

INSPECTION BALL KITS

GRADE 25 CHROME STEEL (R/C 60 MIN.)



Inspection ball kits are available from stock in the 14 most popular English sizes from 3/32" to 1.00", individually or all in a kit. The kit for each individual size contains 7 balls. A nominal fractional ball as well as one each of a +0.002", +001", +0005", +0002", and -0.001", -002". Kit BK-14 consists of all 14 individual size kits. The inspection ball kits are also excellent for ball sizing parts. Ball sizing is basically pushing a ball through a hole or tube which produces a certain finish or size.

| Part # | Nominal Size | | Price |
|--------|---------------------------------|-----------|----------|
| BK-14 | 14 Sizes From 3/32" - 1" Kit | — | \$614.63 |
| 093-BK | 3/32" | 2.381 mm | 44.17 |
| 125-BK | 1/8" | 3.175 mm | 44.17 |
| 156-BK | 5/32" | 3.969 mm | 44.17 |
| 187-BK | 3/16" | 4.763 mm | 44.17 |
| 218-BK | 7/32" | 5.556 mm | 44.17 |
| 250-BK | 1/4" | 6.35 mm | 44.17 |
| 312-BK | 5/16" | 7.938 mm | 46.03 |
| 375-BK | 3/8" | 9.525 mm | 47.89 |
| 437-BK | 7/16" | 11.113 mm | 47.89 |
| 500-BK | 1/2" | 12.7 mm | 53.41 |
| 625-BK | 5/8" | 15.875 mm | 53.41 |
| 750-BK | 3/4" | 19.05 mm | 62.66 |
| 875-BK | 7/8" | 22.225 mm | 73.71 |
| 100-BK | 1" | 25.4 mm | 73.71 |

DECIMAL DIAMETER BALLS, OTHER MATERIALS AND
TOLERANCES AVAILABLE

CALL FOR PRICING & DELIVERY

Grade 25

BASIC DIAMETER

TOLERANCE = $\pm .0001$

DEVIATION FROM
SPHERICAL FORM
.000025

WILLIAM T. HUTCHINSON CO.

TOLL FREE 1-800-544-7934 • (908) 688-0533 • FAX (908) 688-8296 • ESTABLISHED 1927

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CLASS X MEYER GAGE MG-25 SERIES



MG-25 PIN GAGE SETS

IN .0001" INCREMENTS OR .01mm INCREMENTS

Used as masters to calibrate measuring equipment and check linearity of comparators, micrometers, and calipers. These "Tenth Step" gage sets have unlimited applications, such as quality control inspection, prototype work and production layout. Inspectors select from the range of pins to find the size of a hole or slot. These round masters simulate a cylindrical part which unlike flat blocks can detect uneven wear on the tips of micrometers and calipers. The thin "line" of contact detects uneven face wear better than flat gage blocks with large contact area.

**SEE PAGE 67 FOR
MORE CLASS X GAGE SETS**

FEATURES:

- Each set contains 25 pieces of Class X tolerance (.00004") gage pins. Traceable to NIST.
- Choice of two tolerances Plus (+.00004") or Minus (-.00004").
- Sets consist of a center nominal size, and 12 gages larger in .0001" steps and 12 gages smaller in .0001" steps.
- Each gage is inspected and has a 2 micro-finish or better.
- Heat treated and through hardened to 60-62 Rockwell C.
- All pin gages over .060" or 1.51mm are laser marked with size direction of tolerance and serial number for traceability.

| GAGE SET NO. | NOMINAL SIZE RANGE | | SET PRICE |
|--------------|--------------------|--------------------|-----------|
| | <i>English</i> | <i>or Metric</i> | |
| MG1-25 | .0156 to .1250 | .40mm to 3.18mm | \$500.00 |
| MG2-25 | .1251 to .2500 | 3.19mm to 6.35mm | \$400.00 |
| MG3-25 | .2510 to .3750 | 6.36mm to 9.53mm | \$320.00 |
| MG4-25 | .3751 to .5000 | 9.54mm to 12.70mm | \$380.00 |
| MG5-25 | .5001 to .6250 | 12.71mm to 15.88mm | \$460.00 |
| MG6-25 | .6251 to .8750 | 15.89mm to 22.23mm | \$520.00 |

To order simply select your nominal size from any .0001" English or .01mm Metric increment and direction of tolerance. Then refer to the above chart to find the set price.

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PRECISION PLUG GAGE SETS



METRIC GAGE SETS

| Gage Set Number | Gage Size | No. of Members | Price | Separate Member Price |
|-----------------|----------------|----------------|---------|-----------------------|
| WTH-0 | .011 - .060 | 50 | 150.00 | 9.00 |
| WTH-0-5 | .0115 - .0605 | 50 | 150.00 | 9.00 |
| WTH-1 | .061 - .250 | 190 | 330.00 | 8.50 |
| WTH-1-5 | .0615 - .2505 | 190 | 330.00 | 8.50 |
| WTH-10 | .011 - .250 | 240 | 460.00 | — |
| WTH-105 | .0115 - .2505 | 240 | 470.00 | — |
| WTH-2 | .251 - .500 | 250 | 490.00 | 9.50 |
| WTH-2-5 | .2515 - .5005 | 250 | 500.00 | 9.50 |
| WTH-3 | .501 - .625 | 125 | 570.00 | 10.50 |
| WTH-3-5 | .5015 - .6255 | 125 | 580.00 | 10.50 |
| WTH-4 | .626 - .750 | 125 | 630.00 | 14.00 |
| WTH-4-5 | .6265 - .7505 | 125 | 650.00 | 14.00 |
| WTH-5 | .751 - .832 | 82 | 1060.00 | 18.00 |
| WTH-5-5 | .7515 - .8325 | 82 | 1080.00 | 18.00 |
| WTH-6 | .833 - .916 | 84 | 1220.00 | 18.00 |
| WTH-6-5 | .8335 - .9165 | 84 | 1240.00 | 18.00 |
| WTH-7 | .917 - 1.000 | 84 | 1260.00 | 18.00 |
| WTH-7-5 | .9175 - 1.0005 | 84 | 1280.00 | 18.00 |

