.803      |
| M39        | 4           | 36.342          | 36.202      | 36.118      |
| M39        | 3           | 37.003          | 36.878      | 36.803      |

Note: To obtain inch values for pitch diameters multiply by .03937.

# Pitch Diameters – Straight Pipe Gages



Table VI

| PIPE SIZE    | MEMBER | PITCH DIAMETERS FOR STRAIGHT PIPE GAGES |        |        |        |         |                   |        |
|--------------|--------|-----------------------------------------|--------|--------|--------|---------|-------------------|--------|
|              |        | THREAD PLUG GAGES                       |        |        |        |         | THREAD RING GAGES |        |
|              |        | NPSF                                    | NPSI   | NPSL   | NPSC   | NPSM-2B | NPSM-2A           | NPSL   |
| 1/16-27      | Go     | .2768                                   | .2791  |        |        |         |                   |        |
|              | No Go  | .2803                                   | .2826  |        |        |         |                   |        |
| 1/8-27       | Go     | .3692                                   | .3715  | .3863  | .3701  | .3736   | .3725             | .3840  |
|              | No Go  | .3727                                   | .3750  | .3898  | .3771  | .3783   | .3689             | .3805  |
| 1/4-18       | Go     | .4852                                   | .4886  | .5073  | .4864  | .4916   | .4903             | .5038  |
|              | No Go  | .4904                                   | .4938  | .5125  | .4968  | .4974   | .4859             | .4986  |
| 3/8-18       | Go     | .6205                                   | .6240  | .6444  | .6218  | .6270   | .6256             | .6409  |
|              | No Go  | .6257                                   | .6292  | .6496  | .6322  | .6329   | .6211             | .6357  |
| 1/2-14       | Go     | .7700                                   | .7745  | .8008  | .7717  | .7784   | .7769             | .7963  |
|              | No Go  | .7767                                   | .7812  | .8075  | .7851  | .7851   | .7718             | .7896  |
| 3/4-14       | Go     | .9805                                   | .9850  | 1.0112 | .9822  | .9889   | .9873             | 1.0067 |
|              | No Go  | .9872                                   | .9917  | 1.0179 | .9956  | .9958   | .9820             | 1.0000 |
| 1"-11 1/2    | Go     | 1.2284                                  | 1.2338 | 1.2658 | 1.2305 | 1.2386  | 1.2369            | 1.2604 |
|              | No Go  | 1.2365                                  | 1.2420 | 1.2739 | 1.2468 | 1.2462  | 1.2311            | 1.2523 |
| 1 1/4-11 1/2 | Go     |                                         |        | 1.6106 | 1.5752 | 1.5834  | 1.5816            | 1.6051 |
|              | No Go  |                                         |        | 1.6187 | 1.5915 | 1.5912  | 1.5756            | 1.5970 |
| 1 1/2-11 1/2 | Go     |                                         |        | 1.8495 | 1.8142 | 1.8223  | 1.8205            | 1.8441 |
|              | No Go  |                                         |        | 1.8576 | 1.8305 | 1.8302  | 1.8144            | 1.8360 |
| 2"-11 1/2    | Go     |                                         |        | 2.3234 | 2.2881 | 2.2963  | 2.2944            | 2.3180 |
|              | No Go  |                                         |        | 2.3315 | 2.3044 | 2.3044  | 2.2882            | 2.3099 |

**NPSM–National Pipe Straight Mechanical**–These external and internal threads are intended for free-fitting mechanical joints where there are no internal pressures. The product is gaged with straight Go and No Go plug and ring gages.

**NPSL–National Pipe Straight Locknut**–These external and internal threads are intended to produce a thread having the largest diameter that is possible to cut on standard pipe. The product is gaged with straight Go and No Go plug and ring gages.

**NH–National Fire-Hose Coupling Threads**–These external and internal threads are intended for fire hose, garden hose, chemical engine and booster hose. The product is gaged with straight Go and No Go plug and ring gages.

**NPSH–National Hose Coupling Threads**–These external and internal threads are intended for steam, air, water, and all other hose connections to be made up with standard pipe threads. The product is gaged with straight Go and No Go plug and ring gages.

**NPSC–National Pipe Straight Coupling**–These internal threads are intended to form low pressure tight joints when assembled with NPT external threads by using a sealer. The product may be gaged with a NPT plug gage or with straight Go and No Go plug gages.

**NPSF–Dryseal American Standard Fuel**–These internal threads are intended for use in soft or ductile materials for assembly with NPTF external threads without using a sealer. The product may be gaged with NPTF-LI basic notch plug gage or with straight Go and No Go plug gages.

