



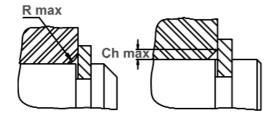
Free Diameter & Ring Measurements with Section B-B

Shaft Diameter & Groove Dimensions

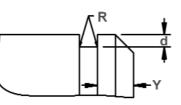
Clearance Diameter Expanded Over Shaft

Clearance Diameter & Gaging Diameter Released in Groove.

| RING | | SHAFT | | | | ROOVE SI | ZE | | | | SIZE & V | | | CLEARA | NCE DIA. | î THRUST | |
|----------------|--------------|--------------|------------|-------|--------|----------|-------|-------|-------|-------|----------|---------|-------------|----------------|--------------|----------------|------------------|
| NO. | | DIAMETER | 1 | DIAM | IETER | WI | DTH | DEPTH | | REE | THICKN | IESS*** | Weight | Ex- | Re- | Sqr. Corner | |
| | | | | | | | | | DIAN | IETER | | | Per 1000 | panded over | leased in | Ring Safety | Groove Safety |
| | | | | | | | | | | | | | PCS. | Shaft | Groove | Factor | Factor |
| | | | | | | | | | | | | | p03. | onan | | of 4 | of 2 |
| | Ds | Ds | Ds | | | | | | | | | | | | | | |
| | DEC | FRAC | mm | Dg | Tol. | W | Tol. | d | Df | Tol. | T | Tol. | lbs. | L1 | L2 | Pr | Pg |
| **SH-12 | .125 | 1/8 | 3.2 | .117 | | .012 | | .004 | .112 | | .010 | ±.001 | .018 | .222 | .214 | 112 | 35 |
| **SH-15 | .156 | 5/32 | 4.0 | .146 | | .012 | | .005 | .142 | | .010 | | .037 | .27 | .260 | 132 | 55 |
| **SH-18 | .188 | 3/16 | 4.8 | .175 | ±.0015 | .018 | +.002 | .006 | .168 | +.002 | .015 | | .059 | .298 | .286 | 244 | 80 |
| **SH-19 | .197 | - | 5.0 | .185 | .0015* | .018 | 000 | .006 | .179 | 004 | .015 | | .063 | .319 | .307 | 254 | 85 |
| **SH-21 | .219 | 7/32 | 5.6 | .205 | | .018 | | .007 | .196 | | .015 | | .074 | .338 | .324 | 284 | 110 |
| **SH-23 | .236 | 15/64 | 6.0 | .222 | | .018 | | .007 | .215 | | .015 | | .086 | .355 | .341 | 315 | 120 175 |
| SH-25 SH-27 | .250 .276 | 1/4 | 6.4 7.0 | .230 | | .029 | | .010 | .225 | | .025 | | .21 .23 | .45 .48 | .43 .46 | 599 660 | 1/5 |
| SH-27 SH-28 | .276 | - 9/32 | 7.0 | .200 | | .029 | | .010 | .250 | | .025 | | .23 | .40 | .40 | 670 | 200 |
| SH-20 SH-31 | .201 | 9/32 5/16 | 7.1 | .201 | | .029 | | .010 | .230 | | .025 | | .24 | .49 | .47 | 751 | 200 |
| SH-34 | .344 | 11/32 | 8.7 | .290 | ±.002 | .029 | | .011 | .309 | | .025 | | .31 | .54 | .52 | 812 | 265 |
| SH-35 | .354 | - | 9.0 | .321 | .002* | .029 | | .011 | .320 | +.002 | .025 | | .35 | .57 | .55 | 832 | 300 |
| SH-37 | .375 | 3/8 | 9.5 | .352 | .002 | .029 | | .012 | .338 | 002 | .025 | | .39 | .61 | .57 | 883 | 320 |
| SH-39 | .394 | 0/0 | 10.0 | .369 | | .029 | | .012 | .354 | 005 | .025 | | .42 | .62 | .60 | 954 | 335 |
| SH-40 | .406 | 13/32 | 10.0 | .382 | | .029 | | .012 | .366 | | .025 | | .42 | .62 | .61 | 964 | 350 |
| SH-40 | .438 | 7/16 | 11.1 | .412 | | .029 | | .012 | .395 | | .025 | | .50 | .66 | .64 | 1035 | 400 |
| SH-46SP1 | .461 | - | 11.7 | .435 | | .029 | | .013 | .420 | | .025 | | .51 | .68 | .66 | 1110 | 460 |
| SH-46 | .469 | 15/32 | 11.9 | .443 | | .029 | | .013 | .428 | | .025 | ±.002 | .54 | .68 | .66 | 1117 | 450 |
| SH-50 | .500 | 1/2 | 12.7 | .468 | ±.002 | .039 | +.003 | .016 | .461 | | .035 | | .91 | .77 | .74 | 1675 | 550 |
| SH-55 | .551 | - | 14.0 | .519 | .004* | .039 | 000 | .016 | .509 | | .035 | | .90 | .81 | .78 | 1800 | 600 |
| SH-56 | .562 | 9/16 | 14.3 | .530 | | .039 | | .016 | .521 | | .035 | | 1.1 | .82 | .79 | 1878 | 650 |
| SH-59 | .594 | 19/32 | 15.1 | .559 | | .039 | | .017 | .550 | | .035 | | 1.2 | .86 | .83 | 1979 | 750 |
| SH-62 | .625 | 5/8 | 15.9 | .588 | | .039 | | .018 | .579 | | .035 | | 1.3 | .90 | .87 | 2091 | 800 |
| SH-66 | .669 | - | 17.0 | .629 | | .039 | | .020 | .621 | +.005 | .035 | | 1.4 | .93 | .89 | 2233 | 950 |
| SH-66 | .672 | 43/64 | 17.1 | .631 | | .039 | | .020 | .621 | 010 | .035 | | 1.4 | .93 | .89 | 2233 | 950 |
| SH-68 | .688 | 11/16 | 17.5 | .646 | | .046 | | .021 | .635 | | .042 | | 1.8 | 1.01 | .97 | 3451 | 1000 |
| SH-75 | .750 | 3/4 | 19.0 | .704 | ±.003 | .046 | | .023 | .693 | | .042 | | 2.1 | 1.09 | 1.05 | 3756 | 1200 |
| SH-78 | .781 | 25/32 | 19.8 | .733 | .004* | .046 | | .024 | .722 | | .042 | | 2.2 | 1.12 | 1.08 | 3959 | 1300 |
| SH-81 | .812 | 13/16 | 20.6 | .762 | | .046 | | .025 | .751 | | .042 | | 2.5 | 1.15 | 1.10 | 4060 | 1450 |
| SH-84 | .844 | - | 21.4 | .791 | | .046 | | .026 | .780 | | .042 | | 2.7 | 1.18 | 1.13 | 4200 | 1500 |
| SH-87 | .875 | 7/8 | 22.2 | .821 | | .046 | | .027 | .810 | | .042 | | 2.8 | 1.21 | 1.16 | 4365 | 1650 |
| SH-93 | .938 | 15/16 | 23.8 | .882 | | .046 | | .028 | .867 | | .042 | | 3.1 | 1.34 | 1.29 | 4720 | 1850 |
| SH-98 | .984 | 63/64 | 25.0 | .926 | | .046 | | .029 | .910 | | .042 | | 3.5 | 1.39 | 1.34 | 4923 | 2000 |
| SH-100 | 1.000 | 1 | 25.4 | .940 | | .046 | | .030 | .925 | | .042 | | 3.6 | 1.41 | 1.35 | 5024 | 2100 |
| SH-102 | 1.023 | - | 26.0 | .961 | | .046 | | .031 | .946 | | .042 | | 3.9 | 1.43 | 1.37 | 5126 | 2250 |
| SH-106 | 1.062 | 1-1/16 | 27.0 | .998 | ±.004 | .056 | +.004 | .032 | .982 | +.010 | .050 | | 4.8 | 1.50 | 1.44 | 6293 | 2400 |
| SH-112 | 1.125 | 1-1/8 | 28.6 | 1.059 | .005* | .056 | 000 | .033 | 1.041 | 015 | .050 | | 5.1 | 1.55 | 1.49 | 6699 | 2600 |