IN .001 INCREMENTS

| Gage Set Number | Gage Size | No. of Members | Price | Separate Member Price |
|-----------------|-------------------|----------------|---------|-----------------------|
| WTH-0 mm | .22mm - 1.50mm | 65 | 190.00 | 14.00 |
| WTH-01 mm | .23mm - 1.51mm | 65 | 200.00 | 14.00 |
| WTH-1 mm | 1.52mm - 7.70mm | 310 | 670.00 | 8.50 |
| WTH-11 mm | 1.53mm - 7.71mm | 310 | 680.00 | 8.50 |
| WTH-2 mm | 7.72mm - 12.70mm | 250 | 710.00 | 9.50 |
| WTH-21 mm | 7.73mm - 12.71mm | 250 | 720.00 | 9.50 |
| WTH-3 mm | 12.72mm - 15.30mm | 130 | 770.00 | 10.50 |
| WTH-31 mm | 12.73mm - 15.31mm | 130 | 780.00 | 10.50 |
| WTH-4 mm | 15.32mm - 17.80mm | 125 | 810.00 | 14.00 |
| WTH-41 mm | 15.33mm - 17.81mm | 125 | 820.00 | 14.00 |
| WTH-5 mm | 17.82mm - 20.36mm | 128 | 940.00 | 18.00 |
| WTH-51 mm | 17.83mm - 20.37mm | 128 | 950.00 | 18.00 |
| WTH-6 mm | 20.38mm - 22.04mm | 84 | 1110.00 | 18.00 |
| WTH-61 mm | 20.39mm - 22.05mm | 84 | 1130.00 | 18.00 |
| WTH-7 mm | 22.06mm - 23.72mm | 84 | 1250.00 | 19.00 |
| WTH-71 mm | 22.07mm - 22.73mm | 84 | 1270.00 | 19.00 |
| WTH-8 mm | 23.74mm - 25.40mm | 84 | 1280.00 | 21.50 |
| WTH-81 mm | 23.75mm - 25.41mm | 84 | 1300.00 | 21.50 |

IN .02mm INCREMENTS

IMPORTANT: SPECIFY PLUS OR MINUS TOLERANCE WHEN ORDERING GAGES

PLASTIC CASES

EACH HOLE SIZE MARKED ON INSERT.

| | |
|--|--------------|
| Plastic insert for WTH-0 set | \$25.00 each |
| Plastic insert for WTH-1 thru WTH-8 sets | 40.00 each |
| Plastic case for WTH-0 set | 25.00 each |
| Plastic case for WTH-1 thru WTH-7 sets | 45.00 each |
| Plastic case with insert for WTH-0 set | 50.00 each |
| Plastic case with insert for WTH-1 thru WTH-7 sets | 85.00 each |

USES

- Checking locations.
- Measuring hole sizes and depths
- Go and No-Go gaging.
- Setting micrometers.
- Checking distances between holes.

FEATURES

- All Gages 2" long
- No sharp edges
- Boxes and Gages both marked (WTH-0 pins not etched)
- 8 Micro finish or better
- All english gages are inspected within .0001 tolerance limits
- All metric gages are inspected within .0025mm tolerance limits
- Heat treated to a hardness of Rockwell C 60-62
- Each set packaged in its own plastic case

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PRECISION PLUG GAGE SETS



CLASS X GAGE SETS .001 INCREMENTS

| Gage Set | Range | Number of Members | Price | Separate Member Price |
|----------|----------------|-------------------|---------|-----------------------|
| WTH-OX | .011" -.060" | 50 | 780.00 | 41.00 |
| WTH-O5X | .0115 -.0605 | 50 | 800.00 | 41.00 |
| WTH-1X | .061 - .250 | 190 | 1950.00 | 33.50 |
| WTH-15X | .0615 - .2505 | 190 | 1970.00 | 33.50 |
| WTH-2X | .251 - .500 | 250 | 2480.00 | 34.00 |
| WTH-25X | .2515 - .5005 | 250 | 2500.00 | 34.00 |
| WTH-3X | .501 - .625 | 125 | 2080.00 | 35.50 |
| WTH-35 | .5015 - .6255 | 125 | 2100.00 | 35.50 |
| WTH-4X | .626 - .750 | 125 | 2190.00 | 38.00 |
| WTH-45 | .6265 - .7505 | 125 | 2210.00 | 38.00 |
| WTH-5X | .751 - .832 | 82 | 1820.00 | 40.00 |
| WTH-55X | .7515 - .8325 | 82 | 1840.00 | 40.00 |
| WTH-6X | .833 - .916 | 84 | 1900.00 | 40.00 |
| WTH-65X | .8335 - .9165 | 84 | 1920.00 | 40.00 |
| WTH-7X | .917 - 1.000 | 84 | 2160.00 | 40.00 |
| WTH-75X | .9175 - 1.0005 | 84 | 2180.00 | 40.00 |

.000040 tolerance • Each set packaged in Plastic Case and Insert.

