

Precision Thread and Plain Gages

Including Gage Calibration

Swanson
tool manufacturing, inc.

2023

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

| | Plugs | Rings |
|--------------------------|------------------|------------------|
| Sizes 1/16" to 3" | \$42.00 / member | \$66.00 / member |
| Sizes 3-1/2" to 6" | \$58.00 / member | \$80.00 / member |

CYLINDRICAL GAGES

| | Plugs | Rings |
|--|------------------|------------------|
| Sizes .040" to .060" (M1.016 to M1.524)..... | \$88.00 / member | \$88.00 / member |
| Sizes .061" to .100" (M1.525 to M2.54)..... | \$70.00 / member | \$70.00 / member |
| Sizes .101" to 2.010" (M2.541 to M51.05)..... | \$60.00 / member | \$60.00 / member |
| Sizes 2.011" to 5.510" (M51.06 to M140.0)..... | \$70.00 / member | \$70.00 / 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

Titanium Nitride Coated HSS Thread Plug Gages



**Class "X" Tolerance
Precision Lapped**

| NOMINAL SIZE | THREADS PER INCH | | | MEMBERS | | HANDLES | | DOUBLE END |
|--------------|------------------|--------|----------|-----------------------|--------|---------|-------|------------|
| | NC UNC | NF UNF | NEF UNEF | GO | NO GO | NO. | PRICE | 2B, 3B |
| | | | | 1, 2, 3 1B, 2B, 3B | 2B, 3B | | | |
| 0 | | 80 | | 117.00 | 117.00 | 000 | 12.00 | 246.00 |
| 1 | 64 | 72 | | 117.00 | 117.00 | 000 | 12.00 | 246.00 |
| 2 | 56 | 64 | | 102.00 | 102.00 | 000 | 12.00 | 216.00 |
| 3 | 48 | 56 | | 102.00 | 102.00 | 000 | 12.00 | 216.00 |
| 4 | 40 | 48 | | 92.00 | 92.00 | 00 | 12.00 | 196.00 |
| 5 | 40 | 44 | | 92.00 | 92.00 | 00 | 12.00 | 196.00 |
| 6 | 32 | 40 | | 81.00 | 81.00 | 00 | 12.00 | 174.00 |
| 8 | 32 | 36 | | 81.00 | 81.00 | 0 | 12.00 | 174.00 |
| 10 | 24 | 32 | | 81.00 | 81.00 | 0 | 12.00 | 174.00 |
| 12 | 24 | 28 | | 81.00 | 81.00 | 0 | 12.00 | 174.00 |
| 12 | | | 32 | 169.00 | 169.00 | 0 | 12.00 | 350.00 |
| 1/4 | 20 | 28 | | 69.00 | 69.00 | 1 | 12.00 | 150.00 |
| 1/4 | | | 32 | 169.00 | 169.00 | 1 | 12.00 | 350.00 |
| 5/16 | 18 | 24 | | 69.00 | 69.00 | 1 | 12.00 | 150.00 |
| 5/16 | | | 32 | 173.00 | 173.00 | 1 | 12.00 | 358.00 |
| 3/8 | 16 | 24 | | 74.00 | 74.00 | 2 | 12.00 | 160.00 |
| 3/8 | | | 32 | 180.00 | 180.00 | 2 | 12.00 | 372.00 |
| 7/16 | 14 | 20 | | 74.00 | 74.00 | 2 | 12.00 | 160.00 |
| 7/16 | | | 28 | 166.00 | 166.00 | 2 | 12.00 | 344.00 |
| 1/2 | 13 | 20 | | 82.00 | 82.00 | 2 | 12.00 | 176.00 |
| 1/2 | | | 28 | 166.00 | 166.00 | 2 | 12.00 | 344.00 |
| 9/16 | 12 | 18 | | 99.00 | 99.00 | 3 | 12.00 | 210.00 |
| 9/16 | | | 24 | 176.00 | 176.00 | 3 | 12.00 | 364.00 |
| 5/8 | 11 | 18 | | 105.00 | 105.00 | 3 | 12.00 | 222.00 |
| 5/8 | | | 24 | 189.00 | 189.00 | 3 | 12.00 | 390.00 |
| 11/16 | | | 24 | 202.00 | 202.00 | 3 | 12.00 | 416.00 |
| 3/4 | 10 | 16 | | 122.00 | 122.00 | 3 | 12.00 | 256.00 |
| 3/4 | | | 20 | 202.00 | 202.00 | 3 | 12.00 | 416.00 |
| 13/16 | | | 20 | 211.00 | 211.00 | 3 | 12.00 | 434.00 |
| 7/8 | 9 | 14 | | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 7/8 | | | 20 | 221.00 | 221.00 | 4 | 12.00 | 454.00 |
| 15/16 | | | 20 | 232.00 | 232.00 | 4 | 12.00 | 476.00 |
| 1" | 8 | 12 | 14NS | 171.00 | 171.00 | 4 | 12.00 | 354.00 |
| 1" | | | 20 | 232.00 | 232.00 | 4 | 12.00 | 476.00 |
| 1-1/16 | | 12 | 18 | 222.00 | 222.00 | 4 | 12.00 | 456.00 |
| 1-1/8 | 7 | 12 | | 222.00 | 222.00 | 4 | 12.00 | 456.00 |
| 1-1/8 | | | 18 | 238.00 | 238.00 | 4 | 12.00 | 488.00 |
| 1-3/16 | | 12 | 18 | 254.00 | 254.00 | 5 | 13.00 | 521.00 |
| 1-1/4 | 7 | 12 | | 254.00 | 254.00 | 5 | 13.00 | 521.00 |
| 1-1/4 | | | 18 | 275.00 | 275.00 | 5 | 13.00 | 563.00 |
| 1-5/16 | | 12 | 18 | 278.00 | 278.00 | 5 | 13.00 | 569.00 |
| 1-3/8 | 6 | 12 | | 288.00 | 288.00 | 5 | 13.00 | 589.00 |
| 1-3/8 | | | 18 | 311.00 | 311.00 | 5 | 13.00 | 635.00 |
| 1-7/16 | | 12 | 18 | 297.00 | 297.00 | 5 | 13.00 | 607.00 |
| 1-1/2 | 6 | 12 | | 297.00 | 297.00 | 5 | 13.00 | 607.00 |
| 1-1/2 | | | 18 | 330.00 | 330.00 | 5 | 13.00 | 673.00 |

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 gaging wear
- Lower gaging cost
- Increased productivity

Taperlock Thread Plug Gages



**Class "X" Tolerance
Precision Lapped**

| NOMINAL SIZE | THREADS PER INCH | | | MEMBERS | | HANDLES | | DOUBLE END |
|-----------------|------------------|-----------|-------------|-----------------------|--------|---------|-------|---------------|
| | NC UNC | NF UNF | NEF UNEF | GO | NO GO | NO. | PRICE | 2B, 3B |
| | | | | 1, 2, 3 1B, 2B, 3B | 2B, 3B | | | |
| 0 | | 80 | | 55.00 | 55.00 | 000 | 12.00 | 122.00 |
| 1 | 64 | 72 | | 55.00 | 55.00 | 000 | 12.00 | 122.00 |
| 2 | 56 | 64 | | 53.00 | 53.00 | 000 | 12.00 | 118.00 |
| 3 | 48 | 56 | | 48.00 | 48.00 | 000 | 12.00 | 108.00 |
| 4 | 40 | 48 | | 45.00 | 45.00 | 00 | 12.00 | 102.00 |
| 5 | 40 | 44 | | 45.00 | 45.00 | 00 | 12.00 | 102.00 |
| 6 | 32 | 40 | | 40.00 | 40.00 | 00 | 12.00 | 92.00 |
| 8 | 32 | 36 | | 40.00 | 40.00 | 0 | 12.00 | 92.00 |
| 10 | 24 | 32 | | 40.00 | 40.00 | 0 | 12.00 | 92.00 |
| 12 | 24 | 28 | | 40.00 | 40.00 | 0 | 12.00 | 92.00 |
| 12 | | | 32 | 61.00 | 61.00 | 0 | 12.00 | 134.00 |
| 1/4 | 20 | 28 | | 36.00 | 36.00 | 1 | 12.00 | 84.00 |
| 1/4 | | | 32 | 65.00 | 65.00 | 1 | 12.00 | 142.00 |
| 5/16 | 18 | 24 | | 36.00 | 36.00 | 1 | 12.00 | 84.00 |
| 5/16 | | | 32 | 65.00 | 65.00 | 1 | 12.00 | 142.00 |
| 3/8 | 16 | 24 | | 37.00 | 37.00 | 2 | 12.00 | 86.00 |
| 3/8 | | | 32 | 74.00 | 74.00 | 2 | 12.00 | 160.00 |
| 7/16 | 14 | 20 | | 37.00 | 37.00 | 2 | 12.00 | 86.00 |
| 7/16 | | | 28 | 74.00 | 74.00 | 2 | 12.00 | 160.00 |
| 1/2 | 13 | 20 | | 40.00 | 40.00 | 2 | 12.00 | 92.00 |
| 1/2 | | | 28 | 77.00 | 77.00 | 2 | 12.00 | 166.00 |
| 9/16 | 12 | 18 | | 50.00 | 50.00 | 3 | 12.00 | 112.00 |
| 9/16 | | | 24 | 85.00 | 85.00 | 3 | 12.00 | 182.00 |
| 5/8 | 11 | 18 | | 50.00 | 50.00 | 3 | 12.00 | 112.00 |
| 5/8 | | | 24 | 85.00 | 85.00 | 3 | 12.00 | 182.00 |
| 11/16 | | | 24 | 86.00 | 86.00 | 3 | 12.00 | 184.00 |
| 3/4 | 10 | 16 | | 55.00 | 55.00 | 3 | 12.00 | 122.00 |
| 3/4 | | | 20 | 88.00 | 88.00 | 3 | 12.00 | 188.00 |
| 13/16 | | | 20 | 99.00 | 99.00 | 3 | 12.00 | 210.00 |
| 7/8 | 9 | 14 | | 61.00 | 61.00 | 4 | 12.00 | 134.00 |
| 7/8 | | | 20 | 99.00 | 99.00 | 4 | 12.00 | 210.00 |
| 15/16 | | | 20 | 100.00 | 100.00 | 4 | 12.00 | 212.00 |
| 1" | 8 | 12 | 14NS | 70.00 | 70.00 | 4 | 12.00 | 152.00 |
| 1" | | | 20 | 114.00 | 114.00 | 4 | 12.00 | 240.00 |
| 1-1/16 | | 12 | 18 | 120.00 | 120.00 | 4 | 12.00 | 252.00 |
| 1-1/8 | 7 | 12 | | 88.00 | 88.00 | 4 | 12.00 | 188.00 |
| 1-1/8 | | | 18 | 115.00 | 115.00 | 4 | 12.00 | 242.00 |
| 1-3/16 | | 12 | 18 | 124.00 | 124.00 | 5 | 13.00 | 261.00 |
| 1-1/4 | 7 | 12 | | 95.00 | 95.00 | 5 | 13.00 | 203.00 |
| 1-1/4 | | | 18 | 119.00 | 119.00 | 5 | 13.00 | 251.00 |
| 1-5/16 | | 12 | 18 | 135.00 | 135.00 | 5 | 13.00 | 283.00 |
| 1-3/8 | 6 | 12 | | 104.00 | 104.00 | 5 | 13.00 | 221.00 |
| 1-3/8 | | | 18 | 142.00 | 142.00 | 5 | 13.00 | 297.00 |
| 1-7/16 | | 12 | 18 | 146.00 | 146.00 | 5 | 13.00 | 305.00 |
| 1-1/2 | 6 | 12 | | 117.00 | 117.00 | 5 | 13.00 | 247.00 |
| 1-1/2 | | | 18 | 154.00 | 154.00 | 5 | 13.00 | 321.00 |

For chrome plate – add 30%.

