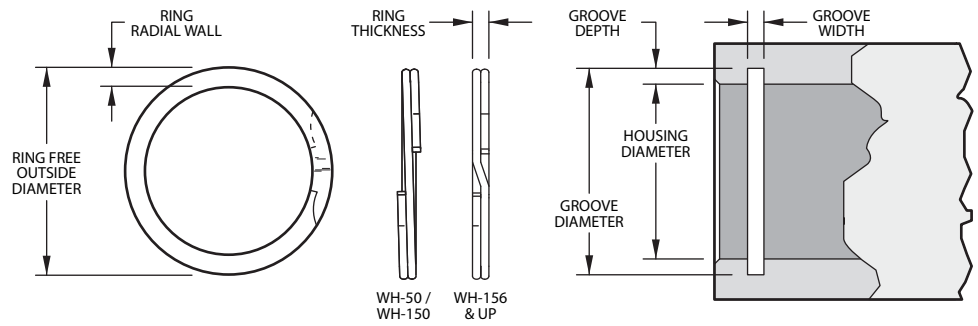


AS 3217, AS 4299
MIL-DTL-27426/3

Product Dimensions

All dimensions are in inches unless otherwise specified.



Stock Items available in carbon and stainless steel.

| Smalley Part Number ^{1, 4} | Housing Diameter | RING | | | GROOVE | | THRUST CAPACITY | |
|-------------------------------------|------------------|------------------|-------------|-----------|----------|-------|--------------------------------|------------------------------|
| | | Outside Diameter | Radial Wall | Thickness | Diameter | Width | Groove Yield (lb) ² | Ring Shear (lb) ³ |
| WH-50 | .500 | .532 | .045 | .025 | .526 | .030 | 460 | 2,000 |
| WH-51 | .512 | .544 | .045 | .025 | .538 | .030 | 470 | 2,050 |
| WH-53 | .531 | .564 | .045 | .025 | .557 | .030 | 490 | 2,130 |
| WH-56 | .562 | .594 | .045 | .025 | .588 | .030 | 520 | 2,250 |
| WH-59 | .594 | .626 | .045 | .025 | .619 | .030 | 550 | 2,380 |
| WH-62 | .625 | .658 | .045 | .025 | .651 | .030 | 570 | 2,500 |
| WH-65 | .656 | .689 | .045 | .025 | .682 | .030 | 600 | 2,630 |
| WH-68 | .687 | .720 | .045 | .025 | .713 | .030 | 630 | 2,750 |
| WH-71 | .718 | .751 | .045 | .025 | .744 | .030 | 660 | 2,870 |
| WH-75 | .750 | .790 | .065 | .031 | .782 | .036 | 850 | 3,360 |
| WH-77 | .777 | .817 | .065 | .031 | .808 | .036 | 880 | 3,480 |
| WH-78 | .781 | .821 | .065 | .031 | .812 | .036 | 880 | 3,500 |
| WH-81 | .812 | .853 | .065 | .031 | .843 | .036 | 920 | 3,640 |
| WH-84 | .843 | .889 | .065 | .031 | .880 | .036 | 1,130 | 3,780 |
| WH-86 | .866 | .913 | .065 | .031 | .903 | .036 | 1,160 | 3,880 |
| WH-87 | .875 | .922 | .065 | .031 | .912 | .036 | 1,180 | 3,920 |
| WH-90 | .906 | .953 | .065 | .031 | .943 | .036 | 1,220 | 4,060 |
| WH-93 | .938 | .986 | .065 | .031 | .975 | .036 | 1,260 | 4,200 |
| WH-96 | .968 | 1.022 | .075 | .037 | 1.011 | .042 | 1,440 | 5,180 |
| WH-98 | .987 | 1.041 | .075 | .037 | 1.030 | .042 | 1,470 | 5,280 |
| WH-100 | 1.000 | 1.054 | .075 | .037 | 1.043 | .042 | 1,480 | 5,350 |
| WH-102 | 1.023 | 1.078 | .075 | .037 | 1.066 | .042 | 1,520 | 5,470 |
| WH-103 | 1.031 | 1.084 | .075 | .037 | 1.074 | .042 | 1,530 | 5,510 |
| WH-106 | 1.062 | 1.117 | .075 | .037 | 1.104 | .042 | 1,580 | 5,680 |
| WH-109 | 1.093 | 1.147 | .075 | .037 | 1.135 | .042 | 1,620 | 5,840 |
| WH-112 | 1.125 | 1.180 | .075 | .037 | 1.167 | .042 | 1,670 | 6,020 |
| WH-115 | 1.156 | 1.210 | .075 | .037 | 1.198 | .042 | 1,720 | 6,180 |
| WH-118 | 1.188 | 1.249 | .085 | .043 | 1.236 | .048 | 2,020 | 7,380 |
| WH-121 | 1.218 | 1.278 | .085 | .043 | 1.266 | .048 | 2,070 | 7,570 |
| WH-125 | 1.250 | 1.312 | .085 | .043 | 1.298 | .048 | 2,120 | 7,770 |
| WH-128 | 1.281 | 1.342 | .085 | .043 | 1.329 | .048 | 2,170 | 7,960 |
| WH-131 | 1.312 | 1.374 | .085 | .043 | 1.360 | .048 | 2,230 | 8,150 |
| WH-134 | 1.343 | 1.408 | .085 | .043 | 1.395 | .048 | 2,470 | 8,350 |
| WH-137 | 1.375 | 1.442 | .095 | .043 | 1.427 | .048 | 2,530 | 8,540 |
| WH-140 | 1.406 | 1.472 | .095 | .043 | 1.458 | .048 | 2,580 | 8,740 |
| WH-143 | 1.437 | 1.504 | .095 | .043 | 1.489 | .048 | 2,640 | 8,930 |
| WH-145 | 1.456 | 1.523 | .095 | .043 | 1.508 | .048 | 2,680 | 9,050 |
| WH-146 | 1.468 | 1.535 | .095 | .043 | 1.520 | .048 | 2,700 | 9,120 |
| WH-150 | 1.500 | 1.567 | .095 | .043 | 1.552 | .048 | 2,760 | 9,320 |
| WH-156 | 1.562 | 1.634 | .108 | .049 | 1.617 | .056 | 3,090 | 10,100 |
| WH-157 | 1.574 | 1.649 | .108 | .049 | 1.633 | .056 | 3,340 | 10,180 |
| WH-162 | 1.625 | 1.701 | .108 | .049 | 1.684 | .056 | 3,350 | 10,510 |
| WH-165 | 1.653 | 1.730 | .108 | .049 | 1.712 | .056 | 3,510 | 10,690 |
| WH-168 | 1.687 | 1.768 | .118 | .049 | 1.750 | .056 | 3,700 | 10,910 |
| WH-175 | 1.750 | 1.834 | .118 | .049 | 1.813 | .056 | 3,840 | 11,310 |
| WH-181 | 1.813 | 1.894 | .118 | .049 | 1.875 | .056 | 3,970 | 11,720 |
| WH-185 | 1.850 | 1.937 | .118 | .049 | 1.917 | .056 | 4,450 | 11,960 |