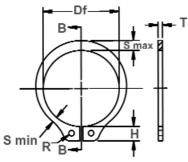
Exploded Groove Profile & Edge Margin (Y) Maximum bottom radii (R), sharp corners for ring sizes -12 thru -23; .003 for ring sizes -25 thru -35; .005 for sizes -37 thru -100; .010 for ring sizes -102 thru -1000

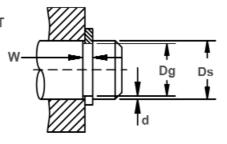


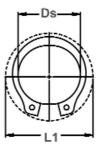


Alternate Design Manufacturer's Option

| RING NO. | LUG HEIGHT | | HEIGHT SECTION | | | MUM TION | |)LE IETER | GAGING Dia. | COR | NABLE INER DII & IFERS | MAX. LOAD w/ R max or Ch max (Ibs.) | EDGE MAR- GIN | R.P.M. LIMITS Stan- dard Material |
|----------------|---------------|-------|----------------|--------|-------|-------------|------|--------------|----------------|-------|---------------------------------|--|---------------------|---|
| | Н | Tol. | S max | Tol. | S min | Tol. | R | Tol. | Gd Max | R max | Ch max | P'r | Y | RPM |
| **SH-12 | .046 | | .018 | ±.0015 | .011 | ±.0015 | .026 | | .148 | .010 | .006 | 45 | .012 | 80000 |
| **SH-15 | .054 | | .026 | | .016 | | .026 | | .189 | .015 | .009 | 45 | .015 | 80000 |
| **SH-18 | .050 | ±.002 | .025 | | .016 | | .025 | | .218 | .014 | .0085 | 105 | .018 | 80000 |
| **SH-19 | .056 | | .026 | ±.002 | .016 | ±.002 | .026 | | .229 | .0145 | .009 | 105 | .018 | 80000 |
| **SH-21 | .056 | | .028 | | .017 | | .026 | | .252 | .015 | .009 | 105 | .021 | 80000 |
| **SH-23 | .056 | | .030 | | .019 | | .026 | | .272 | .0165 | .010 | 105 | .021 | 80000 |
| SH-25 | .080 | | .035 | | .025 | | .041 | | .290 | .018 | .011 | 470 | .030 | 80000 |
| SH-27 | .081 | | .035 | | .024 | | .041 | | .315 | .0175 | .0105 | 470 | .031 | 76000 |
| SH-28 | .080 | | .038 | | .025 | | .041 | | .326 | .020 | .012 | 470 | .030 | 74000 |
| SH-31 SH-34 | .087 .087 | | .040 | | .026 | | .041 | | .357 .390 | .020 | .012 | 470 470 | .033 | 70000 |
| | | | | | | . 000 | .041 | | .390 | | | 470 | .033 | 64000 62000 |
| SH-35 SH-37 | .087 .088 | | .046 .050 | ±.003 | .029 | ±.003 | .041 | 1 010 | .405 | .023 | .014 .0155 | 470 | .036 | 60000 |
| SH-37 SH-39 | .088 | ±.003 | .050 | | .0305 | | .041 | +.010 | .433 | .026 | .0155 | 470 | .036 | 56500 |
| SH-39 SH-40 | .087 | ±.003 | .052 | | .031 | | .041 | 002 | .452 | .027 | .016 | 470 | .037 | 55000 |
| SH-40 SH-43 | .088 | | .054 | | .033 | | .041 | | .400 | .0285 | .0175 | 470 | .030 | 50000 |
| SH-46SP1 | .000 | | .055 | | .033 | | .041 | | .540 | .029 | .0173 | 470 | .039 | 42000 |
| SH-463F1 | .092 | | .060 | | .035 | | .041 | | .540 | .013 | .017 | 470 | .039 | 42000 |
| SH-40 SH-50 | .108 | | .065 | | .033 | | .047 | | .574 | .031 | .020 | 910 | .033 | 40000 |
| SH-55 | .108 | | .053 | | .040 | | .047 | | .611 | .034 | .0165 | 910 | .048 | 36000 |
| SH-56 | .108 | | .072 | | .030 | | .047 | | .644 | .027 | .023 | 910 | .040 | 35000 |
| SH-59 | .109 | | .072 | ±.004 | .043 | ±.004 | .047 | | .680 | .0395 | .0235 | 910 | .040 | 32000 |
| SH-62 | .110 | | .080 | 001 | .045 | | .047 | | .715 | .0415 | .025 | 910 | .055 | 30000 |
| SH-66 | .110 | | .082 | | .043 | | .047 | | .756 | .040 | .024 | 910 | .060 | 29000 |
| SH-66 | .110 | | .082 | | .043 | 1 | .047 | 1 | .758 | .040 | .024 | 910 | .060 | 29000 |
| SH-68 | .136 | | .084 | | .048 | | .052 | 1 | .779 | .042 | .025 | 1340 | .063 | 28000 |
| SH-75 | .136 | | .092 | | .051 | 1 | .052 | 1 | .850 | .046 | .0275 | 1340 | .069 | 26500 |
| SH-78 | .136 | | .094 | | .052 | 1 | .052 | 1 | .883 | .047 | .028 | 1340 | .072 | 25500 |
| SH-81 | .136 | | .096 | | .054 | 1 | .052 | 1 | .914 | .047 | .028 | 1340 | .075 | 24500 |
| SH-84 | .137 | | .100 | | .057 | 1 | .052 | 1 | .950 | .047 | .028 | 1340 | .078 | 24000 |
| SH-87 | .137 | ±.004 | .104 | ±.005 | .057 | ±.005 | .052 | 1 | .987 | .051 | .0305 | 1340 | .081 | 23000 |
| SH-93 | .166 | | .110 | | .063 | | .078 | | 1.054 | .055 | .033 | 1340 | .084 | 21500 |
| SH-98 | .167 | | .114 | | .064 | | .078 | | 1.106 | .056 | .0335 | 1340 | .087 | 20500 |
| SH-100 | .167 | | .116 | | .065 | | .078 | +.015 | 1.122 | .057 | .034 | 1340 | .090 | 20000 |
| SH-102 | .168 | | .118 | | .066 | | .078 | 002 | 1.147 | .058 | .035 | 1340 | .093 | 19500 |
| SH-106 | .181 | | .122 | ±.006 | .069 | ±.006 | .078 | | 1.192 | .060 | .036 | 1950 | .096 | 19000 |
| SH-112 | .182 | | .128 | | .071 | | .078 | | 1.261 | .063 | .038 | 1950 | .099 | 18800 |









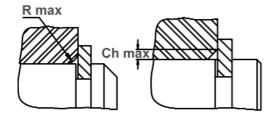
Free Diameter & Ring Measurements with Section B-B

Shaft Diameter & Groove Dimensions

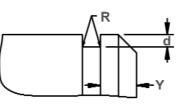
Clearance Diameter Expanded Over Shaft

Clearance Diameter & Gaging Diameter Released in Groove.