Adjustable Thread Ring Gages



**Class "X"
Tolerance
Precision
Lapped**

| NOMINAL SIZE | THREADS PER INCH | | | MEMBERS | | (SET) | HOLDERS | |
|-----------------|------------------|-----------|-------------|--------------------|--------|------------|---------|-------|
| | NC UNC | NF UNF | NEF UNEF | GO | NO GO | GO / NO GO | NO. | PRICE |
| | | | | 2, 3 1A, 2A, 3A | 2A, 3A | | | |
| 0 | | 80 | | 163.00 | 163.00 | 326.00 | 1 | 21.00 |
| 1 | 64 | 72 | | 149.00 | 149.00 | 298.00 | 1 | 21.00 |
| 2 | 56 | 64 | | 134.00 | 134.00 | 268.00 | 1 | 21.00 |
| 3 | 48 | 56 | | 134.00 | 134.00 | 268.00 | 1 | 21.00 |
| 4 | 40 | 48 | | 124.00 | 124.00 | 248.00 | 1 | 21.00 |
| 5 | 40 | 44 | | 109.00 | 109.00 | 218.00 | 1 | 21.00 |
| 6 | 32 | 40 | | 109.00 | 109.00 | 218.00 | 1 | 21.00 |
| 8 | 32 | 36 | | 106.00 | 106.00 | 212.00 | 1 | 21.00 |
| 10 | 24 | 32 | | 106.00 | 106.00 | 212.00 | 1 | 21.00 |
| 12 | 24 | 28 | | 106.00 | 106.00 | 212.00 | 1 | 21.00 |
| 12 | | | 32 | 146.00 | 146.00 | 292.00 | 1 | 21.00 |
| 1/4 | 20 | 28 | | 105.00 | 105.00 | 210.00 | 2 | 22.00 |
| 1/4 | | | 32 | 146.00 | 146.00 | 292.00 | 2 | 22.00 |
| 5/16 | 18 | 24 | | 105.00 | 105.00 | 210.00 | 2 | 22.00 |
| 5/16 | | | 32 | 146.00 | 146.00 | 292.00 | 2 | 22.00 |
| 3/8 | 16 | 24 | | 115.00 | 115.00 | 230.00 | 3 | 23.00 |
| 3/8 | | | 32 | 150.00 | 150.00 | 300.00 | 3 | 23.00 |
| 7/16 | 14 | 20 | | 115.00 | 115.00 | 230.00 | 3 | 23.00 |
| 7/16 | | | 28 | 150.00 | 150.00 | 300.00 | 3 | 23.00 |
| 1/2 | 13 | 20 | | 119.00 | 119.00 | 238.00 | 3 | 23.00 |
| 1/2 | | | 28 | 152.00 | 152.00 | 304.00 | 3 | 23.00 |
| 9/16 | 12 | 18 | | 135.00 | 135.00 | 270.00 | 4 | 28.00 |
| 9/16 | | | 24 | 160.00 | 160.00 | 320.00 | 4 | 28.00 |
| 5/8 | 11 | 18 | | 135.00 | 135.00 | 270.00 | 4 | 28.00 |
| 5/8 | | | 24 | 185.00 | 185.00 | 370.00 | 4 | 28.00 |
| 11/16 | | | 24 | 180.00 | 180.00 | 360.00 | 4 | 28.00 |
| 3/4 | 10 | 16 | | 168.00 | 168.00 | 336.00 | 4 | 28.00 |
| 3/4 | | | 20 | 209.00 | 209.00 | 418.00 | 4 | 28.00 |
| 13/16 | | | 20 | 213.00 | 213.00 | 426.00 | 4 | 28.00 |
| 7/8 | 9 | 14 | | 182.00 | 182.00 | 364.00 | 5 | 39.00 |
| 7/8 | | | 20 | 221.00 | 221.00 | 442.00 | 5 | 39.00 |
| 15/16 | | | 20 | 222.00 | 222.00 | 444.00 | 5 | 39.00 |
| 1" | 8 | 12 | 14NS | 226.00 | 226.00 | 452.00 | 5 | 39.00 |
| 1" | | | 20 | 253.00 | 253.00 | 506.00 | 5 | 39.00 |
| 1-1/16 | | 12 | 18 | 275.00 | 275.00 | 550.00 | 5 | 39.00 |
| 1-1/8 | 7 | 12 | | 280.00 | 280.00 | 560.00 | 5 | 39.00 |
| 1-1/8 | | | 18 | 290.00 | 290.00 | 580.00 | 5 | 39.00 |
| 1-3/16 | | 12 | 18 | 300.00 | 300.00 | 600.00 | 6 | 50.00 |
| 1-1/4 | 7 | 12 | | 300.00 | 300.00 | 600.00 | 6 | 50.00 |
| 1-1/4 | | | 18 | 305.00 | 305.00 | 610.00 | 6 | 50.00 |
| 1-5/16 | | 12 | 18 | 306.00 | 306.00 | 612.00 | 6 | 50.00 |
| 1-3/8 | 6 | 12 | | 305.00 | 305.00 | 610.00 | 6 | 50.00 |
| 1-3/8 | | | 18 | 326.00 | 326.00 | 652.00 | 6 | 50.00 |
| 1-7/16 | | 12 | 18 | 327.00 | 327.00 | 654.00 | 6 | 50.00 |
| 1-1/2 | 6 | 12 | | 335.00 | 335.00 | 670.00 | 6 | 50.00 |
| 1-1/2 | | | 18 | 350.00 | 350.00 | 700.00 | 6 | 50.00 |

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 SIZE | THREADS PER INCH | | | MEMBERS | | HANDLES | | DOUBLE END |
|--------------|------------------|--------|----------|--------------------|--------|---------|-------|------------|
| | NC UNC | NF UNF | NEF UNEF | GO | NO GO | NO. | PRICE | 2A, 3A |
| | | | | 2, 3 1A, 2A, 3A | 2A, 3A | | | |
| 0 | | 80 | | 116.00 | 116.00 | 000 | 12.00 | 244.00 |
| 1 | 64 | 72 | | 116.00 | 116.00 | 000 | 12.00 | 244.00 |
| 2 | 56 | 64 | | 116.00 | 116.00 | 000 | 12.00 | 244.00 |
| 3 | 48 | 56 | | 110.00 | 110.00 | 000 | 12.00 | 232.00 |
| 4 | 40 | 48 | | 105.00 | 105.00 | 00 | 12.00 | 222.00 |
| 5 | 40 | 44 | | 99.00 | 99.00 | 00 | 12.00 | 210.00 |
| 6 | 32 | 40 | | 99.00 | 99.00 | 00 | 12.00 | 210.00 |
| 8 | 32 | 36 | | 99.00 | 99.00 | 0 | 12.00 | 210.00 |
| 10 | 24 | 32 | | 99.00 | 99.00 | 0 | 12.00 | 210.00 |
| 12 | 24 | 28 | | 105.00 | 105.00 | 0 | 12.00 | 222.00 |
| 12 | | | 32 | 128.00 | 128.00 | 0 | 12.00 | 268.00 |
| 1/4 | 20 | 28 | | 90.00 | 90.00 | 1 | 12.00 | 192.00 |
| 1/4 | | | 32 | 126.00 | 126.00 | 1 | 12.00 | 264.00 |
| 5/16 | 18 | 24 | | 90.00 | 90.00 | 1 | 12.00 | 192.00 |
| 5/16 | | | 32 | 126.00 | 126.00 | 1 | 12.00 | 264.00 |
| 3/8 | 16 | 24 | | 91.00 | 91.00 | 2 | 12.00 | 194.00 |
| 3/8 | | | 32 | 147.00 | 147.00 | 2 | 12.00 | 306.00 |
| 7/16 | 14 | 20 | | 95.00 | 95.00 | 2 | 12.00 | 202.00 |
| 7/16 | | | 28 | 149.00 | 149.00 | 2 | 12.00 | 310.00 |
| 1/2 | 13 | 20 | | 101.00 | 101.00 | 2 | 12.00 | 214.00 |
| 1/2 | | | 28 | 162.00 | 162.00 | 2 | 12.00 | 336.00 |
| 9/16 | 12 | 18 | | 116.00 | 116.00 | 3 | 12.00 | 244.00 |
| 9/16 | | | 24 | 174.00 | 174.00 | 3 | 12.00 | 360.00 |
| 5/8 | 11 | 18 | | 120.00 | 120.00 | 3 | 12.00 | 252.00 |
| 5/8 | | | 24 | 180.00 | 180.00 | 3 | 12.00 | 372.00 |
| 11/16 | | | 24 | 192.00 | 192.00 | 3 | 12.00 | 396.00 |
| 3/4 | 10 | 16 | | 140.00 | 140.00 | 3 | 12.00 | 292.00 |
| 3/4 | | | 20 | 185.00 | 185.00 | 3 | 12.00 | 382.00 |
| 13/16 | | | 20 | 198.00 | 198.00 | 3 | 12.00 | 408.00 |
| 7/8 | 9 | 14 | | 161.00 | 161.00 | 4 | 12.00 | 334.00 |
| 7/8 | | | 20 | 202.00 | 202.00 | 4 | 12.00 | 416.00 |
| 15/16 | | | 20 | 204.00 | 204.00 | 4 | 12.00 | 420.00 |
| 1" | 8 | 12 | 14NS | 185.00 | 185.00 | 4 | 12.00 | 382.00 |
| 1" | | | 20 | 214.00 | 214.00 | 4 | 12.00 | 440.00 |
| 1-1/16 | | 12 | 18 | 210.00 | 210.00 | 4 | 12.00 | 432.00 |
| 1-1/8 | 7 | 12 | | 210.00 | 210.00 | 4 | 12.00 | 432.00 |
| 1-1/8 | | | 18 | 230.00 | 230.00 | 4 | 12.00 | 472.00 |
| 1-3/16 | | 12 | 18 | 230.00 | 230.00 | 5 | 13.00 | 473.00 |
| 1-1/4 | 7 | 12 | | 235.00 | 235.00 | 5 | 13.00 | 483.00 |
| 1-1/4 | | | 18 | 262.00 | 262.00 | 5 | 13.00 | 537.00 |
| 1-5/16 | | 12 | 18 | 268.00 | 268.00 | 5 | 13.00 | 549.00 |
| 1-3/8 | 6 | 12 | | 270.00 | 270.00 | 5 | 13.00 | 553.00 |
| 1-3/8 | | | 18 | 279.00 | 279.00 | 5 | 13.00 | 571.00 |
| 1-7/16 | | 12 | 18 | 290.00 | 290.00 | 5 | 13.00 | 593.00 |
| 1-1/2 | 6 | 12 | | 292.00 | 292.00 | 5 | 13.00 | 597.00 |
| 1-1/2 | | | 18 | 299.00 | 299.00 | 5 | 13.00 | 611.00 |