**NPSI–Dryseal American Standard Intermediate**–These internal threads are intended for use in hard or brittle materials for assembly with PTF-SAE short external threads but may also be assembled with full length NPTF external threads. The product may be gaged with a NPTF-LI basic notch plug gage or with straight Go and No Go plug gages.

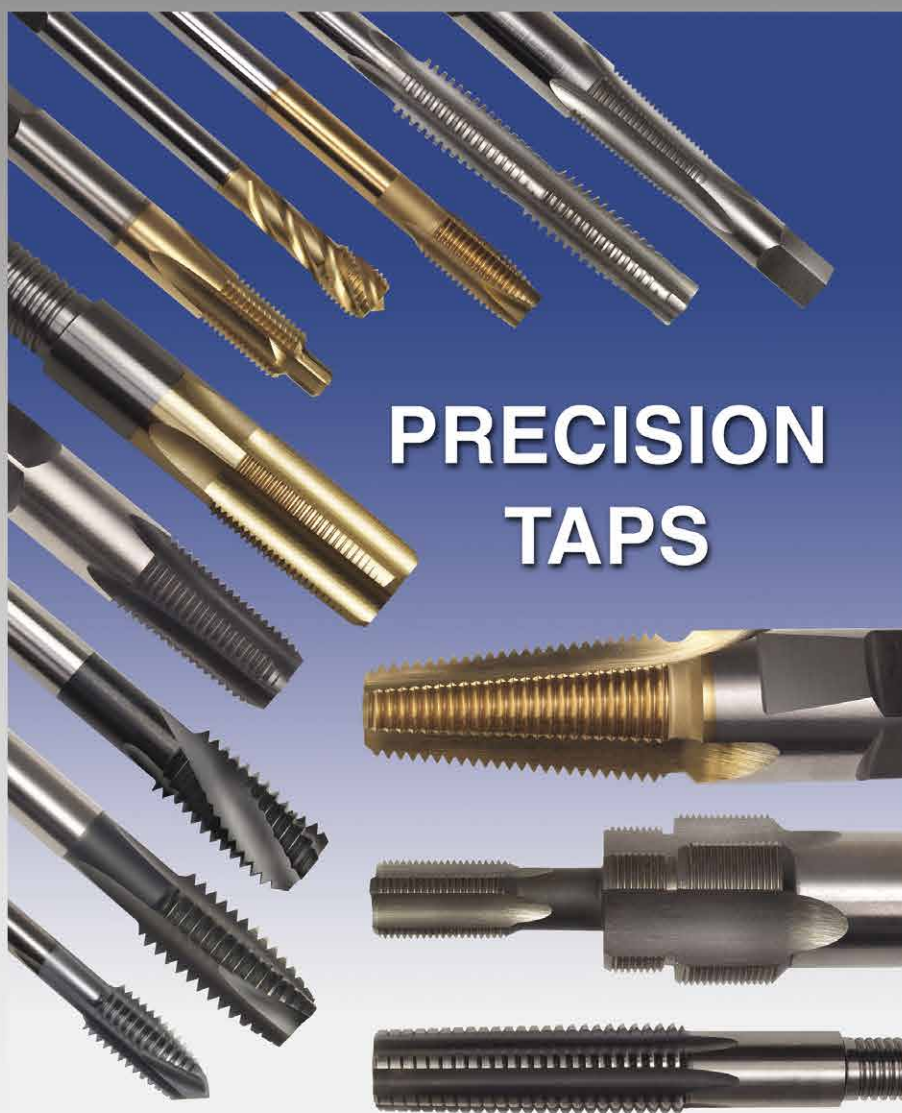
**NOTE:** NPSM and NPSF Series Gages are available from stock.