GAGE SET LIBRARIES: Conveniently store all your gages in one location
IMPORTANT! Specify plus or minus tolerance when ordering gages

.0001 (CLASS Z) LIBRARY SERIES

| Model Number | Wt./lbs. | Range | Number of members | Price |
|--------------|----------|----------------|----------------------------------|---------|
| L-S | 87 | .011" - .625" | (615 gages) | 1850.00 |
| L-C | 120 | .011" - .750" | (740 gages) | 2680.00 |
| L-1 | 120 | .061" - .750" | (690 gages) | 2560.00 |
| L-2 | 95 | .061" - .5005" | (880 gages in .0005" increments) | 2100.00 |
| L-2C | 96 | .011" - .5005" | (980 gages in .0005" increments) | 2400.00 |
| L-3* | 240 | .061" - 1.000" | (940 gages) | 5800.00 |
| L-4* | 240 | .011" - 1.000" | (990 gages) | 6040.00 |
| L-5 | 140 | .751" - 1.000" | (250 gages) | 3800.00 |

.00004 (CLASS X) LIBRARY SERIES

| Model Number | Wt./lbs. | Range | Number of members | Price |
|--------------|----------|----------------|----------------------------------|----------|
| L-CX | 120 | .011" - .750" | (740 gages) | 8000.00 |
| L-1X | 122 | .061" - .750" | (690 gages) | 7500.00 |
| L-2X | 98 | .061" - .5005" | (880 gages in .0005 increments) | 7250.00 |
| L-2CX | 100 | .011" - .5005" | (980 gages in .0005" increments) | 8250.00 |
| L-3X* | 260 | .061" - 1.000" | (940 gages) | 12500.00 |
| L-4X* | 250 | .011" - 1.000" | (990 gages) | 12730.00 |

* Consists of one seven drawer cabinet.

METRIC LIBRARY SERIES (.0025mm)

| Model Number | Wt./lbs. | Range | Number of members | Price |
|--------------|----------|-------------------|-------------------|---------|
| L-10 mm | 124 | 1.52mm - 17.80mm | (815 gages) | 3100.00 |
| L-11 mm | 124 | 1.53mm - 17.81mm | (815 gages) | 3120.00 |
| L-20 mm | 183 | 17.82mm - 25.40mm | (380 gages) | 4580.00 |
| L-21 mm | 183 | 17.83mm - 25.41mm | (380 gages) | 4600.00 |
| L-30 mm** | 305 | 1.52mm - 25.40mm | (1195 gages) | 7500.00 |
| L-31 mm** | 305 | 1.53mm - 25.41mm | (1195 gages) | 7520.00 |

**Consists of 2 four drawer cabinets

Upgrade Existing Sets

| | | | |
|--------|----|--|--------|
| L-E 4 | 38 | four drawer cabinet empty | 525.00 |
| L-IN 4 | 46 | four drawer cabinet with four inserts of your choice | 625.00 |

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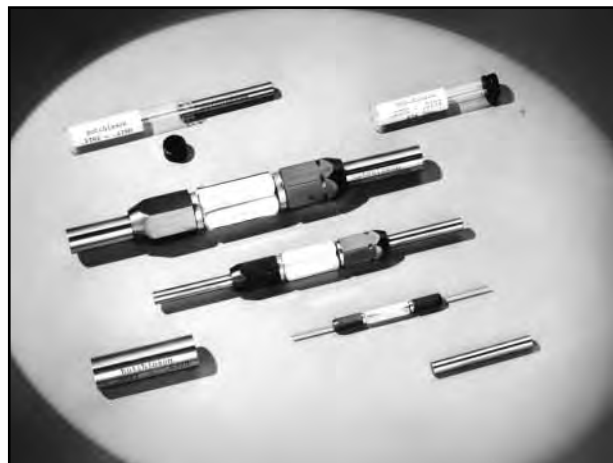
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REVERSIBLE PLUG GAGES

Hutchinson HSS gages are an ideal low cost solution to a variety of dimensioning problems.

All gage members are made of M2 high speed steel hardness "C" 62-64.



YOUR CHOICE OF THREE TOLERANCES

| | | |
|---------|---------|---------|
| + .0002 | + .0000 | + .0001 |
| - .0000 | - .0002 | - .0001 |

2" LONG HSS GAGE MEMBER PRICES

| | | |
|--|--|---|
| .0030-.0049 22.00 .076 MM - .126 MM .0050-.0069 20.00 .127 MM - .176 MM .0070-.0099 17.00 .177 MM - .253 MM .0100-.0200 7.00 .254 MM - .508 MM .0201-.0312 5.42 .511 MM - .793 MM .0313-.0938 4.70 .795 MM - 2.383 MM .0939 - .1250 4.97 2.385MM - 3.175 MM .1251 - .1875 6.42 3.178 MM - 4.763 MM .1876 - .2500 6.99 4.765 MM - 6.350 MM | .2501-.3125 7.63 6.353 MM - 7.938 MM .3126 - .3750 8.05 7.940 MM - 9.525 MM .3751-.5000 9.06 9.528. MM - 12.700 MM .5001 - .5625 11.21 12.703 - 14.288 MM .5626 - .6250 12.11 14.290 MM - 15.875 MM .6251 - .6875 13.58 15.878 MM - 17.463 MM .6876 - .7500 14.73 17.465 MM - 19.050 MM .7501 - .8125 16.51 19.053 MM - 20.638 MM .8126 - .8750 17.98 20.640 MM - 22.225 MM | .8751 - .9375 21.12 22.228 MM - 23.813 MM .9376-1.0000 23.06 23.815 MM - 25.400 MM 1.0001-1.0625 28.48 25.403 MM - 26.988 MM 1.0626-1.1250. 31.73 26.990 MM - 30.163 MM 1.1251 - 1.2500 37.73 30.165 MM - 31.750 MM 1.2501 - 1.3125 40.24 31.753 MM - 33.338 MM 1.3126 - 1.3750 44.01 33.340 MM - 34.925 MM 1.3751 - 1.4375 49.13 34.928 MM - 36.513 MM 1.4376 - 1.5000 54.04 36.515 MM - 38.100 MM |
|--|--|---|

Standard Plug Gage Classes For Product Tolerances

Normal practice for product gage tolerance is to allow 10% of the product to be equally divided between "go" and "no-go". In the case of plug gages, "go" is normally a plus tolerance and "no-go" is normally a minus tolerance.