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 END |
|----------------------|----|----|----|-----------|--------------|---------|-------|------------|
| | | | | GO 2B, 3B | NO GO 2B, 3B | NO. | PRICE | |
| 11/16 | | | 16 | 129.00 | 129.00 | 3 | 12.00 | 270.00 |
| 13/16 | | | 16 | 132.00 | 132.00 | 3 | 12.00 | 276.00 |
| 7/8 | | | 16 | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 15/16 | | | 16 | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 1" | ** | ** | 16 | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 1-1/16 | | ** | 16 | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 1-1/8 | 8 | ** | 16 | 132.00 | 132.00 | 4 | 12.00 | 276.00 |
| 1-3/16 | | ** | 16 | 140.00 | 140.00 | 5 | 13.00 | 293.00 |
| 1-1/4 | 8 | ** | 16 | 140.00 | 140.00 | 5 | 13.00 | 293.00 |
| 1-5/16 | | ** | 16 | 157.00 | 157.00 | 5 | 13.00 | 327.00 |
| 1-3/8 | 8 | ** | 16 | 157.00 | 157.00 | 5 | 13.00 | 327.00 |
| 1-7/16 | | ** | 16 | 162.00 | 162.00 | 5 | 13.00 | 337.00 |
| 1-1/2 | 8 | ** | 16 | 162.00 | 162.00 | 5 | 13.00 | 337.00 |
| 1-5/8 | 8 | 12 | 16 | 180.00 | 180.00 | 5-1/2 | 19.00 | 379.00 |
| 1-3/4 | 8 | 12 | 16 | 193.00 | 193.00 | 5-1/2 | 19.00 | 405.00 |
| 1-7/8 | 8 | 12 | 16 | 206.00 | 206.00 | 5-1/2 | 19.00 | 431.00 |
| 2" | 8 | 12 | 16 | 217.00 | 217.00 | 5-1/2 | 19.00 | 453.00 |
| 2-1/8 | 8 | 12 | 16 | 229.00 | 229.00 | 6 | 19.00 | 477.00 |
| 2-1/4 | 8 | 12 | 16 | 229.00 | 229.00 | 6 | 19.00 | 477.00 |
| 2-3/8 | 8 | 12 | 16 | 249.00 | 249.00 | 6 | 19.00 | 517.00 |
| 2-1/2 | 8 | 12 | 16 | 249.00 | 249.00 | 6 | 19.00 | 517.00 |
| 2-5/8 | 8 | 12 | 16 | 260.00 | 260.00 | 7 | 22.00 | 542.00 |
| 2-3/4 | 8 | 12 | 16 | 260.00 | 260.00 | 7 | 22.00 | 542.00 |
| 2-7/8 | 8 | 12 | 16 | 281.00 | 281.00 | 7 | 22.00 | 584.00 |
| 3" | 8 | 12 | 16 | 281.00 | 281.00 | 7 | 22.00 | 606.00* |
| 3-1/4 | 8 | 12 | 16 | 305.00 | 305.00 | 7 | 22.00 | 654.00* |
| 3-1/2 | 8 | 12 | 16 | 336.00 | 336.00 | 7 | 22.00 | 716.00* |
| 3-3/4 | 8 | 12 | 16 | 345.00 | 345.00 | 7 | 22.00 | 734.00* |
| 4" | 8 | 12 | 16 | 369.00 | 369.00 | 7 | 22.00 | 782.00* |

* 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 GO / NO GO | HOLDER | |
|----------------------|----|----|----|--------------|-----------------|-------------------|--------|-------|
| | | | | GO 2A, 3A | NO GO 2A, 3A | | NO. | PRICE |
| 11/16 | | | 16 | 325.00 | 325.00 | 650.00 | 4 | 28.00 |
| 13/16 | | | 16 | 330.00 | 330.00 | 660.00 | 4 | 28.00 |
| 7/8 | | | 16 | 330.00 | 330.00 | 660.00 | 5 | 39.00 |
| 15/16 | | | 16 | 332.00 | 332.00 | 664.00 | 5 | 39.00 |
| 1" | ** | ** | 16 | 332.00 | 332.00 | 664.00 | 5 | 39.00 |
| 1-1/16 | | ** | 16 | 338.00 | 338.00 | 676.00 | 5 | 39.00 |
| 1-1/8 | 8 | ** | 16 | 338.00 | 338.00 | 676.00 | 5 | 39.00 |
| 1-3/16 | | ** | 16 | 350.00 | 350.00 | 700.00 | 6 | 50.00 |
| 1-1/4 | 8 | ** | 16 | 350.00 | 350.00 | 700.00 | 6 | 50.00 |
| 1-5/16 | | ** | 16 | 364.00 | 364.00 | 728.00 | 6 | 50.00 |
| 1-3/8 | 8 | ** | 16 | 364.00 | 364.00 | 728.00 | 6 | 50.00 |
| 1-7/16 | | ** | 16 | 388.00 | 388.00 | 776.00 | 6 | 50.00 |
| 1-1/2 | 8 | ** | 16 | 388.00 | 388.00 | 776.00 | 6 | 50.00 |
| 1-5/8 | 8 | 12 | 16 | 404.00 | 404.00 | 808.00 | | |
| 1-3/4 | 8 | 12 | 16 | 429.00 | 429.00 | 858.00 | | |
| 1-7/8 | 8 | 12 | 16 | 445.00 | 445.00 | 890.00 | | |
| 2" | 8 | 12 | 16 | 471.00 | 471.00 | 942.00 | | |
| 2-1/8 | 8 | 12 | 16 | 502.00 | 502.00 | 1004.00 | | |
| 2-1/4 | 8 | 12 | 16 | 502.00 | 502.00 | 1004.00 | | |
| 2-3/8 | 8 | 12 | 16 | 530.00 | 530.00 | 1060.00 | | |
| 2-1/2 | 8 | 12 | 16 | 530.00 | 530.00 | 1060.00 | | |

** 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 END |
|----------------------|----|----|----|--------------|-----------------|--------|-------|---------------|
| | | | | GO 2A, 3A | NO GO 2A, 3A | NO. | PRICE | |
| 11/16 | | | 16 | 174.00 | 174.00 | 3 | 12.00 | 360.00 |
| 13/16 | | | 16 | 190.00 | 190.00 | 3 | 12.00 | 392.00 |
| 7/8 | | | 16 | 190.00 | 190.00 | 4 | 12.00 | 392.00 |
| 15/16 | | | 16 | 212.00 | 212.00 | 4 | 12.00 | 436.00 |
| 1" | ** | ** | 16 | 212.00 | 212.00 | 4 | 12.00 | 436.00 |
| 1-1/16 | | ** | 16 | 223.00 | 223.00 | 4 | 12.00 | 458.00 |
| 1-1/8 | 8 | ** | 16 | 223.00 | 223.00 | 4 | 12.00 | 458.00 |
| 1-3/16 | | ** | 16 | 255.00 | 255.00 | 5 | 13.00 | 523.00 |
| 1-1/4 | 8 | ** | 16 | 255.00 | 255.00 | 5 | 13.00 | 523.00 |
| 1-5/16 | | ** | 16 | 277.00 | 277.00 | 5 | 13.00 | 567.00 |
| 1-3/8 | 8 | ** | 16 | 277.00 | 277.00 | 5 | 13.00 | 567.00 |
| 1-7/16 | | ** | 16 | 289.00 | 289.00 | 5 | 13.00 | 591.00 |
| 1-1/2 | 8 | ** | 16 | 289.00 | 289.00 | 5 | 13.00 | 591.00 |
| 1-5/8 | 8 | 12 | 16 | 309.00 | 309.00 | 5-1/2 | 19.00 | 637.00 |
| 1-3/4 | 8 | 12 | 16 | 311.00 | 311.00 | 5-1/2 | 19.00 | 641.00 |
| 1-7/8 | 8 | 12 | 16 | 320.00 | 320.00 | 5-1/2 | 19.00 | 659.00 |
| 2" | 8 | 12 | 16 | 328.00 | 328.00 | 5-1/2 | 19.00 | 675.00 |
| 2-1/8 | 8 | 12 | 16 | 339.00 | 339.00 | 6 | 19.00 | 697.00 |
| 2-1/4 | 8 | 12 | 16 | 339.00 | 339.00 | 6 | 19.00 | 697.00 |
| 2-3/8 | 8 | 12 | 16 | 377.00 | 377.00 | 6 | 19.00 | 773.00 |
| 2-1/2 | 8 | 12 | 16 | 377.00 | 377.00 | 6 | 19.00 | 773.00 |

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

Helical Coil (STI) Thread Plug Gages



**Class "X" Tolerance
Precision Lapped**

| NOMINAL SIZE | REGULAR TOOL STEEL | | | TiN COATED HIGH SPEED STEEL | | | HANDLES | |
|--------------|--------------------|--------------|--------------------|-----------------------------|--------------|--------------------|---------|-------|
| | MEMBERS | | DOUBLE END 2B & 3B | MEMBERS | | DOUBLE END 2B & 3B | | |
| | GO 2B, 3B | NO GO 2B, 3B | | GO 2B, 3B | NO GO 2B, 3B | | NO. | PRICE |
| 2-56 | 67.00 | 67.00 | 146.00 | 130.00 | 130.00 | 272.00 | 00 | 12.00 |
| 4-40 | 60.00 | 60.00 | 132.00 | 114.00 | 114.00 | 240.00 | 00 | 12.00 |
| 4-48 | 60.00 | 60.00 | 132.00 | 179.00 | 179.00 | 370.00 | 00 | 12.00 |
| 5-40 | 60.00 | 60.00 | 132.00 | 179.00 | 179.00 | 370.00 | 0 | 12.00 |
| 6-32 | 60.00 | 60.00 | 132.00 | 114.00 | 114.00 | 240.00 | 0 | 12.00 |
| 6-40 | 60.00 | 60.00 | 132.00 | 182.00 | 182.00 | 376.00 | 0 | 12.00 |
| 8-32 | 56.00 | 56.00 | 124.00 | 111.00 | 111.00 | 234.00 | 0 | 12.00 |
| 8-36 | 56.00 | 56.00 | 124.00 | 169.00 | 169.00 | 350.00 | 0 | 12.00 |
| 10-24 | 56.00 | 56.00 | 124.00 | 169.00 | 169.00 | 350.00 | 0 | 12.00 |
| 10-32 | 56.00 | 56.00 | 124.00 | 111.00 | 111.00 | 234.00 | 0 | 12.00 |
| 12-24 | 56.00 | 56.00 | 124.00 | 166.00 | 166.00 | 344.00 | 1 | 12.00 |
| 1/4-20 | 56.00 | 56.00 | 124.00 | 166.00 | 166.00 | 344.00 | 1 | 12.00 |
| 1/4-28 | 56.00 | 56.00 | 124.00 | 109.00 | 109.00 | 230.00 | 1 | 12.00 |
| 5/16-18 | 56.00 | 56.00 | 124.00 | 166.00 | 166.00 | 344.00 | 2 | 12.00 |
| 5/16-24 | 56.00 | 56.00 | 124.00 | 109.00 | 109.00 | 230.00 | 1 | 12.00 |
| 3/8-16 | 58.00 | 58.00 | 128.00 | 166.00 | 166.00 | 344.00 | 2 | 12.00 |
| 3/8-24 | 58.00 | 58.00 | 128.00 | 111.00 | 111.00 | 234.00 | 2 | 12.00 |
| 7/16-14 | 60.00 | 60.00 | 132.00 | 166.00 | 166.00 | 344.00 | 3 | 12.00 |
| 7/16-20 | 60.00 | 60.00 | 132.00 | 166.00 | 166.00 | 344.00 | 2 | 12.00 |
| 1/2-13 | 64.00 | 64.00 | 140.00 | 166.00 | 166.00 | 344.00 | 3 | 12.00 |
| 1/2-20 | 64.00 | 64.00 | 140.00 | 166.00 | 166.00 | 344.00 | 3 | 12.00 |
| 9/16-12 | 74.00 | 74.00 | 160.00 | 172.00 | 172.00 | 356.00 | 3 | 12.00 |
| 9/16-18 | 74.00 | 74.00 | 160.00 | 172.00 | 172.00 | 356.00 | 3 | 12.00 |
| 5/8-11 | 74.00 | 74.00 | 160.00 | 185.00 | 185.00 | 382.00 | 3 | 12.00 |
| 5/8-18 | 74.00 | 74.00 | 160.00 | 185.00 | 185.00 | 382.00 | 3 | 12.00 |
| 3/4-10 | 80.00 | 80.00 | 172.00 | 203.00 | 203.00 | 418.00 | 4 | 12.00 |
| 3/4-16 | 80.00 | 80.00 | 172.00 | 203.00 | 203.00 | 418.00 | 3 | 12.00 |

For class "W" pitch diameters – call Swanson.