INTERNAL RETAINING RINGS

¹ Add suffix "-S02" for 302 stainless steel, "-S16" for 316 stainless steel.

² Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 102-103 for How to Order.

Manufactured in USA

| Smalley Part Number ^{1,4} | Housing Diameter | RING | | | GROOVE | | THRUST CAPACITY | |
|------------------------------------|------------------|------------------|-------------|-----------|----------|-------|--------------------------------|------------------------------|
| | | Outside Diameter | Radial Wall | Thickness | Diameter | Width | Groove Yield (lb) ² | Ring Shear (lb) ³ |
| WH-187 | 1.875 | 1.960 | .118 | .049 | 1.942 | .056 | 4,510 | 12,120 |
| WH-193 | 1.938 | 2.025 | .118 | .049 | 2.005 | .056 | 4,660 | 12,530 |
| WH-200 | 2.000 | 2.091 | .128 | .049 | 2.071 | .056 | 4,950 | 12,930 |
| WH-204 | 2.047 | 2.138 | .128 | .049 | 2.118 | .056 | 5,060 | 13,240 |
| WH-206 | 2.062 | 2.154 | .128 | .049 | 2.132 | .056 | 5,100 | 13,330 |
| WH-212 | 2.125 | 2.217 | .128 | .049 | 2.195 | .056 | 5,260 | 13,740 |
| WH-216 | 2.165 | 2.260 | .138 | .049 | 2.239 | .056 | 5,660 | 14,000 |
| WH-218 | 2.188 | 2.284 | .138 | .049 | 2.262 | .056 | 5,720 | 14,150 |
| WH-225 | 2.250 | 2.347 | .138 | .049 | 2.324 | .056 | 5,890 | 14,550 |
| WH-231 | 2.312 | 2.413 | .138 | .049 | 2.390 | .056 | 6,370 | 14,950 |
| WH-237 | 2.375 | 2.476 | .138 | .049 | 2.453 | .056 | 6,550 | 15,360 |
| WH-243 | 2.437 | 2.543 | .148 | .049 | 2.519 | .056 | 7,060 | 15,760 |
| WH-244 | 2.440 | 2.546 | .148 | .049 | 2.522 | .056 | 7,070 | 15,780 |
| WH-250 | 2.500 | 2.606 | .148 | .049 | 2.582 | .056 | 7,250 | 16,160 |
| WH-253 | 2.531 | 2.641 | .148 | .049 | 2.617 | .056 | 7,690 | 16,360 |
| WH-256 | 2.562 | 2.673 | .148 | .049 | 2.648 | .056 | 7,790 | 16,560 |
| WH-262 | 2.625 | 2.736 | .148 | .049 | 2.711 | .056 | 7,980 | 16,970 |
| WH-267 | 2.677 | 2.789 | .158 | .049 | 2.767 | .056 | 8,520 | 17,310 |
| WH-268 | 2.688 | 2.803 | .158 | .049 | 2.778 | .056 | 8,550 | 17,380 |
| WH-275 | 2.750 | 2.865 | .158 | .049 | 2.841 | .056 | 8,750 | 17,780 |
| WH-281 | 2.813 | 2.929 | .158 | .049 | 2.903 | .056 | 8,950 | 18,190 |
| WH-283 | 2.834 | 2.954 | .168 | .049 | 2.928 | .056 | 9,520 | 18,320 |
| WH-287 | 2.875 | 2.995 | .168 | .049 | 2.969 | .056 | 9,550 | 18,590 |
| WH-293 | 2.937 | 3.058 | .168 | .049 | 3.031 | .056 | 9,760 | 18,990 |
| WH-295 | 2.952 | 3.073 | .168 | .049 | 3.046 | .056 | 9,810 | 19,090 |
| WH-300 | 3.000 | 3.122 | .168 | .061 | 3.096 | .068 | 10,180 | 24,150 |
| WH-306 | 3.062 | 3.186 | .168 | .061 | 3.158 | .068 | 10,390 | 24,650 |
| WH-312 | 3.125 | 3.251 | .178 | .061 | 3.223 | .068 | 10,600 | 25,150 |