| RING | | SHAFT | | | G | ROOVE S | IZE | | | RING | SIZE & | WEIGHT | | CLEARA | NCE DIA. | î THRUST LD.(lbs.) | | |
|------------------|----------|------------------|--------------|----------------|----------------|--------------|-------|--------------------------|----------------|----------|--------|---------|--------------|---------------|--------------|--------------------|------------------|--|
| NO. | | DIAMETER | 1 | DIAN | IETER | WI | DTH | DEPTH | | REE | THICK | NESS*** | Weight | Ex- | Re- | | er Abutment | |
| | | | | | | | | | | DIAMETER | | | Per 1000 | panded | leased | Ring | Groove Safety | |
| | | | | | | | | | | | | | DCS. | over Shaft | in Groove | Safety Factor | Factor | |
| | | | | | | | | | | | | | p03. | onan | 010070 | of 4 | of 2 | |
| | Ds Ds Ds | | | | | | | | | | | | | | | | | |
| | DEC | FRAC | mm | Dg | Tol. | W | Tol. | d | Df | Tol. | T | Tol. | lbs. | L1 | L2 | Pr | Pg | |
| SH-118 | 1.188 | 1-3/16 | 30.2 | 1.118 | | .056 | | .035 | 1.098 | | .050 | | 5.6 | 1.61 | 1.54 | 7105 | 2950 | |
| SH-125 | 1.250 | 1-1/4 | 31.7 | 1.176 | | .056 | | .037 | 1.156 | 010 | .050 | 000 | 5.9 | 1.69 | 1.62 | 7460 | 3250 | |
| SH-131 | 1.312 | 1-5/16 | 33.3 | 1.232 | ±.004 | .056 | | .040 | 1.214 | +.010 | .050 | ±.002 | 6.8 | 1.75 | 1.67 | 7866 | 3700 | |
| SH-137 | 1.375 | 1-3/8 | 34.9 | 1.291 | .005* | .056 | | .042 | 1.272 | 015 | .050 | | 7.2 | 1.80 | 1.72 | 8222 | 4100 | |
| SH-143 | 1.438 | 1-7/16 | 36.5 | 1.350 | | .056 | | .044 | 1.333 | | .050 | | 8.1 | 1.87 | 1.79 | 8628 | 4500 | |
| SH-150 | 1.500 | 1-1/2 | 38.1 | 1.406 | | .056 | | .047 | 1.387 | | .050 | | 9.0 12.4 | 1.99 | 1.90 | 8932 | 5000 | |
| SH-156 | 1.562 | 1-9/16 | 39.7 | 1.468 | | .068 | | | 1.446 | | .062 | | | 2.10 | 2.01 | 11571 | 5200 | |
| SH-162 SH-168 | 1.625 | 1-5/8 1-11/16 | 41.3 42.9 | 1.529 | | .068 .068 | +.004 | .048 .049 | 1.503 | | .062 | | 13.2 14.8 | 2.17 | 2.08 2.15 | 12028 12535 | 5500 5850 | |
| SH-100 SH-175 | 1.750 | | 42.9 | | ±.005 | .068 | 000 | | | +.013 | .062 | - | 14.8 | 2.24 | 2.15 | 12992 | 6200 | |
| SH-175 SH-177 | 1.750 | 1-3/4 | 44.4 | 1.650 1.669 | ±.005 .005* | .068 | | .050 .051 | 1.618 1.637 | +.013 | .062 | | 15.3 | 2.31 | 2.21 | 13144 | 6400 | |
| SH-177 SH-181 | 1.812 | 1-13/16 | 46.0 | 1.708 | .005 | .068 | | .051 | 1.675 | 020 | .062 | ±.003 | 15.4 | 2.33 | 2.23 | 13449 | 6650 | |
| SH-187 | 1.875 | 1-13/10 | 40.0 | 1.769 | | .068 | | .052 | 1.735 | | .062 | | 17.3 | 2.30 | 2.20 | 13906 | 7000 | |
| SH-196 | 1.969 | 1-31/32 | 50.0 | 1.857 | | .068 | | .056 | 1.819 | | .062 | | 18.0 | 2.44 | 2.46 | 14565 | 7800 | |
| SH-200 | 2.000 | 2 | 50.8 | 1.886 | | .068 | | .057 | 1.850 | | .062 | | 19.0 | 2.60 | 2.40 | 14819 | 8050 | |