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

Left Hand Thread Work Plugs 2B & 3B



| NOMINAL SIZE | THREADS PER INCH | | MEMBERS | | HANDLES | | DOUBLE END |
|--------------|------------------|-----|-----------|--------------|---------|-------|------------|
| | UNC | UNF | GO 2B, 3B | NO GO 2B, 3B | NO. | PRICE | |
| 4 | 40 | 48 | 131.00 | 131.00 | 00 | 12.00 | 274.00 |
| 5 | 40 | 44 | 131.00 | 131.00 | 00 | 12.00 | 274.00 |
| 6 | 32 | 40 | 131.00 | 131.00 | 00 | 12.00 | 274.00 |
| 8 | 32 | 36 | 121.00 | 121.00 | 0 | 12.00 | 254.00 |
| 10 | 24 | 32 | 121.00 | 121.00 | 0 | 12.00 | 254.00 |
| 12 | 24 | 28 | 121.00 | 121.00 | 0 | 12.00 | 254.00 |
| 1/4 | 20 | 28 | 119.00 | 119.00 | 1 | 12.00 | 250.00 |
| 5/16 | 18 | 24 | 119.00 | 119.00 | 1 | 12.00 | 250.00 |
| 3/8 | 16 | 24 | 119.00 | 119.00 | 2 | 12.00 | 250.00 |
| 7/16 | 14 | 20 | 119.00 | 119.00 | 2 | 12.00 | 250.00 |
| 1/2 | 13 | 20 | 119.00 | 119.00 | 2 | 12.00 | 250.00 |
| 9/16 | 12 | 18 | 119.00 | 119.00 | 3 | 12.00 | 250.00 |
| 5/8 | 11 | 18 | 121.00 | 121.00 | 3 | 12.00 | 254.00 |
| 3/4 | 10 | 16 | 129.00 | 129.00 | 3 | 12.00 | 270.00 |

For chrome plate – add 30%.

For TiN coated prices – call Swanson.

Left Hand Thread Rings 2A & 3A



| NOMINAL SIZE | THREADS PER INCH | | MEMBERS | | SET PRICE | HOLDERS | |
|--------------|------------------|-----|-----------|--------------|-----------|---------|-------|
| | UNC | UNF | GO 2A, 3A | NO GO 2A, 3A | | NO. | PRICE |
| 4 | 40 | 48 | 300.00 | 300.00 | 600.00 | 1 | 21.00 |
| 5 | 40 | 44 | 288.00 | 288.00 | 576.00 | 1 | 21.00 |
| 6 | 32 | 40 | 276.00 | 276.00 | 552.00 | 1 | 21.00 |
| 8 | 32 | 36 | 255.00 | 255.00 | 510.00 | 1 | 21.00 |
| 10 | 24 | 32 | 255.00 | 255.00 | 510.00 | 1 | 21.00 |
| 12 | 24 | 28 | 255.00 | 255.00 | 510.00 | 1 | 21.00 |
| 1/4 | 20 | 28 | 306.00 | 306.00 | 612.00 | 2 | 22.00 |
| 5/16 | 18 | 24 | 306.00 | 306.00 | 612.00 | 2 | 22.00 |
| 3/8 | 16 | 24 | 308.00 | 308.00 | 616.00 | 3 | 23.00 |
| 7/16 | 14 | 20 | 308.00 | 308.00 | 616.00 | 3 | 23.00 |
| 1/2 | 13 | 20 | 308.00 | 308.00 | 616.00 | 3 | 23.00 |
| 9/16 | 12 | 18 | 317.00 | 317.00 | 634.00 | 4 | 28.00 |
| 5/8 | 11 | 18 | 325.00 | 325.00 | 650.00 | 4 | 28.00 |
| 3/4 | 10 | 16 | 325.00 | 325.00 | 650.00 | 4 | 28.00 |

Left Hand Thread Setting Plugs 2A & 3A



| NOMINAL SIZE | THREADS PER INCH | | MEMBERS | | HANDLES | | DOUBLE END |
|--------------|------------------|-----|-----------|--------------|---------|-------|------------|
| | UNC | UNF | GO 2A, 3A | NO GO 2A, 3A | NO. | PRICE | |
| 4 | 40 | 48 | 190.00 | 190.00 | 00 | 12.00 | 392.00 |
| 5 | 40 | 44 | 190.00 | 190.00 | 00 | 12.00 | 392.00 |
| 6 | 32 | 40 | 190.00 | 190.00 | 00 | 12.00 | 392.00 |
| 8 | 32 | 36 | 174.00 | 174.00 | 0 | 12.00 | 360.00 |
| 10 | 24 | 32 | 174.00 | 174.00 | 0 | 12.00 | 360.00 |
| 12 | 24 | 28 | 174.00 | 174.00 | 0 | 12.00 | 360.00 |
| 1/4 | 20 | 28 | 163.00 | 163.00 | 1 | 12.00 | 338.00 |
| 5/16 | 18 | 24 | 163.00 | 163.00 | 1 | 12.00 | 338.00 |
| 3/8 | 16 | 24 | 163.00 | 163.00 | 2 | 12.00 | 338.00 |
| 7/16 | 14 | 20 | 163.00 | 163.00 | 2 | 12.00 | 338.00 |
| 1/2 | 13 | 20 | 163.00 | 163.00 | 2 | 12.00 | 338.00 |
| 9/16 | 12 | 18 | 163.00 | 163.00 | 3 | 12.00 | 338.00 |
| 5/8 | 11 | 18 | 170.00 | 170.00 | 3 | 12.00 | 352.00 |
| 3/4 | 10 | 16 | 174.00 | 174.00 | 3 | 12.00 | 360.00 |

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

Reversible Thread Plug Gages



**Class "X" Tolerance
Precision Lapped**

| NOMINAL SIZE | THREADS PER INCH | | MEMBERS | | HANDLES | | DOUBLE END 2B, 3B |
|-----------------|------------------|-----------|----------------------|--------|---------|-------|-------------------------|
| | NC UNC | NF UNF | GO | NO GO | NO. | PRICE | |
| | | | 1, 2, 3 1B, 2B 3B | 2B, 3B | | | |
| 0 | | 80 | 88.00 | 88.00 | 1W | 14.00 | 190.00 |
| 1 | 64 | 72 | 88.00 | 88.00 | 1W | 14.00 | 190.00 |
| 2 | 56 | 64 | 80.00 | 80.00 | 2W | 14.00 | 174.00 |
| 3 | 48 | 56 | 78.00 | 78.00 | 2W | 14.00 | 170.00 |
| 4 | 40 | 48 | 72.00 | 72.00 | 2W | 14.00 | 158.00 |
| 5 | 40 | 44 | 65.00 | 65.00 | 2W | 14.00 | 144.00 |
| 6 | 32 | 40 | 65.00 | 65.00 | 2W | 14.00 | 144.00 |
| 8 | 32 | 36 | 65.00 | 65.00 | 2W | 14.00 | 144.00 |
| 10 | 24 | 32 | 65.00 | 65.00 | 3W | 15.00 | 145.00 |
| 12 | 24 | 28 | 65.00 | 65.00 | 3W | 15.00 | 145.00 |
| 1/4 | 20 | 28 | 60.00 | 60.00 | 3W | 15.00 | 135.00 |
| 5/16 | 18 | 24 | 60.00 | 60.00 | 4W | 17.00 | 137.00 |
| 3/8 | 16 | 24 | 65.00 | 65.00 | 4W | 17.00 | 147.00 |
| 7/16 | 14 | 20 | 65.00 | 65.00 | 5W | 17.00 | 147.00 |
| 1/2 | 13 | 20 | 65.00 | 65.00 | 5W | 17.00 | 147.00 |
| 9/16 | 12 | 18 | 76.00 | 76.00 | 6W | 18.00 | 170.00 |
| 5/8 | 11 | 18 | 76.00 | 76.00 | 6W | 18.00 | 170.00 |
| 3/4 | 10 | 16 | 85.00 | 85.00 | 7W | 20.00 | 190.00 |

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 END |
|-----------------------|------|------|------|------|---------|----------|---------|-------|---------------|
| | | | | | 6H GO | 6H NO GO | NO. | PRICE | |
| M1.6 | 0.35 | | | | 99.00 | 99.00 | 1W | 14.00 | 212.00 |
| M2 | 0.40 | | | | 93.00 | 93.00 | 2W | 14.00 | 200.00 |
| M2.5 | 0.45 | | | | 93.00 | 93.00 | 2W | 14.00 | 200.00 |
| M3 | 0.50 | | | | 80.00 | 80.00 | 2W | 14.00 | 174.00 |
| M3.5 | 0.60 | | | | 72.00 | 72.00 | 2W | 14.00 | 158.00 |
| M4 | 0.70 | | | | 72.00 | 72.00 | 2W | 14.00 | 158.00 |
| M5 | 0.80 | | | | 72.00 | 72.00 | 3W | 15.00 | 159.00 |
| M6 | 1.00 | | | | 63.00 | 63.00 | 3W | 15.00 | 141.00 |
| M8 | 1.25 | 1.00 | | | 63.00 | 63.00 | 4W | 17.00 | 143.00 |
| M10 | 1.50 | 1.25 | | | 64.00 | 64.00 | 4W | 17.00 | 145.00 |
| M12 | 1.75 | 1.50 | 1.25 | 1.00 | 67.00 | 67.00 | 5W | 17.00 | 151.00 |
| M14 | 2.00 | 1.50 | | | 77.00 | 77.00 | 6W | 18.00 | 172.00 |
| M16 | 2.00 | 1.50 | | | 80.00 | 80.00 | 7W | 20.00 | 180.00 |
| M18 | 1.50 | | | | 88.00 | 88.00 | 7W | 20.00 | 196.00 |

