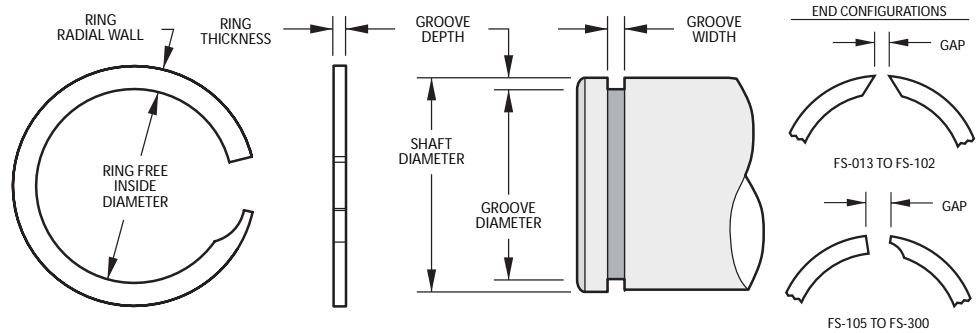




Product Dimensions

All dimensions are in millimeters unless otherwise specified.



Stock Items in carbon and stainless steel.

| Smalley Part Number ^{1,4} | Shaft Diameter | RING | | | GROOVE | | THRUST CAPACITY | |
|------------------------------------|----------------|-----------------|-------------|-----------|----------|-------|-------------------------------|-----------------------------|
| | | Inside Diameter | Radial Wall | Thickness | Diameter | Width | Groove Yield (N) ² | Ring Shear (N) ³ |
| FS-013 | 13.00 | 12.27 | 1.40 | .94 | 12.40 | 1.10 | 1,931 | 10,591 |
| FS-014 | 14.00 | 13.31 | 1.40 | .94 | 13.40 | 1.10 | 2,077 | 11,396 |
| FS-015 | 15.00 | 14.15 | 1.40 | .94 | 14.30 | 1.10 | 2,602 | 12,224 |
| FS-016 | 16.00 | 14.98 | 1.65 | .94 | 15.20 | 1.10 | 3,172 | 13,029 |
| FS-017 | 17.00 | 16.06 | 1.65 | .94 | 16.20 | 1.10 | 3,367 | 13,838 |
| FS-018 | 18.00 | 16.82 | 1.90 | 1.15 | 17.00 | 1.30 | 4,457 | 17,953 |
| FS-019 | 19.00 | 17.81 | 1.90 | 1.15 | 18.00 | 1.30 | 4,702 | 18,941 |
| FS-020 | 20.00 | 18.80 | 1.90 | 1.15 | 19.00 | 1.30 | 4,951 | 19,928 |
| FS-021 | 21.00 | 19.79 | 1.90 | 1.15 | 20.00 | 1.30 | 5,200 | 20,942 |
| FS-022 | 22.00 | 20.83 | 1.90 | 1.15 | 21.00 | 1.30 | 5,445 | 21,930 |
| FS-023 | 23.00 | 21.77 | 1.90 | 1.15 | 22.00 | 1.30 | 5,698 | 22,939 |
| FS-024 | 24.00 | 22.50 | 2.15 | 1.15 | 22.90 | 1.30 | 6,539 | 23,927 |
| FS-025 | 25.00 | 23.70 | 2.15 | 1.15 | 23.90 | 1.30 | 6,806 | 24,914 |
| FS-026 | 26.00 | 24.64 | 2.15 | 1.15 | 24.90 | 1.30 | 7,082 | 25,929 |
| FS-027 | 27.00 | 25.50 | 2.15 | 1.15 | 25.90 | 1.30 | 7,353 | 26,916 |
| FS-028 | 28.00 | 26.32 | 3.25 | 1.44 | 26.60 | 1.60 | 9,702 | 33,179 |
| FS-029 | 29.00 | 27.15 | 3.25 | 1.44 | 27.60 | 1.60 | 10,053 | 34,385 |
| FS-030 | 30.00 | 28.35 | 3.25 | 1.44 | 28.60 | 1.60 | 10,395 | 35,559 |
| FS-032 | 32.00 | 29.87 | 3.25 | 1.44 | 30.30 | 1.60 | 13,073 | 37,939 |
| FS-033 | 33.00 | 31.07 | 3.25 | 1.44 | 31.30 | 1.60 | 13,478 | 39,113 |