Standard Gagemakers' Tolerance Chart

| Size Range | CLASS XXXX | CLASS XXX | CLASS XX | CLASS X | CLASS Y | CLASS Z |
|------------------------|------------|-----------|----------|---------|---------|---------|
| Above To and including | | | | | | |
| .0009 - .010 | .000005 | .00001 | .00002 | .00004 | .00007 | .00010 |
| .010 - .029 | .000005 | .00001 | .00002 | .00004 | .00007 | .00010 |
| .029 - .825 | .000005 | .00001 | .00002 | .00004 | .00007 | .00010 |
| .825 - 1.510 | .000008 | .000015 | .00003 | .00006 | .00009 | .00012 |
| 1.510 - 2.510 | .00001 | .00002 | .00004 | .00008 | .00012 | .00016 |
| 2.510 - 4.510 | .000013 | .000025 | .00005 | .00010 | .00015 | .00020 |
| 4.510 - 6.510 | .000017 | .000033 | .000065 | .00013 | .00019 | .00025 |
| 6.510 - 9.010 | .00002 | .00004 | .00008 | .00016 | .00024 | .00032 |
| 9.010 - 12.260 | .000025 | .00005 | .00010 | .00020 | .00030 | .00040 |

PLEASE USE THIS CHART FOR GAGES
ON THE FOLLOWING PAGES

Single or Double End Handles for above gages

| Handle Number | Size Range | Price Each |
|---------------|--------------|------------|
| 1W | .000 - .075 | 11.75 |
| 2W | .075 - .180 | 10.50 |
| 3W | .180 - .281 | 11.75 |
| 4W | .281 - .406 | 14.50 |
| 5W | .406 - .510 | 17.00 |
| 6W | .510 - .635 | 21.75 |
| 7W | .635 - .760 | 24.50 |
| 8W | .760 - 1.010 | 34.75 |

All handles supplied complete with bushings.

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TRILOCKS - STEEL AND CHROME

| SIZE RANGE Above - Through | CLASS | STD GO MEMBER ONLY | | | STD NO GO MEMBER ONLY | | | HANDLE | |
|---|-------|--------------------|--------|--------------------------|-----------------------|--------|--------------------------|--------|-------|
| | | Length | Steel | Chrome | Length | Steel | Chrome | No. | Price |
| .760 IN - .947 IN 19.30 MM - 24.05 MM | XX | | 150.00 | | 3/4 in. | 145.00 | | 2 1/2 | 23.50 |
| | X | 1 1/4 IN | 120.00 | | 19.1MM | 115.00 | | | |
| | Y | 31.8 MM | 105.00 | | | 100.00 | | | |
| | Z | | 80.00 | | | 70.00 | | | |
| .947 IN - 1.135 IN 24.05 MM - 28.83 MM | XX | | 155.00 | | 3/4 in. | 145.00 | | 3 1/2 | 25.00 |
| | X | 1 3/8 IN | 125.00 | | 19.1 MM | 120.00 | | | |
| | Y | 34.9 MM | 110.00 | | | 105.00 | | | |
| | Z | | 85.00 | | | 75.00 | | | |
| 1.135 IN - 1.510 IN 28.83 MM - 38.35 MM | XX | | 160.00 | | 3/4 IN. | 155.00 | | 4 1/2 | 26.50 |
| | X | 1 1/2 IN. | 130.00 | | 19.1 MM | 120.00 | | | |
| | Y | 38.1 MM | 110.00 | | | 105.00 | | | |
| | Z | | 95.00 | | | 85.00 | | | |
| 1.510 IN - 2.010 IN 38.35 MM - 51.05 MM | XX | | 210.00 | Prices on Application | 7/8 IN | 200.00 | Prices on Application | 5 1/2 | 29.75 |
| | X | 1 7/8 IN | 170.00 | | 22.2 MM | 160.00 | | | |
| | Y | 47.8 MM | 145.00 | | | 135.00 | | | |
| | Z | | 130.00 | | | 115.00 | | | |
| 2.010 IN - 2.510 IN 51.05 MM - 63.75 MM | XX | | 240.00 | Prices on Application | 7/8 IN | 230.00 | Prices on Application | 6 | 33.75 |
| | X | 2 IN | 190.00 | | 22.2 MM | 180.00 | | | |
| | Y | 50.8 MM | 170.00 | | | 160.00 | | | |
| | Z | | 155.00 | | | 145.00 | | | |
| 2.510 IN - 3.010 IN 63.75 MM - 76.45 MM | XX | | 285.00 | Prices on Application | 1 IN | 265.00 | Prices on Application | 7 | 37.25 |
| | X | 2 IN | 235.00 | | 25.4MM | 215.00 | | | |
| | Y | 50.8 MM | 215.00 | | | 190.00 | | | |
| | Z | | 185.00 | | | 165.00 | | | |
| 3.010 IN - 3.510 IN 76.45 MM - 89.15 MM | XX | | 360.00 | Prices on Application | 1 IN | 315.00 | Prices on Application | 7 | 37.25 |
| | X | 2 IN | 310.00 | | 25.4 MM | 275.00 | | | |
| | Y | 50.8 MM | 280.00 | | | 240.00 | | | |
| | Z | | 250.00 | | | 210.00 | | | |
| 3.510 IN - 4.010 IN 89.15 MM - 101.85 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |
| 4.010 IN - 4.510 IN 101.85 MM - 114.55 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 50.8 MM | | | | | | | |
| | Z | | | | | | | | |
| 4.510 IN - 5.010 IN 114.55MM - 127.25 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |
| 5.010 IN - 5.510 IN 127.25 MM - 139.95 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |
| 5.510 IN - 6.010 IN 139.95 MM - 152.65 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |
| 6.010 IN - 6.510 IN 152.65 MM - 165.35 MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |
| 6.510 IN - 7.010 IN 165.35MM - 178.05MM | XX | | | Prices on Application | 1 IN | | Prices on Application | 7 | 37.25 |
| | X | 2 1/8 IN | | | 25.4 MM | | | | |
| | Y | 54.0 MM | | | | | | | |
| | Z | | | | | | | | |

Additional sizes available through 8.010 in.