| SH-206 | 2.062 | 2-1/16 | 52.4 | 1.946 | | .000 | | .058 | 1.906 | | .078 | | 25.0 | 2.68 | 2.57 | 19234 | 8450 | |
| SH-212 | 2.125 | 2-1/8 | 54.0 | 2.003 | | .086 | | .000 | 1.964 | | .078 | | 26.1 | 2.78 | 2.66 | 19793 | 9150 | |
| SH-215 | 2.156 | 2-5/32 | 54.8 | 2.032 | | .086 | | .062 | 1.993 | | .078 | | 26.3 | 2.81 | 2.69 | 20097 | 9450 | |
| SH-225 | 2.250 | 2-1/4 | 57.1 | 2.120 | | .086 | | .065 | 2.081 | +.015 | .078 | | 27.7 | 2.88 | 2.76 | 21011 | 10350 | |
| SH-231 | 2.312 | 2-5/16 | 58.7 | 2.178 | | .086 | | .067 | 2.139 | 025 | .078 | | 28.0 | 2.94 | 2.81 | 21518 | 10950 | |
| SH-237 | 2.375 | 2-3/8 | 60.3 | 2.239 | | .086 | | .068 | 2.197 | | .078 | | 29.2 | 3.06 | 2.93 | 22127 | 11400 | |
| SH-243 | 2.438 | 2-7/16 | 61.9 | 2.299 | | .086 | | .069 | 2.255 | | .078 | | 29.5 | 3.07 | 2.94 | 22736 | 11900 | |
| SH-250 | 2.500 | 2-1/2 | 63.5 | 2.360 | | .086 | | .070 | 2.313 | | .078 | | 29.7 | 3.17 | 3.03 | 23345 | 12350 | |
| SH-255 | 2.559 | - | 65.0 | 2.419 | | .086 | | .070 | 2.377 | | .078 | | 33.9 | 3.18 | 3.04 | 23853 | 12650 | |
| SH-262 | 2.625 | 2-5/8 | 66.7 | 2.481 | ±.006 | .086 | +.005 | .072 | 2.428 | | .078 | | 35.0 | 3.30 | 3.16 | 24462 | 13350 | |
| SH-268 | 2.688 | 2-11/16 | 68.3 | 2.541 | .006* | .086 | 000 | .073 | 2.485 | | .078 | | 36.0 | 3.37 | 3.23 | 25071 | 13850 | |
| SH-275 | 2.750 | 2-3/4 | 69.8 | 2.602 | | .103 | | .074 | 2.543 | | .093 | | 42.5 | 3.48 | 3.34 | 30551 | 14400 | |
| SH-287 | 2.875 | 2-7/8 | 73.0 | 2.721 | | .103 | | .077 | 2.659 | | .093 | | 48.5 | 3.60 | 3.45 | 31973 | 15650 | |
| SH-293 | 2.938 | 2-15/16 | 74.6 | 2.779 | | .103 | | .079 | 2.717 | +.020 | .093 | | 50.0 | 3.66 | 3.51 | 32683 | 16400 | |
| SH-300 | 3.000 | 3 | 76.2 | 2.838 | | .103 | | .081 | 2.775 | 030 | .093 | | 52.0 | 3.60 | 3.44 | 33394 | 17200 | |
| SH-306 | 3.062 | 3-1/16 | 77.8 | 2.898 | | .103 | | .082 | 2.832 | | .093 | | 47.5 | 3.74 | 3.58 | 34003 | 17750 | |
| SH-312 | 3.125 | 3-1/8 | 79.4 | 2.957 | | .103 | | .084 | 2.892 | | .093 | | 58.0 | 3.85 | 3.69 | 34815 | 18550 | |
| SH-315 | 3.156 | 3-5/32 | 80.2 | 2.986 | | .103 | | .085 | 2.920 | | .093 | | 59.0 | 3.88 | 3.71 | 35119 | 18950 | |
| SH-325 | 3.250 | 3-1/4 | 82.5 | 3.076 | | .103 | | .087 3.006 .090 3.092 | | | .093 | | 62.0 | 3.93 | 3.76 | 36134 | 20000 | |
| SH-334 | 3.346 | 3-11/32 | 85.0 | 3.166 | | .103 | | | | .093 | 3 | 64.0 | 4.02 | 3.85 | 37251 | 21000 | | |
| SH-343 | 3.438 | 3-7/16 | 87.3 | 3.257 | | .103 | | .090 | 3.179 | | .093 | | 66.0 | 4.14 | 3.96 | 38266 | 21900 | |
| SH-350 | 3.500 | 3-1/2 | 88.9 | 3.316 | | .120 | | .092 | 3.237 | | .109 | | 72.0 | 4.16 | 3.98 | 45574 | 22800 | |