| WH-314 | 3.149 | 3.276 | .178 | .061 | 3.247 | .068 | 10,680 | 25,350 |
| WH-318 | 3.187 | 3.311 | .178 | .061 | 3.283 | .068 | 10,810 | 25,650 |
| WH-325 | 3.250 | 3.379 | .178 | .061 | 3.350 | .068 | 11,490 | 26,160 |
| WH-331 | 3.312 | 3.446 | .188 | .061 | 3.416 | .068 | 12,170 | 26,660 |
| WH-334 | 3.346 | 3.479 | .188 | .061 | 3.450 | .068 | 12,300 | 26,930 |
| WH-337 | 3.375 | 3.509 | .188 | .061 | 3.479 | .068 | 12,410 | 27,170 |
| WH-343 | 3.437 | 3.574 | .188 | .061 | 3.543 | .068 | 12,880 | 27,660 |
| WH-350 | 3.500 | 3.636 | .188 | .061 | 3.606 | .068 | 13,110 | 28,170 |
| WH-354 | 3.543 | 3.684 | .198 | .061 | 3.653 | .068 | 13,770 | 28,520 |
| WH-356 | 3.562 | 3.703 | .198 | .061 | 3.672 | .068 | 13,850 | 28,670 |
| WH-362 | 3.625 | 3.769 | .198 | .061 | 3.737 | .068 | 14,350 | 29,180 |
| WH-368 | 3.687 | 3.832 | .198 | .061 | 3.799 | .068 | 14,600 | 29,680 |
| WH-374 | 3.740 | 3.885 | .198 | .061 | 3.852 | .068 | 14,800 | 30,100 |
| WH-375 | 3.750 | 3.894 | .198 | .061 | 3.862 | .068 | 14,840 | 30,180 |
| WH-381 | 3.812 | 3.963 | .208 | .061 | 3.930 | .068 | 15,900 | 30,680 |
| WH-387 | 3.875 | 4.025 | .208 | .061 | 3.993 | .068 | 16,160 | 31,190 |
| WH-393 | 3.938 | 4.089 | .208 | .061 | 4.056 | .068 | 16,420 | 31,700 |
| WH-400 | 4.000 | 4.157 | .218 | .061 | 4.124 | .068 | 17,530 | 32,200 |
| WH-406 | 4.063 | 4.222 | .218 | .061 | 4.187 | .068 | 17,810 | 32,700 |
| WH-412 | 4.125 | 4.284 | .218 | .061 | 4.249 | .068 | 18,080 | 33,200 |
| WH-418 | 4.188 | 4.347 | .218 | .061 | 4.311 | .068 | 18,350 | 33,710 |
| WH-425 | 4.250 | 4.416 | .228 | .061 | 4.380 | .068 | 19,530 | 34,210 |
| WH-431 | 4.312 | 4.479 | .228 | .061 | 4.442 | .068 | 19,810 | 34,710 |
| WH-433 | 4.330 | 4.497 | .228 | .061 | 4.460 | .068 | 19,900 | 34,850 |
| WH-437 | 4.375 | 4.543 | .228 | .061 | 4.505 | .068 | 20,100 | 35,210 |
| WH-443 | 4.437 | 4.611 | .238 | .061 | 4.573 | .068 | 21,330 | 35,710 |
| WH-450 | 4.500 | 4.674 | .238 | .061 | 4.636 | .068 | 21,630 | 36,220 |
| WH-452 | 4.527 | 4.701 | .238 | .061 | 4.663 | .068 | 21,760 | 36,440 |
| WH-456 | 4.562 | 4.737 | .238 | .061 | 4.698 | .068 | 21,930 | 36,720 |
| WH-462 | 4.625 | 4.803 | .250 | .072 | 4.765 | .079 | 22,890 | 43,940 |
| WH-468 | 4.687 | 4.867 | .250 | .072 | 4.827 | .079 | 23,190 | 44,530 |
| WH-472 | 4.724 | 4.903 | .250 | .072 | 4.864 | .079 | 23,370 | 44,880 |
| WH-475 | 4.750 | 4.930 | .250 | .072 | 4.890 | .079 | 23,500 | 45,130 |
| WH-481 | 4.812 | 4.993 | .250 | .072 | 4.952 | .079 | 23,810 | 45,720 |
| WH-487 | 4.875 | 5.055 | .250 | .072 | 5.015 | .079 | 24,120 | 46,310 |
| WH-492 | 4.921 | 5.102 | .250 | .072 | 5.061 | .079 | 24,350 | 46,750 |