See page 74 for Progressive Trilocks

**Trilocks are also available in Carbide.
Call for pricing and delivery**



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REVERSIBLE PLUG GAGES

| Size / Range | | Class | Tolerance in inches | Member Length | Reversible Go or No Go | | AGD Handle single or double end | |
|---|---------------------|--------|---------------------------|------------------|------------------------|---------|------------------------------------|-------|
| Above | To and Including | | | | Steel | Carbide | No. | Price |
| .011 IN - .020 IN .279 MM - .508 MM | XX | .00002 | 2 IN 50.8 MM | 90.00 | — | 1 W | 11.75 | |
| | X | .00004 | | 41.00 | — | | | |
| | Y | .00007 | | 41.00 | — | | | |
| | Z | .00010 | | 41.00 | — | | | |
| .020 IN - .030 IN .508 MM - .762 MM | XX | .00002 | 2 IN 50.8 MM | 90.00 | — | 1 W | 11.75 | |
| | X | .00004 | | 41.00 | — | | | |
| | Y | .00007 | | 41.00 | — | | | |
| | Z | .00010 | | 41.00 | — | | | |
| .030 IN - .040 IN .762 MM - 1.02 MM | XX | .00002 | 2 IN 50.8 MM | 78.00 | — | 1 W | 11.75 | |
| | X | .00004 | | 33.50 | — | | | |
| | Y | .00007 | | 33.50 | — | | | |
| | Z | .00010 | | 33.50 | — | | | |
| .040 IN - .075 IN 1.02 MM - 1.91 MM | XX | .00002 | 2 IN 50.8 MM | 78.00 | 127.00 | 1 W | 11.75 | |
| | X | .00004 | | 33.50 | 121.00 | | | |
| | Y | .00007 | | 33.50 | 115.00 | | | |
| | Z | .00010 | | 33.50 | 108.00 | | | |
| .075 IN - .116 IN 1.91 MM - 2.92 MM | XX | .00002 | 2 IN 50.8 MM | 78.00 | 127.00 | 2 W | 10.75 | |
| | X | .00004 | | 33.50 | 121.00 | | | |
| | Y | .00007 | | 33.50 | 115.00 | | | |
| | Z | .00010 | | 33.50 | 108.00 | | | |
| .116 IN - .130 IN 2.92 MM - 3.30 MM | XX | .00002 | 2 IN 50.8 MM | 70.00 | 77.00 | 2 W | 10.75 | |
| | X | .00004 | | 30.00 | 71.00 | | | |
| | Y | .00007 | | 30.00 | 65.00 | | | |
| | Z | .00010 | | 30.00 | 63.00 | | | |
| .130 IN - .180 IN 3.30 MM - 4.57 MM | XX | .00002 | 2 IN 50.8 MM | 70.00 | 79.00 | 2 W | 10.75 | |
| | X | .00004 | | 30.00 | 76.00 | | | |
| | Y | .00007 | | 30.00 | 70.00 | | | |
| | Z | .00010 | | 30.00 | 65.00 | | | |
| .180 IN - .230 IN 4.57 MM - 5.84 MM | XX | .00002 | 2 IN 50.8 MM | 72.00 | 83.00 | 3 W | 11.75 | |
| | X | .00004 | | 31.00 | 79.00 | | | |
| | Y | .00007 | | 31.00 | 76.00 | | | |
| | Z | .00010 | | 31.00 | 70.00 | | | |
| .230 IN - .281 IN 5.84 MM - 7.14 MM | XX | .00002 | 2 IN 50.8 MM | 72.00 | 96.00 | 3 W | 11.75 | |
| | X | .00004 | | 31.00 | 88.00 | | | |
| | Y | .00007 | | 31.00 | 80.00 | | | |
| | Z | .00010 | | 31.00 | 81.00 | | | |
| .281 IN - .344 IN 7.14 MM - 8.74 MM | XX | .00002 | 2 IN 50.8 MM | 74.00 | 98.00 | 4 W | 14.50 | |
| | X | .00004 | | 32.50 | 91.00 | | | |
| | Y | .00007 | | 32.50 | 85.00 | | | |
| | Z | .00010 | | 32.50 | 82.00 | | | |
| .344 IN - .406 IN 8.74 MM - 10.31 MM | XX | .00002 | 2 IN 50.8 MM | 74.00 | 106.00 | 4 W | 14.50 | |
| | X | .00004 | | 32.50 | 102.00 | | | |
| | Y | .00007 | | 32.50 | 99.00 | | | |
| | Z | .00010 | | 32.50 | 97.00 | | | |
| .406 IN - .460 IN 10.31 MM - 11.68 MM | XX | .00002 | 2 IN 50.8 MM | 76.00 | 113.00 | 5 W | 18.50 | |
| | X | .00004 | | 34.00 | 108.00 | | | |
| | Y | .00007 | | 34.00 | 105.00 | | | |
| | Z | .00010 | | 34.00 | 100.00 | | | |
| .460 IN - .510 IN 11.68 MM - 12.95 MM | XX | .00002 | 2 IN 50.8 MM | 76.00 | 120.00 | 5 W | 18.50 | |
| | X | .00004 | | 34.00 | 113.00 | | | |
| | Y | .00007 | | 34.00 | 108.00 | | | |
| | Z | .00010 | | 34.00 | 105.00 | | | |

