

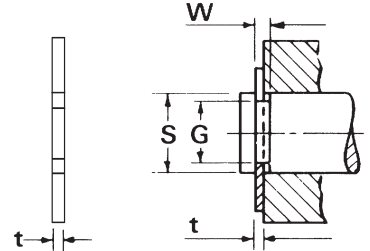
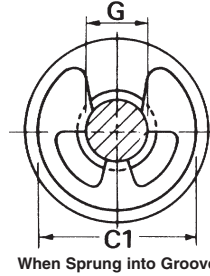
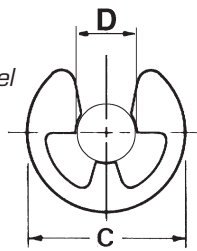


.040" to 1.375"

Standard Material
4 Beryllium Copper
X6 up Carbon Spring Steel
Standard Finish
4 Self Finish
X6 up Phosphate

MS 16633

**STANDARD E-RING
EXTERNAL**



| PART NUMBER | SHAFT | | | THICKNESS | | RING | | | | GROOVE | | | | APPROX Wt. LB / 1000 PCS. | PERMISSIBLE THRUST LOAD (LBS) | ASSEMBLY TOOLS | |
|-------------|------------|-----------|------|-----------|-------------|---------------|-------------|-------|-------|----------|-------------|----------|-------------|---------------------------|-------------------------------|----------------|---------------|
| | DIAMETER S | | | t inches | Tot. inches | FREE DIAMETER | | | | DIAMETER | | WIDTH | | | | APPLICATOR No. | DISPENSER No. |
| | Frac. inch | Dec. inch | mm | | | D inches | Tol. inches | C | C1 | G inches | Tol. inches | W inches | Tol. inches | | | | |
| 1500-4 | - | .040 | 1 | .010 | ±.001 | .025 | | .079 | .090 | .026 | +0.02 | .012 | | .009 | 13 | AM 1 | - |
| 1500-X6 | 1/16 | .062 | 1.5 | .010 | | .051 | +0.001 | .140 | .150 | .052 | -0.00 | .012 | | .028 | 20 | AM 2 | SF 2 |
| 1500-Y6 | 1/16 | .062 | 1.6 | .020 | ±.002 | .051 | -0.003 | .187 | .200 | .052 | ±.002 | .023 | +0.02 | .094 | 40 | - | - |
| 1500-6 | 1/16 | .062 | 1.5 | .010 | ±.001 | .051 | | .156 | .165 | .052 | | .012 | -0.00 | .030 | 20 | AM 3 | SF 3 |
| 1500-X9 | 3/32 | .094 | 2.4 | .015 | | .069 | +0.002 | .230 | .245 | .074 | | .020 | | .100 | 45 | AM 4 | SF 4 |
| 1500-9 | 3/32 | .094 | 2.4 | .015 | | .073 | -0.003 | .187 | .200 | .074 | | .020 | | .058 | 45 | AM 5 | SF 5 |
| 1500-X11 | 7/64 | .110 | 2.8 | .015 | | .076 | | .375 | .390 | .079 | | .020 | | .310 | 60 | AM 6 | SF 6 |
| 1500-12 | 1/8 | .125 | 3.2 | .015 | | .094 | | .230 | .240 | .095 | +0.02 | .020 | | .087 | 65 | AM 7 | SF 7 |
| 1500-X14 | 9/64 | .140 | 3.6 | .015 | | .100 | | .203 | .215 | .102 | -0.00 | .020 | | .060 | 75 | AM 8 | SF 8 |
| 1500-Y14 | 9/64 | .140 | 3.6 | .015 | | .108 | | .250 | .265 | .110 | | .020 | | .10 | 75 | AM 9 | SF 9 |
| 1500-14 | 9/64 | .140 | 3.6 | .025 | | .102 | +0.001 | .270 | .285 | .105 | | .029 | | .21 | 170 | AM 10 | SF 10 |
| 1500-15 | 5/32 | .156 | 4.0 | .025 | | .114 | -0.003 | .282 | .295 | .116 | | .029 | | .21 | 175 | AM 11 | SF 11 |
| 1500-X17 | 11/64 | .172 | 4.4 | .025 | | .125 | | .312 | .325 | .127 | | .029 | | .24 | 180 | AM 12 | SF 12 |
| 1500-X18 | 3/16 | .188 | 4.8 | .025 | | .122 | | .375 | .390 | .125 | | .029 | | .45 | 200 | AM 13 | SF 13 |
| 1500-18 | 3/16 | .188 | 4.8 | .025 | | .145 | | .335 | .350 | .147 | | .029 | | .29 | 190 | AM 14 | SF 14 |
| 1500-X21 | 7/32 | .219 | 5.6 | .025 | ±.002 | .185 | | .437 | .450 | .188 | | .029 | | .47 | 225 | AM 15 | SF 15 |
| 1500-25 | 1/4 | .250 | 6.3 | .025 | | .207 | | .527 | .540 | .210 | | .029 | | .76 | 255 | AM 16 | SF 16 |
| 1500-X31 | 5/16 | .312 | 7.9 | .025 | | .243 | | .500 | .520 | .250 | | .029 | | .57 | 325 | AM 17 | SF 17 |
| 1500-37 | 3/8 | .375 | 9.5 | .035 | | .300 | | .660 | .680 | .303 | | .039 | +0.003 | 1.5 | 690 | AM 18 | SF 18 |
| 1500-43 | 7/16 | .438 | 11.1 | .035 | | .337 | +0.002 | .687 | .710 | .343 | | .039 | -0.00 | 1.5 | 830 | AM 19 | SF 19 |
| 1500-X43 | 7/16 | .438 | 11.1 | .035 | | .375 | -0.004 | .600 | .620 | .380 | | .039 | | 1.0 | 800 | AM 20 | SF 20 |
| 1500-50 | 1/2 | .500 | 12.7 | .042 | | .392 | | .800 | .820 | .396 | +0.003 | .046 | | 2.5 | 1110 | AM 21 | SF 21 |
| 1500-62 | 5/8 | .625 | 15.9 | .042 | | .480 | | .940 | .096 | .485 | -0.00 | .046 | | 3.2 | 1420 | AM 22 | SF 22 |
| 1500-X74 | 3/4 | .744 | 19.0 | .050 | | .616 | +0.003 | 1.000 | 1.02 | .625 | | .056 | | 4.3 | 1950 | AM 23 | SF 23 |
| 1500-75 | 3/4 | .750 | 19.0 | .050 | | .574 | -0.005 | 1.120 | 1.14 | .580 | | .056 | | 5.8 | 2000 | AM 24 | SF 24 |
| 1500-87 | 7/8 | .875 | 22.2 | .050 | | .668 | | 1.300 | 1.32 | .675 | | .056 | | 7.6 | 2350 | AM 25 | SF 25 |
| 1500-X98 | 1 | .984 | 25.0 | .050 | | .822 | | 1.500 | 1.53 | .835 | | .056 | | 9.2 | 2650 | AM 26 | SF 26 |
| 1500-X118 | 1 1/16 | 1.188 | 30.2 | .062 | | 1.066 | +0.006 | 1.626 | 1.670 | 1.079 | | .068 | +0.004 | 11.3 | 3450 | AM 28 | SF 28 |
| 1500-X137 | 1 3/8 | 1.375 | 34.9 | .062 | ±.003 | 1.213 | -0.010 | 1.875 | 1.920 | 1.230 | | .068 | -0.00 | 15.4 | 4100 | - | - |



