

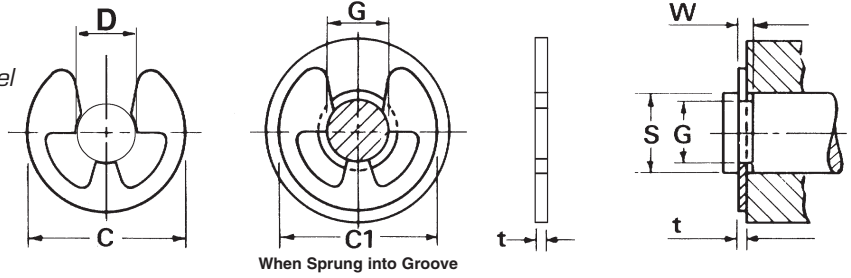


.040" to 1.375"

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	+0.002	.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	.960	.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 3/16	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	-	-



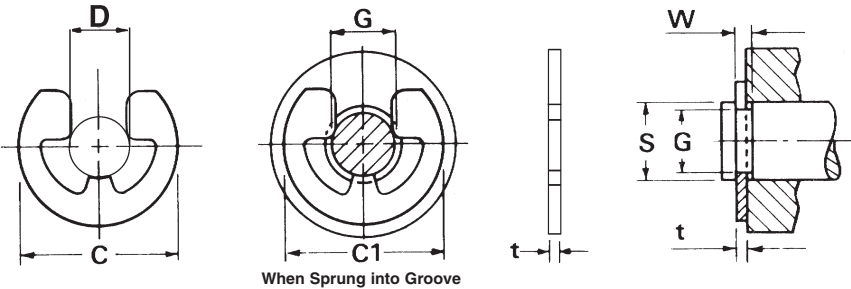
.094" to .562"

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	+0.002	.07	50	AM 30	SF 30
1540-12	1/8	.125	3.2	.015		.093	-0.003	.270	.283	.095	+0.002	.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