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REVERSIBLE PLUG GAGES

| Size / Range | | Class | Tolerance in inches | Member Length | Reversible Go or No Go | | AGD Handle single or double end | |
|--|------------------|-------------------|--------------------------------------|-----------------|-----------------------------------|--------------------------------------|---------------------------------|-------|
| Above | To and Including | | | | Steel | Carbide | No. | Price |
| .510 IN - .560 IN 12.95 MM - 14.22 MM | | XX X Y Z | .00002 .00004 .00007 .00010 | 2 IN 50.8 MM | 80.00 35.50 35.50 35.50 | 167.00 162.00 156.00 149.00 | 6 W | 23.50 |
| .560 IN - .635 IN 14.22 MM - 16.13 MM | | XX X Y Z | .00002 .00004 .00007 .00010 | 2 IN 50.8 MM | 80.00 35.50 35.50 35.50 | 200.00 190.00 185.00 178.00 | 6 W | 23.50 |
| .635 IN - .700 IN 16.13 MM - 17.78 MM | | XX X Y Z | .00002 .00004 .00007 .00010 | 2 IN 50.8 MM | 88.00 38.00 38.00 38.00 | 215.00 206.00 199.00 188.00 | 7 W | 26.50 |
| .700 IN - .760 IN 17.78 MM - 19.30 MM | | XX X Y Z | .00002 .00004 .00007 .00010 | 2 IN 50.8 MM | 88.00 38.00 38.00 38.00 | 265.00 255.00 244.00 235.00 | 7 W | 26.50 |
| .760 IN - .825 IN 19.30 MM - 20.95 MM | | XX X Y Z | .00002 .00004 .00007 .00010 | 2 IN 50.8 MM | 102.00 40.00 40.00 40.00 | — — — — | 8 W | 40.25 |
| .825 IN - 1.000 IN 20.95 MM - 25.40 MM | | XX X Y Z | .00003 .00006 .00009 .00012 | 2 IN 50.8 MM | 102.00 40.00 40.00 40.00 | — — — — | 8 W | 40.25 |

- Go gages supplied with plus tolerance
- No go gages supplied with minus tolerance
- Bi-lateral (Split) tolerances also available at above listed prices
- Extra long gages in steel and chrome are available up to 6 in (152.4mm) for diameters above .075
- Quantity discounts available - Call for quotation
- Certification of calibration available for additional charge
- All handles supplied complete with bushings
- For larger gauges - see trilocks on page 69.
- For class "X" gauges up to 6" long - see page 74.



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RING GAGES

| Size / Range Above To and Including | Class | Tolerance in inches | Standard A.G.D Blank size | | Price Each | | |
|--|-------|---------------------------|------------------------------|--------------------|-----------------------------|--------|---------|
| | | | Length | O.D. | Steel | Chrome | Carbide |
| .015 IN - .040 IN 0.381 MM - 1.02 MM | XX | .00002 | BLANK #000 | | PRICES ON APPLICATION | — | — |
| | X | .00004 | $\frac{3}{32}$ IN | $\frac{15}{16}$ IN | | — | — |
| | Y | .00007 | 2.37 MM | 23.8 MM | | — | — |
| | Z | .00010 | | | | — | — |
| .040 IN - .070 IN 1.02 MM - 2.54 MM | XX | .00002 | BLANK #00 | | 470.00 | — | 675.00 |
| | X | .00004 | $\frac{3}{16}$ IN | $\frac{15}{16}$ IN | 385.00 | — | 565.00 |
| | Y | .00007 | 4.8 MM | 23.8 MM | 380.00 | — | 535.00 |
| | Z | .00010 | | | 380.00 | — | 520.00 |
| .0701 IN - .1500 IN 2.54 MM - 3.81 MM | XX | .00002 | BLANK #00 | | 410.00 | — | 560.00 |
| | X | .00004 | $\frac{3}{16}$ IN | $\frac{15}{16}$ IN | 325.00 | — | 460.00 |
| | Y | .00007 | 4.8 MM | 23.8 MM | 315.00 | — | 440.00 |
| | Z | .00010 | | | 305.00 | — | 415.00 |
| .150 IN - .185 IN 3.81 MM - 4.70 MM | XX | .00002 | BLANK #00 | | 310.00 | 325.00 | 510.00 |
| | X | .00004 | $\frac{3}{16}$ IN | $\frac{15}{16}$ IN | 270.00 | 285.00 | 440.00 |
| | Y | .00007 | 4.8 MM | 23.8 MM | 255.00 | 265.00 | 430.00 |
| | Z | .00010 | | | 235.00 | 245.00 | 405.00 |
| .185 IN - .230 IN 4.70 MM - 5.84 MM | XX | .00002 | BLANK #0 | | 310.00 | 325.00 | 510.00 |
| | X | .00004 | $\frac{3}{8}$ IN | $\frac{15}{16}$ IN | 270.00 | 285.00 | 440.00 |
| | Y | .00007 | 9.5 MM | 23.8 MM | 255.00 | 265.00 | 430.00 |
| | Z | .00010 | | | 235.00 | 245.00 | 405.00 |
| .230 IN - .365 IN 5.84 MM - 9.27 MM | XX | .00002 | BLANK #1 | | 285.00 | 300.00 | 500.00 |
| | X | .00004 | $\frac{5}{16}$ IN | 1 IN | 240.00 | 255.00 | 425.00 |
| | Y | .00007 | 14.3 MM | 28.6 MM | 225.00 | 235.00 | 405.00 |
| | Z | .00010 | | | 210.00 | 220.00 | 385.00 |
| .365 IN - .510 IN 9.27 MM - 12.95 MM | XX | .00002 | BLANK #2 | | 285.00 | 300.00 | 525.00 |
| | X | .00004 | $\frac{3}{4}$ IN | 1 $\frac{3}{8}$ IN | 240.00 | 255.00 | 485.00 |
| | Y | .00007 | 19.1 MM | 34.9 MM | 225.00 | 235.00 | 455.00 |
| | Z | .00010 | | | 210.00 | 220.00 | 430.00 |
| .510 IN - .825 IN 12.95 MM - 20.95 MM | XX | .00002 | BLANK # 3 | | 295.00 | 310.00 | 560.00 |
| | X | .00004 | $\frac{15}{16}$ IN | 1 $\frac{1}{4}$ IN | 260.00 | 270.00 | 520.00 |
| | Y | .00007 | 23.8 MM | 44.4MM | 235.00 | 250.00 | 510.00 |
| | Z | .00010 | | | 215.00 | 230.00 | 490.00 |
| .825 IN - 1.135 IN 20.95 MM - 28.83 MM | XX | .00003 | BLANK # 4 | | 300.00 | 315.00 | 835.00 |
| | X | .00006 | 1 $\frac{1}{8}$ IN | 2 $\frac{1}{8}$ IN | 265.00 | 280.00 | 760.00 |
| | Y | .00009 | 28.6 MM | 54.0 MM | 240.00 | 250.00 | 740.00 |
| | Z | .00012 | | | 225.00 | 235.00 | 730.00 |