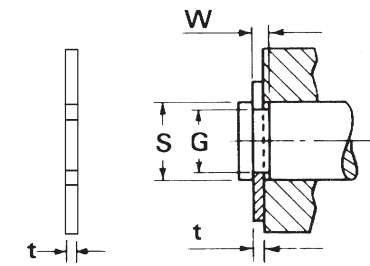
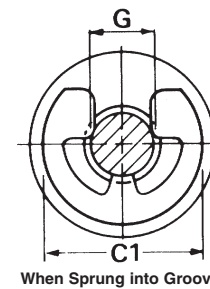
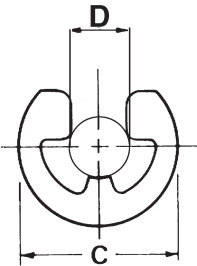
.094" to .562"

Standard Material
Carbon Spring Steel

Standard Finish
Phosphate and oil

MS 3215

**REINFORCED E-RING
EXTERNAL**



| PART NUMBER | SHAFT | | | THICKNESS | | RING | | | | GROOVE | | | | APPROX Wt. LB / 1000 PCS. | PERMISSIBLE THRUST LOAD (LBS) | ASSEMBLY TOOLS | |
|-------------|------------|-----------|------|-----------|-------------|---------------|-------------|------|------|----------|-------------|----------|-------------|---------------------------|-------------------------------|----------------|---------------|
| | DIAMETER S | | | t inches | Tot. inches | FREE DIAMETER | | | | DIAMETER | | WIDTH | | | | APPLICATOR No. | DISPENSER No. |
| | Frac. inch | Dec. inch | mm | | | D inches | Tol. inches | C | C1 | G inches | Tol. inches | W inches | Tol. inches | | | | |
| 1540-9 | 3/32 | .094 | 2.4 | .015 | | .072 | +0.001 | .206 | .219 | .074 | | .018 | +0.02 | .07 | 50 | AM 30 | SF 30 |
| 1540-12 | 1/8 | .125 | 3.2 | .015 | | .093 | -0.003 | .270 | .283 | .095 | +0.02 | .018 | -0.00 | .13 | 75 | AM 31 | SF 31 |
| 1540-15 | 5/32 | .156 | 4.0 | .025 | | .113 | +0.002 | .335 | .35 | .116 | -0.00 | .029 | | .31 | 150 | AM 32 | SF 32 |
| 1540-18 | 3/16 | .188 | 4.8 | .025 | | .143 | | .375 | .39 | .147 | | .029 | | .39 | 180 | AM 33 | SF 33 |
| 1540-21 | 7/32 | .219 | 5.6 | .025 | | .182 | ±.003 | .446 | .46 | .188 | | .029 | | .54 | 220 | AM 34 | SF 34 |
| 1540-25 | 1/4 | .250 | 6.3 | .025 | ±.002 | .204 | | .516 | .53 | .210 | ±.002 | .029 | | .71 | 250 | AM 35 | SF 35 |
| 1540-31 | 5/16 | .312 | 7.9 | .025 | | .242 | | .588 | .61 | .250 | | .039 | +0.003 | 1.2 | 420 | AM 36 | SF 36 |
| 1540-37 | 3/8 | .375 | 9.5 | .035 | | .292 | | .660 | .68 | .303 | | .039 | -0.00 | 1.5 | 520 | AM 37 | SF 37 |
| 1540-43 | 7/16 | .438 | 11.1 | .035 | | .332 | ±.004 | .746 | .77 | .343 | ±.003 | .039 | | 1.9 | 600 | AM 38 | SF 38 |
| 1540-50 | 1/2 | .500 | 12.7 | .042 | | .385 | | .810 | .83 | .396 | | .046 | | 3.2 | 820 | AM 39 | SF 39 |
| 1540-56 | 9/16 | .562 | 14.3 | .042 | | .430 | | .870 | .89 | .437 | | .046 | | 3.5 | 930 | AM 40 | SF 40 |