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 HIGH SPEED STEEL | | | HANDLES | |
|-----------------------|------|------|------|------|--------------------|----------|---------------|--------------------------------|----------|---------------|---------|-------|
| | | | | | MEMBERS | | DOUBLE END | MEMBERS | | DOUBLE END | | |
| | | | | | 6H GO | 6H NO GO | | 6H GO | 6H NO GO | | | |
| M1.6 | 0.35 | | | | 65.00 | 65.00 | 142.00 | 137.00 | 137.00 | 286.00 | 000 | 12.00 |
| M1.8 | 0.35 | | | | 65.00 | 65.00 | 142.00 | 211.00 | 211.00 | 434.00 | 000 | 12.00 |
| M2 | 0.40 | | | | 65.00 | 65.00 | 142.00 | 129.00 | 129.00 | 270.00 | 000 | 12.00 |
| M2.2 | 0.45 | | | | 65.00 | 65.00 | 142.00 | 211.00 | 211.00 | 434.00 | 000 | 12.00 |
| M2.5 | 0.45 | | | | 59.00 | 59.00 | 130.00 | 121.00 | 121.00 | 254.00 | 000 | 12.00 |
| M3 | 0.50 | | | | 59.00 | 59.00 | 130.00 | 121.00 | 121.00 | 254.00 | 00 | 12.00 |
| M3.5 | 0.60 | | | | 51.00 | 51.00 | 114.00 | 179.00 | 179.00 | 370.00 | 00 | 12.00 |
| M4 | 0.70 | | | | 51.00 | 51.00 | 114.00 | 104.00 | 104.00 | 220.00 | 0 | 12.00 |
| M4.5 | 0.75 | | | | 51.00 | 51.00 | 114.00 | 169.00 | 169.00 | 350.00 | 0 | 12.00 |
| M5 | 0.80 | | | | 51.00 | 51.00 | 114.00 | 104.00 | 104.00 | 220.00 | 0 | 12.00 |
| M6 | 1.00 | | | | 42.00 | 42.00 | 96.00 | 92.00 | 92.00 | 196.00 | 1 | 12.00 |
| M7 | 1.00 | | | | 42.00 | 42.00 | 96.00 | 166.00 | 166.00 | 344.00 | 1 | 12.00 |
| M8 | 1.25 | 1.00 | | | 42.00 | 42.00 | 96.00 | 92.00 | 92.00 | 196.00 | 1 | 12.00 |
| M10 | 1.50 | 1.25 | 1.00 | 0.75 | 45.00 | 45.00 | 102.00 | 102.00 | 102.00 | 216.00 | 2 | 12.00 |
| M12 | 1.75 | 1.50 | 1.25 | 1.00 | 50.00 | 50.00 | 112.00 | 111.00 | 111.00 | 234.00 | 2 | 12.00 |
| M14 | 2.00 | 1.50 | | | 54.00 | 54.00 | 120.00 | 166.00 | 166.00 | 344.00 | 3 | 12.00 |
| M15 | 1.00 | | | | 59.00 | 59.00 | 130.00 | 189.00 | 189.00 | 390.00 | 3 | 12.00 |
| M16 | 2.00 | 1.50 | | | 56.00 | 56.00 | 124.00 | 172.00 | 172.00 | 356.00 | 3 | 12.00 |
| M17 | 1.00 | | | | 61.00 | 61.00 | 134.00 | 202.00 | 202.00 | 416.00 | 3 | 12.00 |
| M18 | 2.50 | 1.50 | | | 64.00 | 64.00 | 140.00 | 185.00 | 185.00 | 382.00 | 3 | 12.00 |
| M20 | 2.50 | 1.50 | 1.00 | | 68.00 | 68.00 | 148.00 | 193.00 | 193.00 | 398.00 | 3 | 12.00 |
| M22 | 2.50 | 1.50 | | | 68.00 | 68.00 | 148.00 | 203.00 | 203.00 | 418.00 | 4 | 12.00 |
| M24 | 3.00 | 2.00 | | | 78.00 | 78.00 | 168.00 | 212.00 | 212.00 | 436.00 | 4 | 12.00 |
| M27 | 3.00 | 2.00 | | | 102.00 | 102.00 | 216.00 | 222.00 | 222.00 | 456.00 | 4 | 12.00 |
| M30 | 3.50 | 2.00 | 1.50 | | 132.00 | 132.00 | 277.00 | 254.00 | 254.00 | 521.00 | 5 | 13.00 |
| M33 | 3.50 | 2.00 | | | 132.00 | 132.00 | 277.00 | 283.00 | 283.00 | 579.00 | 5 | 13.00 |
| M35 | 1.50 | | | | 140.00 | 140.00 | 293.00 | 297.00 | 297.00 | 607.00 | 5 | 13.00 |
| M36 | 4.00 | 3.00 | 2.00 | | 148.00 | 148.00 | 309.00 | 297.00 | 297.00 | 607.00 | 5 | 13.00 |
| M39 | 4.00 | 3.00 | 2.00 | | 165.00 | 165.00 | 349.00 | 315.00 | 315.00 | 649.00 | 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 | | | | 190.00 | 190.00 | 380.00 | 1 | 21.00 |
| M1.8 | 0.35 | | | | 190.00 | 190.00 | 380.00 | 1 | 21.00 |
| M2 | 0.40 | | | | 171.00 | 171.00 | 342.00 | 1 | 21.00 |
| M2.2 | 0.45 | | | | 171.00 | 171.00 | 342.00 | 1 | 21.00 |
| M2.5 | 0.45 | | | | 171.00 | 171.00 | 342.00 | 1 | 21.00 |
| M3 | 0.50 | | | | 147.00 | 147.00 | 294.00 | 1 | 21.00 |
| M3.5 | 0.60 | | | | 147.00 | 147.00 | 294.00 | 1 | 21.00 |
| M4 | 0.70 | | | | 136.00 | 136.00 | 272.00 | 1 | 21.00 |
| M4.5 | 0.75 | | | | 136.00 | 136.00 | 272.00 | 1 | 21.00 |
| M5 | 0.80 | | | | 136.00 | 136.00 | 272.00 | 1 | 21.00 |
| M6 | 1.00 | | | | 126.00 | 126.00 | 252.00 | 2 | 22.00 |
| M7 | 1.00 | | | | 126.00 | 126.00 | 252.00 | 2 | 22.00 |
| M8 | 1.25 | 1.00 | | | 126.00 | 126.00 | 252.00 | 2 | 22.00 |
| M10 | 1.50 | 1.25 | 1.00 | 0.75 | 136.00 | 136.00 | 272.00 | 3 | 23.00 |
| M12 | 1.75 | 1.50 | 1.25 | 1.00 | 146.00 | 146.00 | 292.00 | 3 | 23.00 |
| M14 | 2.00 | 1.50 | | | 163.00 | 163.00 | 326.00 | 4 | 28.00 |
| M15 | 1.00 | | | | 163.00 | 163.00 | 326.00 | 4 | 28.00 |
| M16 | 2.00 | 1.50 | | | 163.00 | 163.00 | 326.00 | 4 | 28.00 |
| M17 | 1.00 | | | | 212.00 | 212.00 | 424.00 | 4 | 28.00 |
| M18 | 2.50 | 1.50 | | | 218.00 | 218.00 | 436.00 | 4 | 28.00 |
| M20 | 2.50 | 1.50 | 1.00 | | 264.00 | 264.00 | 528.00 | 4 | 28.00 |
| M22 | 2.50 | 1.50 | | | 269.00 | 269.00 | 538.00 | 5 | 39.00 |
| M24 | 3.00 | 2.00 | | | 311.00 | 311.00 | 622.00 | 5 | 39.00 |
| M27 | 3.00 | 2.00 | | | 324.00 | 324.00 | 648.00 | 5 | 39.00 |
| M30 | 3.50 | 2.00 | 1.50 | | 328.00 | 328.00 | 656.00 | 6 | 50.00 |
| M33 | 3.50 | 2.00 | | | 362.00 | 362.00 | 724.00 | 6 | 50.00 |
| M35 | 1.50 | | | | 383.00 | 383.00 | 766.00 | 6 | 50.00 |
| M36 | 4.00 | 3.00 | 2.00 | | 403.00 | 403.00 | 806.00 | 6 | 50.00 |
| M39 | 4.00 | 3.00 | 2.00 | | 412.00 | 412.00 | 824.00 | 6 | 50.00 |

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 END |
|-----------------------|------|------|------|------|---------|----------|---------|-------|------------|
| | | | | | 6g GO | 6g NO GO | NO. | PRICE | |
| M1.6 | 0.35 | | | | 135.00 | 135.00 | 000 | 12.00 | 282.00 |
| M1.8 | 0.35 | | | | 135.00 | 135.00 | 000 | 12.00 | 282.00 |
| M2 | 0.40 | | | | 127.00 | 127.00 | 000 | 12.00 | 266.00 |
| M2.2 | 0.45 | | | | 127.00 | 127.00 | 000 | 12.00 | 266.00 |
| M2.5 | 0.45 | | | | 127.00 | 127.00 | 000 | 12.00 | 266.00 |
| M3 | 0.50 | | | | 122.00 | 122.00 | 00 | 12.00 | 256.00 |
| M3.5 | 0.60 | | | | 122.00 | 122.00 | 00 | 12.00 | 256.00 |
| M4 | 0.70 | | | | 120.00 | 120.00 | 0 | 12.00 | 252.00 |
| M4.5 | 0.75 | | | | 120.00 | 120.00 | 0 | 12.00 | 252.00 |
| M5 | 0.80 | | | | 120.00 | 120.00 | 0 | 12.00 | 252.00 |
| M6 | 1.00 | | | | 111.00 | 111.00 | 1 | 12.00 | 234.00 |
| M7 | 1.00 | | | | 111.00 | 111.00 | 1 | 12.00 | 234.00 |
| M8 | 1.25 | 1.00 | | | 111.00 | 111.00 | 1 | 12.00 | 234.00 |
| M10 | 1.50 | 1.25 | 1.00 | 0.75 | 118.00 | 118.00 | 2 | 12.00 | 248.00 |
| M12 | 1.75 | 1.50 | 1.25 | 1.00 | 122.00 | 122.00 | 2 | 12.00 | 256.00 |
| M14 | 2.00 | 1.50 | | | 144.00 | 144.00 | 3 | 12.00 | 300.00 |
| M15 | 1.00 | | | | 144.00 | 144.00 | 3 | 12.00 | 300.00 |
| M16 | 2.00 | 1.50 | | | 144.00 | 144.00 | 3 | 12.00 | 300.00 |
| M17 | 1.00 | | | | 156.00 | 156.00 | 3 | 12.00 | 324.00 |
| M18 | 2.50 | 1.50 | | | 150.00 | 150.00 | 3 | 12.00 | 312.00 |
| M20 | 2.50 | 1.50 | 1.00 | | 158.00 | 158.00 | 3 | 12.00 | 328.00 |
| M22 | 2.50 | 1.50 | | | 207.00 | 207.00 | 4 | 12.00 | 426.00 |
| M24 | 3.00 | 2.00 | | | 211.00 | 211.00 | 4 | 12.00 | 434.00 |
| M27 | 3.00 | 2.00 | | | 226.00 | 226.00 | 4 | 12.00 | 468.00 |
| M30 | 3.50 | 2.00 | 1.50 | | 229.00 | 229.00 | 5 | 13.00 | 471.00 |
| M33 | 3.50 | 2.00 | | | 248.00 | 248.00 | 5 | 13.00 | 509.00 |
| M35 | 1.50 | | | | 262.00 | 262.00 | 5 | 13.00 | 537.00 |
| M36 | 4.00 | 3.00 | 2.00 | | 274.00 | 274.00 | 5 | 13.00 | 566.00 |
| M39 | 4.00 | 3.00 | 2.00 | | 304.00 | 304.00 | 5-1/2 | 19.00 | 627.00 |