# ANSI Thread Series Designations

| DESIGNATIONS                              | THREAD SERIES                                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UN                                        | Unified National, Constant Pitch, 60°, Inch                                                                                                                                 |
| UNC                                       | Unified National Coarse, 60°, Inch                                                                                                                                          |
| UNF                                       | Unified National Fine, 60°, Inch                                                                                                                                            |
| UNEF                                      | Unified National Extra Fine, 60°, Inch                                                                                                                                      |
| UNS                                       | Unified National Special, 60°, Inch                                                                                                                                         |
| N, NC, NF, NEF, NS                        | American National, 60°, Inch, Constant Pitch, Coarse, Fine, Extra Fine & Special                                                                                            |
| UNJ, UNJC, UNJF, UNJEF, UNJS              | Unified National, 60° Inch, Constant Pitch, Coarse, Fine, Extra Fine & Special, with .18042P Controlled Root Radius on External Thread                                      |
| UNR, UNRC, UNRF, UNREF, UNRS              | Unified National, 60° Inch, Constant Pitch, Coarse, Fine, Extra Fine & Special, with .144P Controlled Root Radius on External Thread                                        |
| ACME-G, ACME-C                            | Acme, General Purpose and Centralizing, 29°                                                                                                                                 |
| AMO                                       | American Microscopic Objective, 55°, Inch                                                                                                                                   |
| NC5, NC5HF, NC5CSF, NC5ONF, NC5IF, NC5INF | American National Coarse Interference Fit, 60°, Inch, HF – Hard Ferrous, CSF – Copper or Soft Ferrous, ONF – Other Nonferrous, IF – Entire Ferrous, INF – Entire Nonferrous |
| M                                         | Metric, 60°                                                                                                                                                                 |
| MJ                                        | Metric, 60° with .15P to .18P Controlled Root Radius on External Thread                                                                                                     |
| UNM                                       | Unified National Miniature, 60° Metric                                                                                                                                      |
| ANPT                                      | Aeronautical National Pipe Taper, 60° Taper, Inch                                                                                                                           |
| NPT                                       | National (American) Pipe Taper, 60° Taper, Inch                                                                                                                             |
| NPTF                                      | National (American) Pipe Taper Fuel, Dryseal, 60° Taper, Inch                                                                                                               |
| PTF-SAE SHORT                             | National (American) Pipe Taper Fuel Short, Dryseal, 60° Taper, Inch                                                                                                         |
| F-PTF                                     | National (American) Pipe Taper Fuel Short Fine, Dryseal, 60° Taper, Inch                                                                                                    |
| NPSL                                      | National (American) Pipe Straight Locknut, 60° Taper, Inch                                                                                                                  |
| NPSM                                      | National (American) Pipe Straight Mechanical, 60° Taper, Inch                                                                                                               |
| NPSC                                      | National (American) Pipe Straight Coupling, 60° Taper, Inch                                                                                                                 |
| NPSF                                      | National (American) Pipe Straight Fuel, 60° Taper, Inch                                                                                                                     |
| NPSI                                      | National (American) Pipe Straight Intermediate, 60° Taper, Inch                                                                                                             |
| NPSH                                      | National (American) Pipe Straight Hose, 60° Taper, Inch, for Hose Couplings                                                                                                 |
| NH                                        | National (American) Pipe Straight Hose, 60° Taper, Inch, for Fire Hose Couplings                                                                                            |
| NHR                                       | National (American) Pipe Straight Hose, 60° Taper, Inch, for Garden Hose Applications                                                                                       |
| NGT, SGT                                  | National Gas Taper & Special Gas Taper, 60° Taper, Inch                                                                                                                     |
| NGO                                       | National Gas Outlet, 60° Straight, Inch                                                                                                                                     |
| NGS                                       | National Gas Straight, 60° Straight, Inch                                                                                                                                   |
| SPL-PTF                                   | National (American) Pipe Taper Fuel Short, Special Diameter – Pitch Combination Dryseal, 60° Taper, Inch                                                                    |
| STUB ACME                                 | Stub Acme, 29° Inch, reduced thread height of standard Acme                                                                                                                 |
| BUTT                                      | Buttress, "PULL" type 45° clearance flank leading / 7° load flank, Inch                                                                                                     |
| PUSH-BUTT                                 | Buttress, "PUSH" type 7° load flank leading / 45° clearance flank, Inch                                                                                                     |
| STI                                       | Helical Coil Screw Thread Insert, Inch and Metric                                                                                                                           |
| R (BSPT), Rc (BSPT), Rp                   | British Standard Pipe For Pressure Tight Joints, - Rc (internal taper), Rp (Internal straight) and R (External taper) 55° Whitworth Form, Inch                              |
| G (BSPP)                                  | British Standard Pipe For Non-Pressure Tight Joints, - - G (Internal and external straight) 55° Whitworth Form, Inch                                                        |
| BA                                        | British Association, 47.5°                                                                                                                                                  |
| BSF                                       | British Association Standard Fine Pitch, 55° Whitworth Form, Inch                                                                                                           |
| BSW                                       | British Association Standard Whitworth Coarse Pitch, 55° Whitworth Form, Inch                                                                                               |
| AWWA                                      | American Water Works Association, for Underground Service Line Fittings, Taper and Straight 60°, Inch                                                                       |
| DIN                                       | Deutsches Institut für Normung, German Institute for Standardization                                                                                                        |
| JIS                                       | Japanese Industrial Standard                                                                                                                                                |
| ISO                                       | International Standards Organization                                                                                                                                        |



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