| FS-034 | 34.00 | 31.96 | 3.25 | 1.44 | 32.30 | 1.60 | 13,892 | 40,319 |
| FS-035 | 35.00 | 32.57 | 3.25 | 1.44 | 33.00 | 1.60 | 16,899 | 41,493 |
| FS-036 | 36.00 | 33.64 | 4.01 | 1.69 | 34.00 | 1.85 | 17,375 | 50,038 |
| FS-038 | 38.00 | 35.62 | 4.01 | 1.69 | 36.00 | 1.85 | 18,344 | 52,827 |
| FS-040 | 40.00 | 37.02 | 4.01 | 1.69 | 37.50 | 1.85 | 24,265 | 55,621 |
| FS-042 | 42.00 | 39.08 | 4.01 | 1.69 | 39.50 | 1.85 | 25,484 | 58,410 |
| FS-045 | 45.00 | 42.05 | 4.01 | 1.69 | 42.50 | 1.85 | 27,303 | 62,578 |
| FS-046 | 46.00 | 43.10 | 4.01 | 1.69 | 43.50 | 1.85 | 27,904 | 63,952 |
| FS-047 | 47.00 | 44.03 | 4.01 | 1.69 | 44.50 | 1.85 | 28,504 | 65,331 |
| FS-048 | 48.00 | 44.89 | 4.01 | 1.69 | 45.50 | 1.85 | 29,118 | 66,741 |
| FS-050 | 50.00 | 46.50 | 5.08 | 1.93 | 47.00 | 2.15 | 36,529 | 75,282 |
| FS-052 | 52.00 | 48.48 | 5.08 | 1.93 | 49.00 | 2.15 | 37,974 | 78,266 |
| FS-054 | 54.00 | 50.46 | 5.08 | 1.93 | 51.00 | 2.15 | 39,438 | 81,287 |
| FS-055 | 55.00 | 51.45 | 5.08 | 1.93 | 52.00 | 2.15 | 40,163 | 82,777 |
| FS-056 | 56.00 | 52.44 | 5.08 | 1.93 | 53.00 | 2.15 | 40,906 | 84,307 |
| FS-058 | 58.00 | 54.42 | 5.08 | 1.93 | 55.00 | 2.15 | 42,352 | 87,287 |
| FS-060 | 60.00 | 56.55 | 5.08 | 1.93 | 57.00 | 2.15 | 43,819 | 90,308 |
| FS-062 | 62.00 | 58.32 | 5.08 | 1.93 | 59.00 | 2.15 | 45,283 | 93,328 |
| FS-063 | 63.00 | 59.37 | 5.08 | 1.93 | 60.00 | 2.15 | 46,008 | 94,823 |
| FS-065 | 65.00 | 61.35 | 5.08 | 2.41 | 62.00 | 2.65 | 47,471 | 116,641 |
| FS-067 | 67.00 | 63.35 | 5.08 | 2.41 | 64.00 | 2.65 | 48,939 | 120,240 |
| FS-068 | 68.00 | 64.45 | 5.08 | 2.41 | 65.00 | 2.65 | 49,660 | 122,019 |
| FS-070 | 70.00 | 66.22 | 5.08 | 2.41 | 67.00 | 2.65 | 51,128 | 125,618 |
| FS-072 | 72.00 | 68.28 | 5.08 | 2.41 | 69.00 | 2.65 | 52,591 | 129,221 |
| FS-075 | 75.00 | 71.25 | 5.08 | 2.41 | 72.00 | 2.65 | 54,780 | 134,599 |
| FS-077 | 77.00 | 73.23 | 5.08 | 2.41 | 74.00 | 2.65 | 56,230 | 138,153 |
| FS-078 | 78.00 | 74.06 | 5.08 | 2.41 | 75.00 | 2.65 | 56,968 | 139,977 |