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 L1 | NPTF L1 | NPTF L3 | NPTF 6-STEP PLAIN | ANPT L1 | ANPT L3 | ANPT 6-STEP PLAIN | HANDLE | |
|--------------|--------|---------|---------|-------------------|---------|---------|-------------------|--------|-------|
| | | | | | | | | NO. | PRICE |
| 1/16-27 | 104.00 | 135.00 | 141.00 | 208.00 | 155.00 | 162.00 | 202.00 | 1 | 12.00 |
| 1/8-27 | 82.00 | 108.00 | 114.00 | 208.00 | 111.00 | 117.00 | 202.00 | 2 | 12.00 |
| 1/4-18 | 86.00 | 113.00 | 118.00 | 208.00 | 129.00 | 135.00 | 202.00 | 3 | 12.00 |
| 3/8-18 | 94.00 | 135.00 | 142.00 | 208.00 | 155.00 | 160.00 | 202.00 | 3 | 12.00 |
| 1/2-14 | 107.00 | 155.00 | 160.00 | 208.00 | 167.00 | 173.00 | 202.00 | 4 | 12.00 |
| 3/4-14 | 122.00 | 171.00 | 179.00 | 222.00 | 182.00 | 188.00 | 212.00 | 4 | 12.00 |
| 1"-11 1/2 | 136.00 | 189.00 | 198.00 | 240.00 | 208.00 | 213.00 | 242.00 | 5 | 13.00 |
| 1 1/4-11 1/2 | 151.00 | 213.00 | 213.00 | 264.00 | 226.00 | 226.00 | 256.00 | 5 | 13.00 |
| 1 1/2-11 1/2 | 171.00 | 242.00 | 242.00 | 298.00 | 254.00 | 254.00 | 279.00 | 5 | 13.00 |
| 2"-11 1/2 | 208.00 | 281.00 | 281.00 | 402.00 | 296.00 | 296.00 | 390.00 | 5 | 13.00 |
| 2 1/2-8 | 256.00 | 446.00 | 446.00 | 618.00 | 474.00 | 474.00 | 598.00 | 6 | 19.00 |
| 3"-8 | 309.00 | 502.00 | 502.00 | 678.00 | 559.00 | 559.00 | 713.00 | 6 | 19.00 |
| 3 1/2-8 | 457.00 | | | | | | | 7 | 22.00 |
| 4"-8 | 524.00 | | | | | | | 7 | 22.00 |
| 5"-8 | 716.00 | | | | | | | 7 | 22.00 |
| 6"-8 | 854.00 | | | | | | | 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 L1 | NPTF L1 THIN | NPTF L2 THICK | NPTF 6-STEP PLAIN | ANPT L1 THIN | ANPT L2 THICK | ANPT 6-STEP PLAIN |
|--------------|---------|--------------|---------------|-------------------|--------------|---------------|-------------------|
| 1/16-27 | 216.00 | 226.00 | 314.00 | 384.00 | 336.00 | 394.00 | 445.00 |
| 1/8-27 | 164.00 | 197.00 | 293.00 | 384.00 | 293.00 | 357.00 | 445.00 |
| 1/4-18 | 164.00 | 187.00 | 314.00 | 384.00 | 286.00 | 369.00 | 445.00 |
| 3/8-18 | 174.00 | 184.00 | 306.00 | 384.00 | 286.00 | 360.00 | 445.00 |
| 1/2-14 | 197.00 | 204.00 | 319.00 | 384.00 | 258.00 | 374.00 | 445.00 |
| 3/4-14 | 220.00 | 227.00 | 354.00 | 428.00 | 280.00 | 411.00 | 498.00 |
| 1"-11 1/2 | 251.00 | 265.00 | 385.00 | 428.00 | 361.00 | 447.00 | 498.00 |
| 1 1/4-11 1/2 | 278.00 | 282.00 | 418.00 | 467.00 | 361.00 | 483.00 | 543.00 |
| 1 1/2-11 1/2 | 329.00 | 339.00 | 457.00 | 537.00 | 394.00 | 531.00 | 622.00 |
| 2"-11 1/2 | 393.00 | 479.00 | 528.00 | 600.00 | 568.00 | 614.00 | 695.00 |
| 2 1/2-8 | 460.00 | 519.00 | 632.00 | 709.00 | 605.00 | 735.00 | 823.00 |
| 3"-8 | 579.00 | 590.00 | 748.00 | 869.00 | 690.00 | 872.00 | 1006.00 |
| 3 1/2-8 | 813.00 | | | | | | |
| 4"-8 | 932.00 | | | | | | |
| 5"-8 | 1118.00 | | | | | | |
| 6"-8 | 1324.00 | | | | | | |

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 NPSM-2B | | | | SET PLUGS NPSM-2A | | | | RINGS NPSM-2A | |
|--------------|-----------------------|--------|-------|---------------|----------------------|--------|-------|---------------|------------------|-------------------|
| | 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 | | | |
| 1/8-27 | 119.00 | 2 | 12.00 | 250.00 | 163.00 | 2 | 12.00 | 338.00 | 308.00 | 616.00 |
| 1/4-18 | 119.00 | 3 | 12.00 | 250.00 | 163.00 | 3 | 12.00 | 338.00 | 317.00 | 634.00 |
| 3/8-18 | 129.00 | 3 | 12.00 | 270.00 | 174.00 | 3 | 12.00 | 360.00 | 325.00 | 650.00 |
| 1/2-14 | 132.00 | 4 | 12.00 | 276.00 | 190.00 | 4 | 12.00 | 392.00 | 330.00 | 660.00 |
| 3/4-14 | 132.00 | 4 | 12.00 | 276.00 | 223.00 | 4 | 12.00 | 458.00 | 338.00 | 676.00 |
| 1"-11 1/2 | 157.00 | 5 | 13.00 | 327.00 | 277.00 | 5 | 13.00 | 567.00 | 364.00 | 728.00 |
| 1 1/4-11 1/2 | 193.00 | 5-1/2 | 19.00 | 405.00 | 311.00 | 5-1/2 | 19.00 | 641.00 | 429.00 | 858.00 |
| 1 1/2-11 1/2 | 217.00 | 5-1/2 | 19.00 | 453.00 | 328.00 | 5-1/2 | 19.00 | 675.00 | 471.00 | 942.00 |
| 2"-11 1/2 | 249.00 | 6 | 19.00 | 517.00 | 377.00 | 6 | 19.00 | 773.00 | 530.00 | 1060.00 |
| 2 1/2-8 | 281.00 | 7 | 22.00 | 606.00* | 427.00 | 7 | 22.00 | 898.00* | 627.00 | 1254.00 |
| 3"-8 | 345.00 | 7 | 22.00 | 734.00* | 528.00 | 7 | 22.00 | 1100.00* | 782.00 | 1564.00 |

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 NO GO | HANDLE | | DOUBLE END |
|-----------|----------------|--------|-------|---------------|
| | | NO. | PRICE | |
| 1/16-27 | 119.00 | 1 | 12.00 | 250.00 |
| 1/8-27 | 119.00 | 2 | 12.00 | 250.00 |
| 1/4-18 | 119.00 | 3 | 12.00 | 250.00 |
| 3/8-18 | 129.00 | 3 | 12.00 | 270.00 |
| 1/2-14 | 132.00 | 4 | 12.00 | 276.00 |
| 3/4-14 | 132.00 | 4 | 12.00 | 276.00 |
| 1"-11 1/2 | 157.00 | 5 | 13.00 | 327.00 |

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 | 119.00 | 1 | 12.00 | 250.00 | 163.00 | 1 | 12.00 | 338.00 | 306.00 | 612.00 |
| 1/8-28 | 119.00 | 2 | 12.00 | 250.00 | 163.00 | 2 | 12.00 | 338.00 | 308.00 | 616.00 |
| 1/4-19 | 119.00 | 3 | 12.00 | 250.00 | 163.00 | 3 | 12.00 | 338.00 | 335.00 | 670.00 |
| 3/8-19 | 131.00 | 3 | 12.00 | 274.00 | 198.00 | 3 | 12.00 | 408.00 | 338.00 | 676.00 |
| 1/2-14 | 132.00 | 4 | 12.00 | 276.00 | 190.00 | 4 | 12.00 | 392.00 | 330.00 | 660.00 |
| 3/4-14 | 132.00 | 4 | 12.00 | 276.00 | 223.00 | 4 | 12.00 | 458.00 | 338.00 | 676.00 |
| 1"-11 | 157.00 | 5 | 13.00 | 327.00 | 277.00 | 5 | 13.00 | 567.00 | 364.00 | 728.00 |
| 1 1/4-11 | 193.00 | 5-1/2 | 19.00 | 405.00 | 311.00 | 5-1/2 | 19.00 | 641.00 | 429.00 | 858.00 |
| 1 1/2-11 | 217.00 | 5-1/2 | 19.00 | 453.00 | 328.00 | 5-1/2 | 19.00 | 675.00 | 471.00 | 942.00 |
| 2"-11 | 249.00 | 6 | 19.00 | 517.00 | 377.00 | 6 | 19.00 | 773.00 | 530.00 | 1060.00 |
| 2 1/2-11 | 281.00 | 7 | 22.00 | 606.00* | 427.00 | 7 | 22.00 | 898.00* | 627.00 | 1254.00 |
| 3"-11 | 345.00 | 7 | 22.00 | 734.00* | 528.00 | 7 | 22.00 | 1100.00* | 782.00 | 1564.00 |

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 "R" System "A" (BSPT) |
|----------|------------------------------------|--------|-------|----------------------|-----------------------------|
| | WORK PLUG ONLY (BSPT) | HANDLE | | WORKPLUG WITH HANDLE | |
| | | NO. | PRICE | | |
| 1/16-28 | 216.00 | 1 | 12.00 | 228.00 | 871.00 |
| 1/8-28 | 216.00 | 2 | 12.00 | 228.00 | 871.00 |
| 1/4-19 | 216.00 | 3 | 12.00 | 228.00 | 904.00 |
| 3/8-19 | 232.00 | 3 | 12.00 | 244.00 | 916.00 |
| 1/2-14 | 233.00 | 4 | 12.00 | 245.00 | 921.00 |
| 3/4-14 | 233.00 | 4 | 12.00 | 245.00 | 943.00 |
| 1"-11 | 271.00 | 5 | 13.00 | 284.00 | 1059.00 |
| 1 1/4-11 | 325.00 | 5 | 13.00 | 338.00 | 1151.00 |
| 1 1/2-11 | 361.00 | 5 | 13.00 | 374.00 | 1249.00 |
| 2"-11 | 409.00 | 5 | 13.00 | 422.00 | 1471.00 |
| 2 1/2-11 | 457.00 | 6 | 19.00 | 476.00 | 1735.00 |
| 3"-11 | 553.00 | 6 | 19.00 | 572.00 | 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

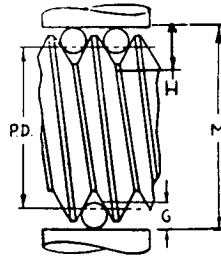
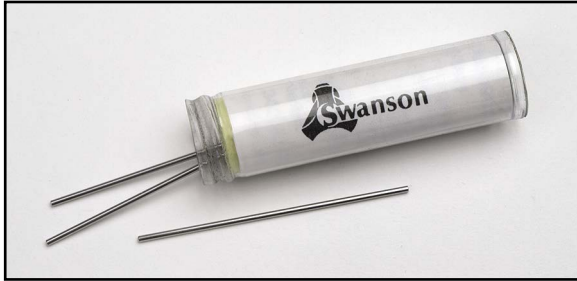
Inch

| SIZE | PRICE | SIZE | PRICE |
|------------|--------|-------------|--------|
| 0-80 UNF | 189.00 | 1/4-28 UNF | 128.00 |
| 1-64 UNC | 179.00 | 5/16-18 UNC | 125.00 |
| 1-72 UNF | 187.00 | 5/16-24 UNF | 128.00 |
| 2-56 UNC | 174.00 | 3/8-16 UNC | 138.00 |
| 2-64 UNF | 179.00 | 3/8-24 UNF | 139.00 |
| 3-48 UNC | 167.00 | 7/16-14 UNC | 134.00 |
| 3-56 UNF | 174.00 | 7/16-20 UNF | 139.00 |
| 4-40 UNC | 145.00 | 1/2-13 UNC | 142.00 |
| 4-48 UNF | 153.00 | 1/2-20 UNF | 147.00 |
| 5-40 UNC | 155.00 | 9/16-12 UNC | 139.00 |
| 5-44 UNF | 147.00 | 9/16-18 UNF | 147.00 |
| 6-32 UNC | 157.00 | 5/8-11 UNC | 145.00 |
| 6-40 UNF | 159.00 | 5/8-18 UNF | 152.00 |
| 8-32 UNC | 148.00 | 3/4-10 UNC | 152.00 |
| 8-36 UNF | 155.00 | 3/4-16 UNF | 155.00 |
| 10-24 UNC | 147.00 | 7/8-9 UNC | 177.00 |
| 10-32 UNF | 148.00 | 7/8-14 UNF | 187.00 |
| 12-24 UNC | 145.00 | 1"-8 UNC | 252.00 |
| 12-28 UNF | 147.00 | 1"-12 UNF | 252.00 |
| 1/4-20 UNC | 125.00 | | |