INTERNAL RETAINING RINGS

¹ Add suffix "-S02" for 302 stainless steel, "-S16" for 316 stainless steel.

² Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 102-103 for How to Order.

Stock Items available in carbon and stainless steel.

| Smalley Part Number ^{1, 4} | Housing Diameter | RING | | | GROOVE | | THRUST CAPACITY | |
|-------------------------------------|------------------|------------------|-------------|-----------|----------|-------|--------------------------------|------------------------------|
| | | Outside Diameter | Radial Wall | Thickness | Diameter | Width | Groove Yield (lb) ² | Ring Shear (lb) ³ |
| WH-493 | 4.937 | 5.122 | .250 | .072 | 5.081 | .079 | 25,130 | 46,900 |
| WH-500 | 5.000 | 5.185 | .250 | .072 | 5.144 | .079 | 25,450 | 47,500 |
| WH-511 | 5.118 | 5.304 | .250 | .072 | 5.262 | .079 | 26,050 | 48,620 |
| WH-512 | 5.125 | 5.311 | .250 | .072 | 5.269 | .079 | 26,100 | 48,690 |
| WH-525 | 5.250 | 5.436 | .250 | .072 | 5.393 | .079 | 26,720 | 49,880 |
| WH-537 | 5.375 | 5.566 | .250 | .072 | 5.522 | .079 | 28,120 | 51,060 |
| WH-550 | 5.500 | 5.693 | .250 | .072 | 5.647 | .079 | 28,770 | 52,250 |
| WH-551 | 5.511 | 5.703 | .250 | .072 | 5.658 | .079 | 28,830 | 52,360 |
| WH-562 | 5.625 | 5.818 | .250 | .072 | 5.772 | .079 | 29,400 | 53,440 |
| WH-570 | 5.708 | 5.909 | .250 | .072 | 5.861 | .079 | 31,070 | 54,230 |
| WH-575 | 5.750 | 5.950 | .250 | .072 | 5.903 | .079 | 31,300 | 54,630 |
| WH-587 | 5.875 | 6.077 | .250 | .072 | 6.028 | .079 | 31,980 | 55,810 |
| WH-590 | 5.905 | 6.106 | .250 | .072 | 6.058 | .079 | 32,140 | 56,100 |
| WH-600 | 6.000 | 6.202 | .250 | .072 | 6.153 | .079 | 32,660 | 57,000 |
| WH-612 | 6.125 | 6.349 | .312 | .086 | 6.297 | .094 | 37,200 | 69,500 |
| WH-625 | 6.250 | 6.474 | .312 | .086 | 6.422 | .094 | 37,990 | 70,920 |
| WH-629 | 6.299 | 6.524 | .312 | .086 | 6.471 | .094 | 38,290 | 71,480 |
| WH-637 | 6.375 | 6.601 | .312 | .086 | 6.547 | .094 | 38,750 | 72,340 |
| WH-650 | 6.500 | 6.726 | .312 | .086 | 6.672 | .094 | 39,510 | 73,760 |
| WH-662 | 6.625 | 6.863 | .312 | .086 | 6.807 | .094 | 42,620 | 75,180 |
| WH-669 | 6.692 | 6.931 | .312 | .086 | 6.874 | .094 | 43,050 | 75,940 |
| WH-675 | 6.750 | 6.987 | .312 | .086 | 6.932 | .094 | 43,420 | 76,600 |
| WH-687 | 6.875 | 7.114 | .312 | .086 | 7.057 | .094 | 44,220 | 78,010 |