Maximum Corner Radius & Chamfer



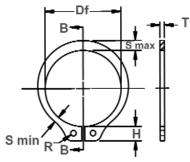
Exploded Groove Profile & Edge Margin (Y) Maximum bottom radii (R), sharp corners for ring sizes -12 thru -23; .003 for ring sizes -25 thru -35; .005 for sizes -37 thru -100; .010 for ring sizes -102 thru -1000

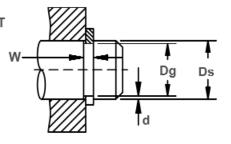
Lug Design For Sizes SH-12 thru SH-23

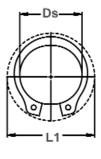


Alternate Design Manufacturer's Option

| RING NO. | HEI | LUG MAXIMU HEIGHT SECTION | | | | imum Tion | |)LE IETER | GAGING DIA. Gd | COR RAD | VABLE INER DII & IFERS | MAX. LOAD w/ R max or Ch max (Ibs.) | EDGE MAR- GIN | R.P.M. LIMITS Stan- dard Material |
|------------------|--------------|------------------------------|--------------|-------|--------------|--------------|--------------|--------------|----------------------|--------------|---------------------------------|--|---------------------|---|
| | Н | Tol. | S max | Tol. | S min | Tol. | R | Tol. | Max. | R max | Ch max | P'r | Ŷ | RPM |
| SH-118 | .182 | | .132 | | .072 | | .078 | | 1.325 | .064 | .0385 | 1950 | .105 | 18000 |
| SH-125 | .183 | | .140 | | .076 | | .078 | | 1.396 | .068 | .041 | 1950 | .111 | 17000 |
| SH-131 | .183 | | .146 | | .076 | | .078 | | 1.458 | .068 | .041 | 1950 | .120 | 16500 |
| SH-137 | .184 | | .152 | | .082 | | .078 | | 1.529 | .072 | .043 | 1950 | .126 | 16000 |
| SH-143 | .184 | | .160 | | .086 | | .078 | | 1.600 | .076 | .045 | 1950 | .132 | 15000 |
| SH-150 | .214 | ±.004 | .168 | ±.006 | .091 | ±.006 | .120 | | 1.668 | .079 | .047 | 1950 | .141 | 14800 |
| SH-156 | .235 | | .172 | | .093 | | .125 | | 1.740 | .082 | .049 | 3000 | .141 | 14000 |
| SH-162 | .235 | | .180 | | .097 | | .125 | | 1.812 | .087 | .052 | 3000 | .144 | 13200 |
| SH-168 | .235 | | .184 | | .099 | | .125 | | 1.877 | .090 | .054 | 3000 | .148 | 13000 |
| SH-175 | .237 | | .188 | | .101 | | .125 | | 1.945 | .091 | .054 | 3000 | .150 | 12200 |
| SH-177 | .237 | | .190 | | .102 | | .125 | | 1.967 | .092 | .055 | 3000 | .154 | 11700 |
| SH-181 | .262 | | .192 | | .102 | | .125 | | 2.010 | .092 | .055 | 3000 | .156 | 11500 |
| SH-187 SH-196 | .262 .262 | | .196 .200 | | .104 .106 | | .125 .125 | | 2.076 2.170 | .094 .094 | .056 .056 | 3000 3000 | .159 .168 | 11000 10500 |
| SH-190 SH-200 | .262 | | .200 | | .100 | | .125 | | 2.170 | .094 | .056 | 3000 | .100 | 10000 |
| SH-200 | .262 | | .204 | | .100 | | .125 | | 2.205 | .098 | .057 | 5000 | .174 | 9600 |
| SH-200 | .207 | | .200 | | .113 | | .125 | +.015 | 2.337 | .090 | .059 | 5000 | .174 | 9500 |
| SH-215 | .280 | | .212 | | .113 | | .125 | 002 | 2.366 | .030 | .058 | 5000 | .186 | 9400 |
| SH-225 | .280 | | .212 | | .116 | | .125 | 002 | 2.466 | .100 | .060 | 5000 | .100 | 9200 |
| SH-231 | .280 | | .222 | | .118 | | .125 | | 2.528 | .100 | .060 | 5000 | .201 | 9000 |
| SH-237 | .292 | | .224 | | .119 | | .125 | | 2.520 | .100 | .060 | 5000 | .201 | 8800 |
| SH-243 | .268 | ±.005 | .228 | ±.007 | .120 | ±.007 | .125 | | 2.657 | .102 | .061 | 5000 | .207 | 8600 |
| SH-250 | .292 | 000 | .232 | 007 | .122 | | .125 | | 2.724 | .104 | .062 | 5000 | .210 | 8400 |
| SH-255 | .268 | | .238 | | .125 | | .125 | | 2.792 | .108 | .065 | 5000 | .210 | 8200 |
| SH-262 | .292 | | .242 | | .127 | | .125 | 1 | 2.860 | .1095 | .066 | 5000 | .216 | 8000 |
| SH-268 | .268 | | .246 | | .129 | | .125 | 1 | 2.926 | .1115 | .067 | 5000 | .219 | 7900 |
| SH-275 | .324 | | .248 | | .131 | | .125 | 1 | 2.992 | .112 | .067 | 7350 | .222 | 7600 |
| SH-287 | .324 | | .256 | | .133 | | .125 | 1 | 3.122 | .115 | .069 | 7350 | .231 | 7300 |
| SH-293 | .324 | | .260 | | .136 | | .125 | | 3.187 | .116 | .070 | 7350 | .237 | 7200 |
| SH-300 | .264 | | .264 | | .138 | | .125 | 1 | 3.252 | .117 | .070 | 7350 | .243 | 6700 |
| SH-306 | .298 | | .252 | | .131 | | .125 | 1 | 3.294 | .107 | .064 | 7350 | .246 | 6600 |
| SH-312 | .324 | | .272 | | .141 | | .125 | | 3.383 | .120 | .072 | 7350 | .252 | 6600 |
| SH-315 | .324 | | .274 | | .143 | | .125 | | 3.415 | .1205 | .072 | 7350 | .255 | 6500 |
| SH-325 | .300 | | .300 | ±.008 | .145 | ±.008 | .125 | | 3.515 | .123 | .074 | 7350 | .261 | 6400 |
| SH-334 | .300 | | .300 | | .147 | | .125 | | 3.613 | .126 | .076 | 7350 | .270 | 6000 |
| SH-343 | .308 | | .292 | | .148 | | .125 | | 3.712 | .129 | .077 | 7350 | .270 | 5900 |
| SH-350 | .285 | | .285 | | .148 | | .125 | | 3.764 | .122 | .073 | 10500 | .276 | 5900 |