¹ Add suffix "-S02" for 302 stainless steel.

² Based on a groove material yield strength of 310 N/mm² and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 106-107 for How to Order.

Manufactured in USA

| Smalley Part Number ^{1, 4} | Shaft Diameter | RING | | | GROOVE | | | THRUST CAPACITY | |
|-------------------------------------|----------------|-----------------|-------------|-----------|----------|-------|-------------------------------|-----------------------------|--|
| | | Inside Diameter | Radial Wall | Thickness | Diameter | Width | Groove Yield (N) ² | Ring Shear (N) ³ | |
| FS-080 | 80.00 | 75.70 | 6.02 | 2.41 | 76.50 | 2.65 | 68,342 | 143,575 | |
| FS-082 | 82.00 | 77.68 | 6.02 | 2.41 | 78.50 | 2.65 | 70,033 | 147,134 | |
| FS-085 | 85.00 | 80.65 | 6.30 | 2.91 | 81.50 | 3.15 | 72,595 | 175,656 | |
| FS-088 | 88.00 | 83.60 | 6.30 | 2.91 | 84.50 | 3.15 | 75,175 | 181,906 | |
| FS-090 | 90.00 | 85.80 | 6.30 | 2.91 | 86.50 | 3.15 | 76,865 | 185,998 | |
| FS-095 | 95.00 | 90.68 | 6.30 | 2.91 | 91.50 | 3.15 | 81,140 | 196,340 | |
| FS-098 | 98.00 | 93.70 | 6.30 | 2.91 | 94.50 | 3.15 | 83,702 | 202,536 | |
| FS-100 | 100.00 | 95.50 | 6.30 | 2.91 | 96.50 | 3.15 | 85,415 | 206,682 | |
| FS-102 | 102.00 | 97.23 | 6.30 | 2.91 | 98.50 | 3.15 | 87,127 | 210,828 | |
| FS-105 | 105.00 | 99.83 | 6.73 | 3.89 | 101.00 | 4.15 | 102,687 | 276,951 | |
| FS-108 | 108.00 | 102.87 | 6.73 | 3.89 | 104.00 | 4.15 | 105,619 | 284,855 | |
| FS-110 | 110.00 | 104.90 | 6.73 | 3.89 | 106.00 | 4.15 | 107,580 | 290,149 | |
| FS-115 | 115.00 | 109.85 | 6.73 | 3.89 | 111.00 | 4.15 | 112,473 | 303,346 | |
| FS-120 | 120.00 | 115.06 | 6.73 | 3.89 | 116.00 | 4.15 | 117,344 | 316,478 | |
| FS-125 | 125.00 | 119.75 | 6.73 | 3.89 | 121.00 | 4.15 | 122,237 | 329,676 | |
| FS-130 | 130.00 | 124.70 | 6.73 | 3.89 | 126.00 | 4.15 | 127,130 | 342,873 | |
| FS-135 | 135.00 | 129.65 | 6.73 | 3.89 | 131.00 | 4.15 | 132,023 | 356,071 | |
| FS-140 | 140.00 | 134.42 | 6.73 | 3.89 | 136.00 | 4.15 | 136,916 | 369,269 | |
| FS-145 | 145.00 | 139.55 | 6.73 | 3.89 | 141.00 | 4.15 | 141,809 | 382,467 | |
| FS-150 | 150.00 | 143.50 | 8.03 | 3.89 | 145.00 | 4.15 | 181,986 | 395,665 | |
| FS-155 | 155.00 | 148.45 | 8.03 | 3.89 | 150.00 | 4.15 | 188,026 | 408,796 | |
| FS-160 | 160.00 | 153.40 | 8.03 | 3.89 | 155.00 | 4.15 | 194,094 | 421,994 | |
| FS-165 | 165.00 | 158.40 | 8.03 | 3.89 | 160.00 | 4.15 | 200,166 | 435,192 | |
| FS-170 | 170.00 | 163.30 | 8.03 | 3.89 | 165.00 | 4.15 | 206,237 | 448,683 | |
| FS-175 | 175.00 | 168.25 | 8.03 | 3.89 | 170.00 | 4.15 | 212,305 | 461,890 | |
| FS-180 | 180.00 | 173.20 | 8.03 | 3.89 | 175.00 | 4.15 | 218,377 | 475,097 | |
| FS-185 | 185.00 | 177.62 | 8.03 | 3.89 | 180.00 | 4.15 | 224,417 | 488,232 | |
| FS-190 | 190.00 | 183.35 | 8.03 | 3.89 | 185.00 | 4.15 | 230,489 | 501,439 | |
| FS-195 | 195.00 | 188.05 | 8.03 | 3.89 | 190.00 | 4.15 | 236,556 | 514,646 | |
| FS-200 | 200.00 | 193.00 | 8.03 | 3.89 | 195.00 | 4.15 | 242,628 | 527,853 | |
| FS-205 | 205.00 | 196.95 | 11.05 | 4.87 | 199.00 | 5.15 | 299,454 | 641,438 | |
| FS-210 | 210.00 | 201.67 | 11.05 | 4.87 | 204.00 | 5.15 | 306,763 | 657,096 | |
| FS-220 | 220.00 | 211.80 | 11.05 | 4.87 | 214.00 | 5.15 | 321,344 | 688,327 | |
| FS-230 | 230.00 | 221.70 | 11.05 | 4.87 | 224.00 | 5.15 | 335,961 | 719,638 | |
| FS-240 | 240.00 | 231.89 | 11.05 | 4.87 | 234.00 | 5.15 | 350,578 | 750,953 | |
| FS-250 | 250.00 | 241.50 | 11.05 | 4.87 | 244.00 | 5.15 | 365,199 | 782,264 | |
| FS-260 | 260.00 | 249.59 | 12.70 | 4.87 | 252.00 | 5.15 | 505,300 | 813,500 | |
| FS-270 | 270.00 | 259.30 | 12.70 | 4.87 | 262.00 | 5.15 | 524,748 | 844,811 | |
| FS-280 | 280.00 | 268.83 | 12.70 | 4.87 | 272.00 | 5.15 | 544,200 | 876,126 | |
| FS-290 | 290.00 | 279.10 | 12.70 | 4.87 | 282.00 | 5.15 | 563,599 | 907,357 | |
| FS-300 | 300.00 | 289.00 | 12.70 | 4.87 | 292.00 | 5.15 | 583,051 | 938,673 | |

¹ Add suffix ".S02" for 302 stainless steel.

² Based on a groove material yield strength of 310 N/mm² and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 106-107 for How to Order.