Metric

| SIZE | PRICE |
|-------------|--------|
| M1.6 x 0.35 | 205.00 |
| M2 x 0.4 | 197.00 |
| M2.5 x 0.45 | 197.00 |
| M3 x 0.5 | 192.00 |
| M3.5 x 0.6 | 192.00 |
| M4 x 0.7 | 187.00 |
| M5 x 0.8 | 172.00 |
| M6 x 1.0 | 153.00 |
| M8 x 1.25 | 152.00 |
| M8 x 1.0 | 152.00 |
| M10 x 1.5 | 158.00 |
| M10 x 1.25 | 159.00 |
| M10 x 0.75 | 214.00 |
| M12 x 1.75 | 167.00 |
| M12 x 1.5 | 167.00 |
| M12 x 1.25 | 172.00 |
| M12 x 1.0 | 172.00 |
| M14 x 2.0 | 177.00 |
| M14 x 1.5 | 177.00 |
| M15 x 1.0 | 177.00 |
| M16 x 2.0 | 177.00 |
| M16 x 1.5 | 187.00 |
| M17 x 1.0 | 189.00 |
| M18 x 1.5 | 189.00 |
| M20 x 2.5 | 189.00 |
| M20 x 1.5 | 192.00 |
| M20 x 1.0 | 192.00 |
| M22 x 2.5 | 209.00 |
| M22 x 1.5 | 209.00 |
| M24 x 3.0 | 228.00 |
| M24 x 2.0 | 228.00 |

Calibrated Thread Measuring Wires



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

Special Thread Measuring Wires +/- 20 millionths

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

60° Threads

| (n) THREADS PER INCH | (G) NOMINAL BEST WIRE DIAMETER | (C) NOMINAL CONSTANT | PRICE SET OF THREE |
|-------------------------------|--|----------------------------|-----------------------------|
| 120 | .00481" | .00722" | 198.00 |
| 100 | .00577 | .00866 | 198.00 |
| 96 | .00601 | .00902 | 198.00 |
| 90 | .00642 | .00962 | 198.00 |
| 80 | .00722 | .01083 | 198.00 |
| 72 | .00802 | .01203 | 198.00 |
| 64 | .00902 | .01353 | 198.00 |
| 56 | .01031 | .01546 | 198.00 |
| 50 | .01155 | .01732 | 198.00 |
| 48 | .01203 | .01804 | 124.00 |
| 44 | .01312 | .01968 | 124.00 |
| 40 | .01443 | .02165 | 124.00 |
| 36 | .01604 | .02406 | 124.00 |
| 32 | .01804 | .02706 | 124.00 |
| 30 | .01925 | .02887 | 124.00 |
| 28 | .02062 | .03093 | 124.00 |
| 27 | .02138 | .03208 | 124.00 |
| 26 | .02221 | .03331 | 124.00 |
| 24 | .02406 | .03608 | 124.00 |
| 22 | .02624 | .03936 | 124.00 |
| 20 | .02887 | .04330 | 124.00 |
| 18 | .03208 | .04811 | 124.00 |
| 16 | .03608 | .05413 | 124.00 |
| 14 | .04124 | .06186 | 124.00 |
| 13 | .04441 | .06662 | 124.00 |
| 12 | .04811 | .07217 | 124.00 |
| 11-1/2 | .05020 | .07531 | 124.00 |
| 11 | .05249 | .07873 | 124.00 |
| 10 | .05774 | .08660 | 124.00 |
| 9 | .06415 | .09623 | 124.00 |
| 8 | .07217 | .10825 | 124.00 |
| 7-1/2 | .07698 | .11547 | 124.00 |
| 7 | .08248 | .12372 | 124.00 |
| 6 | .09623 | .14434 | 124.00 |
| 5-1/2 | .10497 | .15746 | 198.00 |
| 5 | .11547 | .17321 | 198.00 |
| 4-1/2 | .12830 | .19245 | 198.00 |
| 4 | .14434 | .21651 | 198.00 |
| 3-1/2 | .16496 | .24744 | 198.00 |
| 3-1/4 | .17765 | .26647 | 198.00 |
| 3 | .19245 | .28868 | 198.00 |
| 2-3/4 | .20995 | .31492 | 198.00 |
| 2 | .28868 | .43301 | 198.00 |

60° Metric Threads

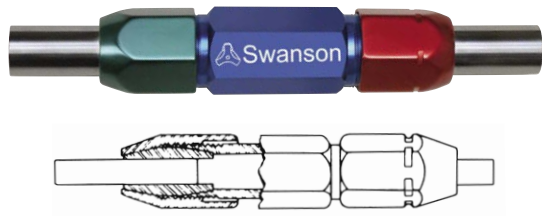
| PITCH mm | NOMINAL BEST WIRE DIAMETER mm | NOMINAL CONSTANT mm | PRICE SET OF THREE |
|-------------|--|---------------------------|-----------------------------|
| .2 | .1155 | .1732 | 198.00 |
| .225 | .1299 | .1949 | 198.00 |
| .25 | .1443 | .2165 | 198.00 |
| .3 | .1732 | .2598 | 198.00 |
| .35 | .2021 | .3031 | 198.00 |
| .4 | .2309 | .3464 | 198.00 |
| .45 | .2598 | .3897 | 198.00 |
| .5 | .2887 | .4330 | 198.00 |
| .6 | .3464 | .5196 | 198.00 |
| .7 | .4041 | .6062 | 198.00 |
| .75 | .4330 | .6495 | 173.00 |
| .8 | .4619 | .6928 | 173.00 |
| .9 | .5196 | .7794 | 173.00 |
| 1.0 | .5774 | .8660 | 124.00 |
| 1.25 | .7217 | 1.0825 | 124.00 |
| 1.5 | .8660 | 1.2990 | 124.00 |
| 1.75 | 1.0104 | 1.5155 | 124.00 |
| 2.0 | 1.1547 | 1.7321 | 124.00 |
| 2.5 | 1.4434 | 2.1651 | 124.00 |
| 3.0 | 1.7321 | 2.5981 | 124.00 |
| 3.5 | 2.0207 | 3.0311 | 124.00 |
| 4.0 | 2.3094 | 3.4641 | 124.00 |
| 4.5 | 2.5981 | 3.8971 | 153.00 |
| 5.0 | 2.8868 | 4.3301 | 198.00 |
| 5.5 | 3.1754 | 4.7631 | 198.00 |
| 6.0 | 3.4641 | 5.1962 | 198.00 |
| 7.0 | 4.0415 | 6.0622 | 198.00 |
| 8.0 | 4.6188 | 6.9282 | 198.00 |
| 9.0 | 5.1962 | 7.7942 | 198.00 |
| 10.0 | 5.7735 | 8.6603 | 198.00 |

**CERTIFICATE OF ACCURACY
INCLUDED WITH EACH SET**

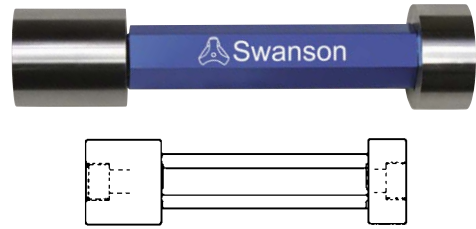
29° Acme Best Threads

| THREADS PER INCH (n) | DIAMETER BEST SIZE WIRE | PRICE SET OF THREE |
|-------------------------------|----------------------------------|-----------------------------|
| 1 | .51645" | 228.00 |
| 1-1/3 | .38734 | 228.00 |
| 1-1/2 | .34430 | 228.00 |
| 1-3/4 | .29511 | 228.00 |
| 2 | .25823 | 228.00 |
| 2-1/2 | .20658 | 228.00 |
| 3 | .17215 | 228.00 |
| 3-1/2 | .14756 | 182.00 |
| 4 | .12911 | 182.00 |
| 4-1/2 | .11477 | 182.00 |
| 5 | .10329 | 182.00 |
| 5-1/2 | .09390 | 182.00 |
| 6 | .08608 | 182.00 |
| 7 | .07378 | 182.00 |
| 8 | .06456 | 182.00 |
| 9 | .05738 | 182.00 |
| 10 | .05164 | 182.00 |
| 12 | .04304 | 182.00 |
| 14 | .03689 | 182.00 |
| 16 | .03228 | 182.00 |
| 18 | .02869 | 182.00 |
| 20 | .02582 | 182.00 |

Cylindrical Plug Gages



Reversible Style



Trilock Style

| SIZE ABOVE – INCLUDING | CLASS | TOL. | GO OR NO GO LENGTH | HANDLE # |
|-------------------------------------|-------|--------|--------------------|----------|
| .010 to .075 .254mm to 1.91mm | XX | .00002 | 2" | 1W |
| | X | .00004 | | 1W |
| | Y | .00007 | | 1W |
| | Z | .00010 | | 1W |
| .075 to .180 1.91mm to 4.57mm | XX | .00002 | 2" | 2W |
| | X | .00004 | | 2W |
| | Y | .00007 | | 2W |
| | Z | .00010 | | 2W |
| .180 to .281 4.57mm to 7.14mm | XX | .00002 | 2" | 3W |
| | X | .00004 | | 3W |
| | Y | .00007 | | 3W |
| | Z | .00010 | | 3W |
| .281 to .406 7.14mm to 10.31mm | XX | .00002 | 2" | 4W |
| | X | .00004 | | 4W |
| | Y | .00007 | | 4W |
| | Z | .00010 | | 4W |
| .406 to .510 10.31mm to 12.95mm | XX | .00002 | 2" | 5W |
| | X | .00004 | | 5W |
| | Y | .00007 | | 5W |
| | Z | .00010 | | 5W |
| .510 to .635 12.95mm to 16.13mm | XX | .00002 | 2" | 6W |
| | X | .00004 | | 6W |
| | Y | .00007 | | 6W |
| | Z | .00010 | | 6W |
| .635 to .760 16.13mm to 19.30mm | XX | .00002 | 2" | 7W |
| | X | .00004 | | 7W |
| | Y | .00007 | | 7W |
| | Z | .00010 | | 7W |
| .760 to .825 19.30mm to 20.96mm | XX | .00002 | 2" | 8W |
| | X | .00004 | | 8W |
| | Y | .00007 | | 8W |
| | Z | .00010 | | 8W |
| .825 to 1.010 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 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 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 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 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 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 63.75mm to 89.15mm | XX | .00005 | 2" | 1" | 7 |
| | X | .00010 | | | 7 |
| | Y | .00015 | | | 7 |
| | Z | .00020 | | | 7 |
| 3.510 to 4.510 89.15mm to 114.55mm | XX | .00005 | 2-1/8" | 1" | 7 |
| | X | .00010 | | | 7 |
| | Y | .00015 | | | 7 |
| | Z | .00020 | | | 7 |
| 4.510 to 6.510 114.55mm to 165.35mm | XX | .000065 | 2-1/8" | 1" | 7 |
| | X | .00013 | | | 7 |
| | Y | .00019 | | | 7 |
| | Z | .00025 | | | 7 |
| 6.510 to 8.010 165.35mm 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

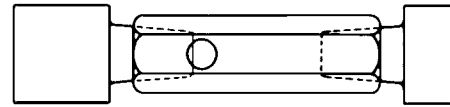
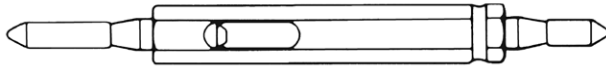
CALL SWANSON FOR PRICING

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.

Taperlock Cylindrical Plug Gages



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

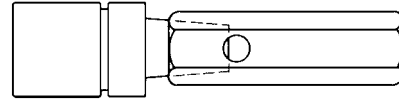
CALL SWANSON FOR PRICING

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 ABOVE - INCLUDING | CLASS | TOL. | MEMBER LENGTH | GO PORTION | NO GO PORTION | HANDLE # |
|--------------------------------------|-------|--------|---------------|------------|---------------|----------|
| .105 to .150 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 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 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 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 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 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 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.