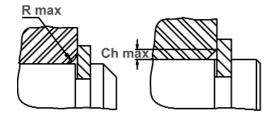




Free Diameter & Ring Measurements with Section B-B Shaft Diameter & Groove Dimensions

Clearance Diameter Expanded Over Shaft Clearance Diameter & Gaging Diameter Released in Groove.

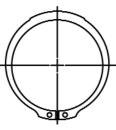
| RING | | SHAFT | | | GPO | OVE S | SI7E | | | BING | SIZE & W | FIGHT | | CLEARA | | î THRUST LD.(lbs.) | | |
|------------------|--------|------------|----------------|-------|-------|-------|-------|-------|-------|-------|----------|-------|----------------|--------------|--------------|--------------------|----------------|--|
| NO. | п | IAMETEI | R | DIAM | | | DTH | DEPTH | FR | | THICKN | | Weight | Ex- | Re- | | r Abutment | |
| | - | | | 2 | | | | | DIAM | | | | Per | panded | leased | Rina | Groove | |
| | | | | | | | | | | | | | 1000 | over | in | Safety | Safety | |
| | | | | | | | | | | | | | pcs. | Shaft | Groove | Factor | Factor | |
| | | | | | | | | | | | | | | | | of 4 | of 2 | |
| | Ds | Ds | Ds | | | | | | | | | | | | | | | |
| | DEC | FRAC | mm | Dg | Tol. | W | Tol. | d | Df | Tol. | T | Tol. | lbs. | L1 | L2 | Pr | Pg | |
| SH-354 | 3.543 | - | 90.0 | 3.357 | | .120 | | .093 | 3.277 | | .109 | | 73.0 | 4.25 | 4.07 | 46183 | 23300 | |
| SH-362 | 3.625 | 3-5/8 | 92.1 | 3.435 | | .120 | | .095 | 3.352 | | .109 | | 76.0 | 4.36 | 4.17 | 47299 | 24300 | |
| SH-368 | 3.688 | 3-11/16 | | 3.493 | | .120 | | .097 | 3.410 | | .109 | | 80.0 | 4.33 | 4.31 | 48010 | 25300 | |
| SH-375 | 3.750 | 3-3/4 | 95.2 | 3.552 | ±.006 | .120 | +.005 | .099 | 3.468 | +.020 | .109 | ±.003 | 83.0 | 4.52 | 4.33 | 48822 | 26200 | |
| SH-387 | 3.875 | 3-7/8 | 98.40 | 3.673 | .006* | .120 | 000 | .101 | 3.584 | 030 | .109 | | 88.0 | 4.64 | 4.44 | 50446 | 27700 | |
| SH-393 | | 3-15/16 | | 3.734 | | .120 | | .102 | 3.642 | | .109 | | 95.0 | 4.70 | 4.50 | 51359 | 28400 | |
| SH-400 | 4.000 | 4 | 101.6 | 3.792 | | .120 | | .104 | 3.700 | | .109 | | 101.0 | 4.76 | 4.56 | 52171 | 29400 | |
| SH-412 | 4.125 | 4-1/8 | 104.8 | 3.915 | | .120 | | .105 | 3.800 | | .109 | | 101.2 | 5.00 | 4.78 | 53200 | 29800 | |
| SH-425 | 4.250 | | 108.0 | 4.065 | | .120 | | .092 | 3.989 | | .109 | | 112.0 | 4.98 | 4.80 | 55419 | 27600 | |
| SH-437 | 4.375 | 4-3/8 | 111.1 | 4.190 | | .120 | | .092 | 4.106 | | .109 | | 115.0 | 5.22 5.37 | 5.04 | 57043 | 28400 30200 | |
| SH-450 SH-475 | 4.500 | 4-1/2 | 114.3 120.6 | 4.310 | | | | .095 | 4.223 | | .109 | | 132.0 113.0 | 5.74 | 5.18 5.52 | 58667 61915 | 30200 | |
| SH-475 SH-500 | 5.000 | 4-3/4 | 120.6 | 4.550 | | .120 | | .100 | 4.408 | | .109 | | 149.0 | 5.85 | 5.64 | 65163 | 37100 | |
| SH-500 | 5.250 | 5-1/4 | 133.3 | 5.030 | | .120 | | .110 | 4.092 | | .109 | | 190.0 | 6.17 | 5.95 | 78460 | 40800 | |