| WH-700 | 7.000 | 7.239 | .312 | .086 | 7.182 | .094 | 45,030 | 79,430 |
| WH-708 | 7.086 | 7.337 | .312 | .086 | 7.278 | .094 | 48,080 | 80,410 |
| WH-712 | 7.125 | 7.376 | .312 | .086 | 7.317 | .094 | 48,350 | 80,850 |
| WH-725 | 7.250 | 7.501 | .312 | .086 | 7.442 | .094 | 49,200 | 82,270 |
| WH-737 | 7.375 | 7.628 | .312 | .086 | 7.567 | .094 | 50,050 | 83,690 |
| WH-748 | 7.480 | 7.734 | .312 | .086 | 7.672 | .094 | 50,760 | 84,880 |
| WH-750 | 7.500 | 7.754 | .312 | .086 | 7.692 | .094 | 50,890 | 85,110 |
| WH-762 | 7.625 | 7.890 | .312 | .086 | 7.827 | .094 | 54,440 | 86,520 |
| WH-775 | 7.750 | 8.014 | .312 | .086 | 7.952 | .094 | 55,330 | 87,940 |
| WH-787 | 7.875 | 8.141 | .312 | .086 | 8.077 | .094 | 63,360 | 89,360 |
| WH-800 | 8.000 | 8.266 | .312 | .086 | 8.202 | .094 | 57,110 | 90,780 |
| WH-825 | 8.250 | 8.528 | .375 | .086 | 8.462 | .094 | 61,820 | 93,620 |
| WH-826 | 8.267 | 8.546 | .375 | .086 | 8.479 | .094 | 61,940 | 93,810 |
| WH-846 | 8.464 | 8.744 | .375 | .086 | 8.676 | .094 | 63,420 | 96,050 |
| WH-850 | 8.500 | 8.780 | .375 | .086 | 8.712 | .094 | 63,690 | 96,450 |
| WH-875 | 8.750 | 9.041 | .375 | .086 | 8.972 | .094 | 68,650 | 99,290 |
| WH-885 | 8.858 | 9.151 | .375 | .086 | 9.080 | .094 | 69,500 | 100,520 |
| WH-900 | 9.000 | 9.293 | .375 | .086 | 9.222 | .094 | 70,620 | 102,130 |
| WH-905 | 9.055 | 9.359 | .375 | .086 | 9.287 | .094 | 74,250 | 102,750 |
| WH-925 | 9.250 | 9.555 | .375 | .086 | 9.482 | .094 | 75,850 | 104,960 |
| WH-944 | 9.448 | 9.755 | .375 | .086 | 9.680 | .094 | 77,470 | 107,210 |
| WH-950 | 9.500 | 9.806 | .375 | .086 | 9.732 | .094 | 77,900 | 107,800 |
| WH-975 | 9.750 | 10.068 | .375 | .086 | 9.992 | .094 | 83,390 | 110,640 |
| WH-1000 | 10.000 | 10.320 | .375 | .086 | 10.242 | .094 | 85,530 | 113,470 |
| WH-1025 | 10.250 | 10.582 | .375 | .086 | 10.502 | .094 | 91,290 | 116,310 |
| WH-1050 | 10.500 | 10.834 | .375 | .086 | 10.752 | .094 | 93,520 | 119,150 |
| WH-1075 | 10.750 | 11.095 | .375 | .086 | 11.012 | .094 | 99,540 | 121,990 |
| WH-1100 | 11.000 | 11.347 | .375 | .086 | 11.262 | .094 | 101,860 | 124,820 |

INTERNAL RETAINING RINGS

¹ Add suffix "-S02" for 302 stainless steel, "-S16" for 316 stainless steel.

² Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 102-103 for How to Order.