Trilock Style

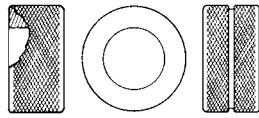
| SIZE ABOVE - INCLUDING | CLASS | TOL. | MEMBER LENGTH | GO PORTION | NO GO PORTION | HANDLE # |
|---------------------------------------|-------|--------|---------------|------------|---------------|----------|
| 1.510 to 2.010 38.35mm to 51.05mm | XX | .00004 | 2-7/8" | 1-7/8" | 7/8" | 5-1/2 |
| | X | .00008 | | | | 5-1/2 |
| | Y | .00012 | | | | 5-1/2 |
| | Z | .00016 | | | | 5-1/2 |
| 2.010 to 2.510 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 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 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 |

Chrome and Carbide also available

CALL SWANSON FOR PRICING

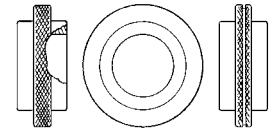
Cylindrical Ring Gages

Solid Type



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

Flanged Type



Sizes Above 1.510" (38.35mm)

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

| SIZE ABOVE – INCLUDING | CLASS | TOL. | WIDTH | O.D. |
|--|-------|---------|--------|---------|
| 1.510 to 2.010 38.35mm to 51.05mm | XX | .00004 | 1-1/2" | 4" |
| | X | .00008 | | |
| | Y | .00012 | | |
| | Z | .00016 | | |
| 2.010 to 2.510 51.05mm to 63.75mm | XX | .00004 | 1-1/2" | 4-1/2" |
| | X | .00008 | | |
| | Y | .00012 | | |
| | Z | .00016 | | |
| 2.510 to 3.010 63.75mm to 76.45mm | XX | .00005 | 1-1/2" | 5" |
| | X | .00010 | | |
| | Y | .00015 | | |
| | Z | .00020 | | |
| 3.010 to 3.510 76.45mm to 89.15 | XX | .00005 | 1-1/2" | 5-1/2" |
| | X | .00010 | | |
| | Y | .00015 | | |
| | Z | .00020 | | |
| 3.510 to 4.010 89.15mm to 101.85mm | XX | .00005 | 1-1/2" | 6-3/8" |
| | X | .00010 | | |
| | Y | .00015 | | |
| | Z | .00020 | | |
| 4.010 to 4.760 101.85mm to 120.90mm | XX | .00005 | 1-1/2" | 7-1/4" |
| | X | .00010 | | |
| | Y | .00015 | | |
| | Z | .00020 | | |
| 4.760 to 5.510 120.90mm to 139.95mm | XX | .000065 | 1-1/2" | 8-1/4" |
| | X | .00013 | | |
| | Y | .00019 | | |
| | Z | .00025 | | |
| 5.510 to 6.260 139.95mm to 159.00mm | XX | .000065 | 1-1/2" | 9-1/4" |
| | X | .00013 | | |
| | Y | .00019 | | |
| | Z | .00025 | | |
| 6.260 to 7.010 159.00mm to 178.05mm | XX | .00008 | 1-1/2" | 10-1/4" |
| | X | .00016 | | |
| | Y | .00024 | | |
| | Z | .00032 | | |
| 7.010 to 7.760 178.05mm to 197.10mm | XX | .00008 | 1-1/2" | 11-1/4" |
| | X | .00016 | | |
| | Y | .00024 | | |
| | Z | .00032 | | |
| 7.760 to 8.510 197.10mm 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 ABOVE - INCLUDING | CLASS | TOL. | STYLE 1 LENGTH | STYLE 2 LENGTH | STYLE 3 LENGTH |
|--|-------|---------|----------------|----------------|----------------|
| .105 to .150 2.67mm to 3.81mm | XX | .00002 | 3/4" | 3/4" | 3/8" |
| | X | .00004 | | | |
| | Y | .00007 | | | |
| | Z | .00010 | | | |
| .150 to .230 3.81mm to 5.84mm | XX | .00002 | 7/8" | 7/8" | 7/16" |
| | X | .00004 | | | |
| | Y | .00007 | | | |
| | Z | .00010 | | | |
| .230 to .365 5.84mm to 9.27mm | XX | .00002 | 1" | 1" | 1/2" |
| | X | .00004 | | | |
| | Y | .00007 | | | |
| | Z | .00010 | | | |
| .365 to .510 9.27mm to 12.95mm | XX | .00002 | 1-1/8" | 1-1/8" | 9/16" |
| | X | .00004 | | | |
| | Y | .00007 | | | |
| | Z | .00010 | | | |
| .510 to .825 12.95mm to 20.96mm | XX | .00002 | 1-1/4" | 1-1/4" | 5/8" |
| | X | .00004 | | | |
| | Y | .00007 | | | |
| | Z | .00010 | | | |
| .825 to 1.135 20.96mm to 28.83mm | XX | .00003 | 1-3/8" | 1-3/8" | 11/16" |
| | X | .00006 | | | |
| | Y | .00009 | | | |
| | Z | .00012 | | | |
| 1.135 to 1.510 28.83mm to 38.35mm | XX | .00003 | 1-5/8" | 1-5/8" | 13/16" |
| | X | .00006 | | | |
| | Y | .00009 | | | |
| | Z | .00012 | | | |
| 1.510 to 2.010 38.35mm to 51.05mm | XX | .00004 | 1-7/8" | 1-7/8" | 7/8" |
| | X | .00008 | | | |
| | Y | .00012 | | | |
| | Z | .00016 | | | |
| 2.010 to 2.510 51.05mm to 63.75mm | XX | .00004 | 2" | 2" | 7/8" |
| | X | .00008 | | | |
| | Y | .00012 | | | |
| | Z | .00016 | | | |
| 2.510 to 3.010 63.75mm to 76.45mm | XX | .00005 | 2-1/8" | 2-1/8" | 1" |
| | X | .00010 | | | |
| | Y | .00015 | | | |
| | Z | .00020 | | | |
| 3.010 to 4.510 76.45mm to 114.55mm | XX | .00005 | 2-1/4" | 2-1/4" | 1" |
| | X | .00010 | | | |
| | Y | .00015 | | | |
| | Z | .00020 | | | |
| 4.510 to 6.510 114.55mm to 165.35mm | XX | .000065 | 2-1/4" | 2-1/4" | 1" |
| | X | .00013 | | | |
| | Y | .00019 | | | |
| | Z | .00025 | | | |
| 6.510 to 8.010 165.35mm to 203.45mm | XX | .00008 | 2-1/4" | 2-1/4" | 1" |
| | X | .00016 | | | |
| | Y | .00024 | | | |
| | Z | .00032 | | | |

CALL SWANSON FOR PRICING

Pitch Diameters – Thread Plug Gages



Table I
Classes 2B, 3B

| Nominal Size | Go Basic All Classes All Series | UNIFIED PITCH DIAMETERS | | | | | Nominal Size | Go Basic All Classes All Series | UNIFIED PITCH DIAMETERS | | | | |
|--------------|---------------------------------|-------------------------|--------|-------------------------|-------------|---------------------|----------------|---------------------------------|-------------------------|--------|-------------------------|-------------|---------------------|
| | | No Go | | X Tol. Go = + No Go = - | X Lead Tol. | X ± Half Angle Tol. | | | No Go | | X Tol. Go = + No Go = - | X Lead Tol. | X ± Half Angle 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' | 1 1/16-24 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' | 1 1/16-12 UN | 1.0084 | 1.0158 | 1.0139 | .0003 | .0003 | 0°10' |
| #12-28 UNF | .1928 | .1970 | .1959 | .0003 | .0003 | 0°15' | 1 1/16-18 UNEF | 1.0264 | 1.0326 | 1.0310 | .0003 | .0003 | 0°10' |
| #12-32 UNEF | .1957 | .1998 | .1988 | .0003 | .0003 | 0°15' | 1 1/8-7 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' | 1 3/16-12 UN | 1.1334 | 1.1409 | 1.1390 | .0003 | .0003 | 0°10' |
| 5/16-18 UNC | .2764 | .2817 | .2803 | .0003 | .0003 | 0°10' | 1 3/16-18 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' | 1 5/16-12 UN | 1.2584 | 1.2659 | 1.2640 | .0003 | .0003 | 0°10' |
| 3/8-32 UNEF | .3547 | .3591 | .3580 | .0003 | .0003 | 0°15' | 1 5/16-18 UNEF | 1.2764 | 1.2827 | 1.2811 | .0003 | .0003 | 0°10' |
| 7/16-14 UNC | .3911 | .3972 | .3957 | .0003 | .0003 | 0°10' | 1 3/8-6 UNC | 1.2667 | 1.2771 | 1.2745 | .0004 | .0004 | 0°05' |
| 7/16-20 UNF | .4050 | .4104 | .4091 | .0003 | .0003 | 0°15' | 1 3/8-12 UNF | 1.3209 | 1.3291 | 1.3270 | .0003 | .0003 | 0°10' |
| 7/16-28 UNEF | .4143 | .4189 | .4178 | .0003 | .0003 | 0°15' | 1 3/8-18 UNEF | 1.3389 | 1.3452 | 1.3436 | .0003 | .0003 | 0°10' |
| 1/2-13 UNC | .4500 | .4565 | .4548 | .0003 | .0003 | 0°10' | 1 7/16-12 UN | 1.3834 | 1.3910 | 1.3891 | .0003 | .0003 | 0°10' |
| 1/2-20 UNF | .4675 | .4731 | .4717 | .0003 | .0003 | 0°15' | 1 7/16-18 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

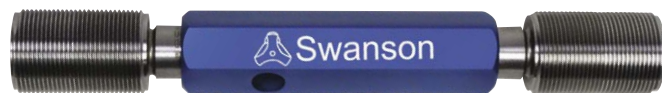


Table II
Classes 2A, 3A

| Nominal Size | UNIFIED PITCH DIAMETERS | | | | | Nominal Size | UNIFIED PITCH DIAMETERS | | | | |
|--------------|-------------------------|-------|----------|-------|-------------------------------|----------------|-------------------------|--------|----------|--------|-------------------------------|
| | Class 2A | | Class 3A | | X Tol. Go = - No Go = + | | Class 2A | | Class 3A | | X Tol. Go = - 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 | 1 1/16-24 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 | 1 3/16-20 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 | 1 5/16-20 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 | 1 1/16-12 UN | 1.0067 | 1.0010 | 1.0084 | 1.0042 | .0003 |
| #12-28 UNF | .1918 | .1886 | .1928 | .1904 | .0003 | 1 1/16-18 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 | 1 3/16-12 UN | 1.1317 | 1.1259 | 1.1334 | 1.1291 | .0003 |
| 5/16-18 UNC | .2752 | .2712 | .2764 | .2734 | .0003 | 1 3/16-18 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 | 1 5/16-12 UN | 1.2567 | 1.2509 | 1.2584 | 1.2541 | .0003 |
| 3/8-32 UNEF | .3537 | .3503 | .3547 | .3522 | .0003 | 1 5/16-18 UNEF | 1.2749 | 1.2700 | 1.2764 | 1.2728 | .0003 |
| 7/16-14 UNC | .3897 | .3850 | .3911 | .3876 | .0003 | 1 3/8-6 UNC | 1.2643 | 1.2563 | 1.2667 | 1.2607 | .0004 |
| 7/16-20 UNF | .4037 | .3995 | .4050 | .4019 | .0003 | 1 3/8-12 UNF | 1.3190 | 1.3127 | 1.3209 | 1.3162 | .0003 |
| 7/16-28 UNEF | .4132 | .4096 | .4143 | .4116 | .0003 | 1 3/8-18 UNEF | 1.3374 | 1.3325 | 1.3389 | 1.3353 | .0003 |
| 1/2-13 UNC | .4485 | .4435 | .4500 | .4463 | .0003 | 1 7/16-12 UN | 1.3816 | 1.3757 | 1.3834 | 1.3790 | .0003 |
| 1/2-20 UNF | .4662 | .4619 | .4675 | .4643 | .0003 | 1 7/16-18 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 Size | PITCH DIAMETERS | | | X Tol. Go = + 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 mm | PITCH mm | PITCH DIAMETERS | | |
|------------|-------------|-----------------|-------------|-------------|
| | | Go (Basic) | No Go 4H | No Go 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 mm | PITCH mm | PITCH DIAMETERS | | |
|------------|-------------|-----------------|-------------|-------------|
| | | Go 4g & 6g | No Go 4g | No Go 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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