| SH-550 | 5.500 | | 139.7 | 5.265 | ±.007 | .139 | +.006 | .117 | 5.162 | +.020 | .125 | ±.004 | 202.5 | 6.63 | 6.39 | 82215 | 45500 | |
| SH-575 | 5.750 | 5-3/4 | 146.0 | 5.505 | .006* | .139 | 000 | .122 | 5.396 | 040 | .125 | ±.004 | 2202.0 | 6.93 | 6.69 | 85971 | 49600 | |
| SH-600 | 6.000 | 5-5/4 6 | 152.4 | 5.745 | .000 | .139 | 000 | .122 | 5.631 | 040 | .125 | | 210.0 | 7.21 | 6.95 | 89625 | 53800 | |
| SH-625 | 6.250 | 6-1/4 | 158.7 | 5.985 | | .174 | | .132 | 5.866 | | .156 | | 282.0 | 7.48 | 7.22 | 116522 | 58300 | |
| SH-650 | 6.500 | 6-1/2 | 165.1 | 6.225 | 1 | .174 | | .137 | 6.100 | +.020 | .156 | | 330.0 | 7.80 | 7.45 | 121191 | 62900 | |
| SH-675 | 6.750 | 6-3/4 | 171.4 | 6.465 | | .174 | | .142 | 6.335 | 050 | .156 | | 356.0 | 8.10 | 7.82 | 125860 | 67700 | |
| SH-700 | 7.000 | 7 | 177.8 | 6.705 | 1 | .174 | | .147 | 6.570 | | .156 | | 371.0 | 7.86 | 7.78 | 130529 | 72700 | |
| SH-725 | 7.250 | 7-1/4 | 184.2 | 6.942 | 1 | .209 | | .154 | 6.775 | | .187 | | 510.0 | 7.59 | 8.13 | 162096 | 78900 | |
| SH-750 | 7.500 | 7-1/2 | 190.5 | 7.180 | 1 | .209 | | .160 | 7.009 | | .187 | | 534.0 | 8.73 | 8.41 | 167678 | 84800 | |
| SH-775 | 7.750 | 7-3/4 | 196.9 | 7.420 | ±.008 | .209 | +.008 | .165 | 7.243 | +.050 | .187 | ±.005 | 545.0 | 8.85 | 8.52 | 173261 | 90450 | |
| SH-800 | 8.000 | 8 | 203.2 | 7.660 | .006* | .209 | 000 | .170 | 7.478 | 130 | .187 | | 640.0 | 9.25 | 8.91 | 178843 | 96100 | |
| SH-825 | 8.250 | 8-1/4 | 209.6 | 7.900 | 1 | .209 | | .175 | 7.712 | | .187 | | 665.0 | 9.54 | 9.19 | 184426 | 102100 | |
| SH-850 | 8.500 | 8-1/2 | 215.9 | 8.140 | | .209 | | .180 | 7.947 | | .187 | | 692.0 | 9.79 | 9.43 | 190008 | 108100 | |
| SH-875 | 8.750 | 8-3/4 | 222.3 | 8.380 | | .209 | | .185 | 8.181 | | .187 | | 712.0 | 10.40 | 10.00 | 195591 | 114450 | |
| SH-900 | 9.000 | 9 | 228.6 | 8.620 | | .209 | | .190 | 8.415 | | .187 | | 737.0 | 10.60 | 10.22 | 201173 | 120800 | |
| SH-925 | 9.250 | 9-1/4 | 234.9 | 8.860 | | .209 | | .195 | 8.650 | | .187 | | 760.0 | 10.85 | 10.50 | 206756 | 128225 | |
| SH-950 | 9.500 | 9-1/2 | 241.3 | 9.100 | | .209 | | .200 | 8.885 | | .187 | | 785.0 | 11.10 | 10.70 | 212338 | 134200 | |
| SH-975 | 9.750 | 9-3/4 | 247.6 | 9.338 | | .209 | | .206 | 9.120 | | .187 | | 845.0 | 11.35 | 10.95 | 217921 | 142000 | |
| SH-1000 | 10.000 | 10 | 254.0 | 9.575 | | .209 | | .212 | 9.355 | | .187 | | 910.0 | 11.60 | 11.20 | 223503 | 149800 | |
| | | | | | | | | | | | | | | | | | | |



Maximum Corner Radius & Chamfer

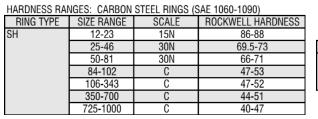
Exploded Groove Profile & Edge Margin (Y) Maximum bottom radii (R), sharp corners for ring sizes -12 thru -23; .003 for ring sizes -25 thru -35; .005 for sizes -37 thru -100; .010 for ring sizes -102 thru -1000