- Choice of three tolerances: Go - Unilateral minus
No Go - Unilateral plus
Master - Bilateral (split)
- Carbide rings have tungsten carbide inserts and steel jackets
- All ring gages are lapped to size and polished
- Roundness and taper of all gages will not exceed 50% of the applicable gagemakers size tolerance and are non-accumulative.

Also Available: Aluminum Ring Gage Holders — SEE PAGE 73



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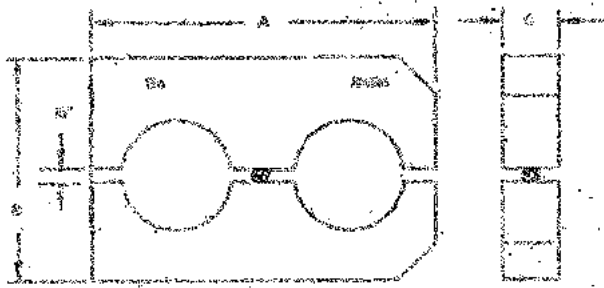
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RING GAGES

| Size / Range Above To and Including | Class | Tolerance in inches | Standard A.G.D Blank size | | Price Each | | |
|--|-------|---------------------|---------------------------|----------|------------|--------|-----------------------------|
| | | | Length | O.D. | Steel | Chrome | Carbide |
| 1.135 IN - 1.510 IN 28.83 MM - 38.35 MM | XX | .00004 | BLANK # 5 | | 345.00 | 365.00 | 1035.00 |
| | X | .00006 | 1 1/16 IN | 2 1/2 IN | 295.00 | 310.00 | 965.00 |
| | Y | .00009 | 33.3MM | 63.5 MM | 275.00 | 290.00 | 900.00 |
| | Z | .00012 | | | 255.00 | 270.00 | 865.00 |
| 1.510 IN - 2.010 IN 38.35 MM - 51.05 MM | XX | .00004 | BLANK #6 | | 425.00 | 445.00 | PRICES ON APPLICATION |
| | X | .00008 | 1 1/2 IN | 4 IN | 375.00 | 390.00 | |
| | Y | .00012 | 38.1 MM | 101.6MM | 340.00 | 360.00 | |
| | Z | .00016 | | | 320.00 | 340.00 | |
| 2.010 IN - 2.510 IN 51.05 MM - 63.75 MM | XX | .00004 | BLANK #7 | | 540.00 | 570.00 | |
| | X | .00008 | 1 1/2 IN | 4 1/2 IN | 475.00 | 500.00 | |
| | Y | .00012 | 38.1 MM | 101.6 MM | 415.00 | 435.00 | |
| | Z | .00016 | | | 380.00 | 395.00 | |
| 2.510 IN - 3.010 IN 63.75 MM - 76.45 MM | XX | .00005 | BLANK #8 | | 590.00 | 620.00 | |
| | X | .00010 | 1 1/2 IN | 5 IN | 515.00 | 545.00 | |
| | Y | .00015 | 38.1 MM | 127.0 MM | 465.00 | 485.00 | |
| | Z | .00020 | | | 430.00 | 450.00 | |
| 3.010 IN - 3.510 IN 76.45 MM - 89.15 MM | XX | .00005 | #9 | | 725.00 | 760.00 | |
| | X | .00010 | 1 1/2 IN | 5 1/2 IN | 615.00 | 650.00 | |
| | Y | .00015 | 38.1 MM | 139.7 MM | 540.00 | 565.00 | |
| | Z | .00020 | | | 490.00 | 515.00 | |
| 3.510 IN - 4.010 IN 89.15 MM - 101.85 MM | XX | .00005 | #10 | | 825.00 | 865.00 | |
| | X | .00010 | 1 1/2 IN | 6 3/8 IN | 690.00 | 725.00 | |
| | Y | .00015 | 38.1 MM | 161.9 MM | 605.00 | 635.00 | |
| | Z | .00020 | | | 570.00 | 595.00 | |