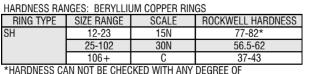




Alternate Design Manufacturer's Option

| RING NO. | LUG HEIGHT | | | | MINI Sect | | HOLE DIAMETER | | GAGING DIA. Gd | COR | VABLE INER DII & IFERS | MAX. LOAD w/ R max or Ch max (lbs.) | EDGE Mar- Gin | R.P.M. LIMITS Stan- dard Material |
|-------------|---------------|-------|-------|-------|--------------|-------|------------------|-------|----------------------|-------|---------------------------------|--|---------------------|---|
| | н | Tol. | S max | Tol. | S min | Tol. | R | Tol. | Max. | R max | Ch max | P'r | Y | RPM |
| SH-354 | .310 | | .310 | | .149 | | .125 | | 3.809 | .123 | .074 | 10500 | .279 | 5800 |
| SH-362 | .310 | | .310 | | .153 | | .125 | | 3.898 | .127 | .076 | 10500 | .285 | 5700 |
| SH-368 | .310 | | .310 | | .156 | | .125 | +.015 | | .130 | .078 | 10500 | .291 | 5600 |
| SH-375 | .342 | ±.005 | .342 | ±.008 | .160 | ±.008 | .125 | 002 | 4.037 | .133 | .080 | 10500 | .297 | 5500 |
| SH-387 | .342 | | .342 | | .163 | | .125 | | 4.169 | .137 | .082 | 10500 | .303 | 5100 |
| SH-393 | .342 | | .342 | | .163 | | .125 | | 4.230 | .137 | .082 | 10500 | .306 | 5200 |
| SH-400 | .342 | | .342 | | .163 | | .125 | | 4.288 | .135 | .081 | 10500 | .312 | 5000 |
| SH-412 | .380 | | .318 | | .165 | | .125 | | 4.410 | .135 | .081 | 10500 | .315 | 4900 |
| SH-425 | .342 | | .342 | | .176 | | .125 | | 4.558 | .146 | .088 | 10500 | .276 | 4800 |
| SH-437 | .342 | | .342 | | .176 | | .125 | | 4.683 | .146 | .088 | 10500 | .276 | 4700 |
| SH-450 | .405 | | .405 | | .185 | | .125 | | 4.860 | .102 | .061 | 10500 | .285 | 4500 |
| SH-475 | .429 | | .303 | | .136 | ±.010 | .125 | | 4.996 | .115 | .069 | 10500 | .300 | 4200 |
| SH-500 | .405 | ±.008 | .405 | ±.010 | | | .156 | | 5.346 | .165 | .099 | 10500 | .315 | 4000 |
| SH-525 | .435 | | .435 | | .211 | | .156 | | 5.605 | .169 | .101 | 13500 | .330 | 3900 |
| SH-550 | .497 | | .435 | | .209 | | .156 | | 5.867 | .175 | .105 | 13500 | .351 | 3700 |
| SH-575 | .518 | | .435 | | .220 | | .156 | | 6.134 | .184 | .110 | 13500 | .366 | 3500 |
| SH-600 | .540 | | .435 | | .171 | | .156 | | 6.302 | .143 | .086 | 13500 | .381 | 3400 |
| SH-625 | .561 | | .485 | | .176 | | .156 | | 6.568 | .148 | .089 | 21000 | .396 | 3100 |
| SH-650 | .586 | | .485 | | .236 | | .156 | | 6.905 | .191 | .114 | 21000 | .411 | 3000 |
| SH-675 | .608 | | .515 | | .246 | | .187 | +.020 | | .200 | .120 | 21000 | .426 | 3000 |
| SH-700 | .530 | | .515 | | .256 | | .187 | 005 | 7.439 | .208 | .125 | 21000 | .441 | 2900 |
| SH-725 | .660 | | .545 | | .267 | | .187 | | 7.700 | .214 | .128 | 30000 | .460 | 2800 |
| SH-750 | .676 | | .545 | | .277 | | .187 | | 7.963 | .220 | .132 | 30000 | .480 | 2700 |
| SH-775 | .660 | ±.012 | .560 | ±.015 | | ±.015 | | | 8.228 | .227 | .136 | 30000 | .495 | 2600 |
| SH-800 | .560 | | .560 | | .294 | | .187 | | 8.493 | .235 | .141 | 30000 | .510 | 2500 |
| SH-825 | .580 | | .580 | 1 | .304 | | .187 | | 8.758 | .242 | .146 | 30000 | .525 | 2400 |
| SH-850 | .580 | | .580 | | .314 | | .187 | | 9.023 | .250 | .150 | 30000 | .540 | 2300 |
| SH-875 | .735 | | .591 | | .322 | | .187 | | 9.280 | .258 | .155 | 30000 | .555 | 2200 |
| SH-900 | .735 | | .609 | | .333 | | .187 | | 9.557 | .267 | .160 | 30000 | .570 | 2200 |
| SH-925 | .735 | | .625 | | .341 | | .187 | | 9.830 | .274 | .164 | 30000 | .585 | 2100 |
| SH-950 | .735 | | .642 | | .350 | | .187 | | 10.086 | .281 | .168 | 30000 | .600 | 2100 |
| SH-975 | .735 | | .658 | | .358 | | .187 | | 10.340 | .287 | .172 | 30000 | .618 | 2000 |
| SH-1000 | .735 | | .675 | | .367 | | .187 | | 10.610 | .294 | .176 | 30000 | .636 | 2000 |





ACCURACY DIRECTLY ON THESE RINGS.