Ring Gage Holders



Black Anodized Aluminum

| FOR RING BLANK NO. | A | B | C | PRICE EACH |
|--------------------|-------|-------|---------|------------|
| 000 | 2-7/8 | 1-3/4 | 3/16 | 67.86 |
| 00 | 2-7/8 | 1-3/4 | 3/16 | 67.86 |
| 0 | 2-7/8 | 1-3/4 | 3/8 | 67.86 |
| 1 | 3-1/2 | 2-1/4 | 9/16 | 67.86 |
| 2 | 4-1/4 | 2-1/2 | 3/4 | 67.86 |
| 3 | 5 | 2-7/8 | 15/16 | 87.86 |
| 4 | 5-3/4 | 3-1/4 | 1-1/8 | 87.86 |
| 5 | 6-1/2 | 3-5/8 | 1-15/16 | 87.86 |

*** Pricing good until stock is depleted ***

Chrome ring gages available in sizes up to 12.260 in (311.40 mm)

Steel ring gages available in sizes up to 16.010 in (406.65 mm)

Call for pricing and delivery

Quantity discounts available on all ring gages

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EXTRA LENGTH CLASS "X" GAGES

Reversible pin gages in English and Metric up to 6" lengths. Ideal for deep and hard to reach holes or slots.

- Centerless lapped to a 5 microfinish
- Up to 6" long
- NIST Traceable
- Stabilized and heat treated to 60-62 RC
- Plus, Minus or Bilateral tolerance

| Inch Size | Millimeter Size | 3" Price | 4" Price | 5" Price | 6" Price |
|----------------------|-----------------------|----------|----------|----------|----------|
| .0110 IN - .0300 IN | .279 MM - .762 MM | 200.00 | 265.00 | 475.00 | 575.00 |
| .0301 IN - .0750 IN | .763 MM - 1.905 MM | 155.00 | 195.00 | 340.00 | 475.00 |
| .0751 IN - .1800 IN | 1.906 MM - 4.572 MM | 115.00 | 140.00 | 190.00 | 260.00 |
| .1801 IN - .2810 IN | 4.573 MM - 7.137 MM | 105.00 | 130.00 | 170.00 | 210.00 |
| .2811 IN - .4060 IN | 7.138 MM - 10.312 MM | 120.00 | 145.00 | 185.00 | 225.00 |
| .4061 IN - .5100 IN | 10.313 MM - 12.954 MM | 130.00 | 165.00 | 195.00 | 245.00 |
| .5101 IN - .6350 IN | 12.955 MM - 16.129 MM | 150.00 | 185.00 | 235.00 | 255.00 |
| .6351 IN - .7600 IN | 16.130 MM - 19.304 MM | 160.00 | 190.00 | 250.00 | 275.00 |
| .7601 IN - 1.0100 IN | 19.305 MM - 25.654 MM | 185.00 | 235.00 | 290.00 | 340.00 |

No guarantee of straightness, due to Centerless Grinding process on these products

PROGRESSIVE TRILOCK GAGES

When you need to check parts quickly, Progressive plug gages are the best choice. Both the GO and NOGO diameters are stepped on a single gage member. All members are securely attached to a Trilock handle. All handles are marked with sizes and direction of tolerance.

- Class XX, X, Y, Z
- NIST traceable
- GO, NOGO tolerances
- Tool Steel 60/62 Rockwell C

| Size / Range | Class | Tolerance Inches | Member Length | GO Portion | NOGO Portion | Steel | Chrome | Handle | |
|--|-------|------------------|---------------------|---------------------|-------------------|------------------|------------------|--------|------------------|
| | | | | | | | | # | Price |
| 1.5101 IN - 2.010 IN 38.35 MM - 51.05 MM | XX | .00004 | 2 7/8 IN 73.0 MM | 1 7/8 IN 47.6 MM | 7/8 IN 22.2 MM | | | 5 1/2 | |
| | X | .00008 | | | | | | | |
| | Y | .00012 | | | | | | | |
| | Z | .00016 | | | | | | | |
| 2.0101 IN - 2.510 IN 51.05 MM - 63.75 MM | XX | .00004 | 3 IN 76.2 MM | 2 IN 50.8 MM | 7/8 IN 22.2 MM | | | 6 | |
| | X | .00008 | | | | | | | |
| | Y | .00012 | | | | | | | |
| | Z | .00016 | | | | | | | |
| 2.5101 IN - 3.010 IN 63.75 MM - 76.45 MM | XX | .00005 | 3 IN 76.2 MM | 2 IN 50.8 MM | 7/8 IN 22.2 MM | Call for Pricing | Call for Pricing | 7 | Call for Pricing |
| | X | .00010 | | | | | | | |
| | Y | .00015 | | | | | | | |
| | Z | .00020 | | | | | | | |
| 3.0101 IN - 3.510 IN 76.45 MM - 89.15 MM | XX | .00005 | 3 IN 76.2 MM | 2 IN 50.8 MM | 7/8 IN 22.2 MM | Call for Pricing | Call for Pricing | 7 | Call for Pricing |
| | X | .00010 | | | | | | | |
| | Y | .00015 | | | | | | | |
| | Z | .00020 | | | | | | | |
| 3.5101 IN - 4.010 IN 89.15 MM - 101.85 MM | XX | .00005 | 3 1/8 IN 79.4 MM | 2 1/8 IN 54.0 MM | 7/8 IN 22.2 MM | | | 7 | |
| | X | .00010 | | | | | | | |
| | Y | .00015 | | | | | | | |
| | Z | .00020 | | | | | | | |
| 4.0101 IN - 4.510 IN 101.85 MM - 114.55 MM | XX | .00005 | 3 1/8 IN 79.4 MM | 2 1/8 IN 54.0 MM | 7/8 IN 22.2 MM | | | 7 | |
| | X | .00010 | | | | | | | |
| | Y | .00015 | | | | | | | |
| | Z | .00020 | | | | | | | |

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