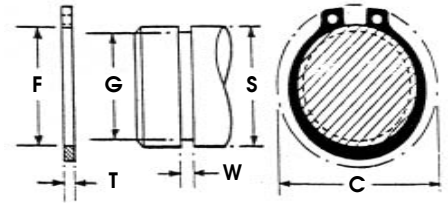


# ANSI (Inch) Retaining Rings External

**.125" to 10.00"**  
Standard Material  
12 to 20 Beryllium Cooper  
25 up Carbon Spring Steel

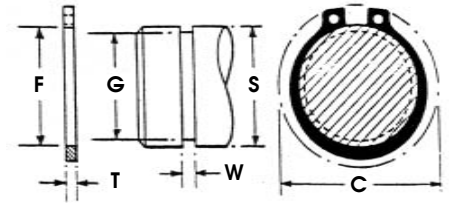
Standard Finish  
12 to 23 Finish  
25 up Phosphate



Ametric® Part No.	Shaft Diameter S			Groove Diameter				Ring Free Diameter				Dia. C Fitted Approx. Inches	Thrust Load lbs.
	Fraction Inch	Decimal Inch	mm	G Inch	Total Inch	W Inch	Total Inch	T Inch	Total Inches	F Inches	Total Inches		
5100-012	1/8	.125	-	.117	±.0015	.012		.010	±.001	.112		.010	110
5100-015	5/32	.156	-	.146	±.0015	.012		.010	±.001	.142		.010	130
5100-018	3/16	.188	-	.175	±.0015	.018	+0.002	.015	±.002	.168	+0.002	.015	240
5100-019	-	.197	5	.185	±.0015	.018	-0.000	.015	±.002	.179	-0.004	.015	250
5100-021	7/32	.219	-	.205	±.0015	.018		.015	±.002	.196		.015	280
5100-023	15/16	.236	-	.222	±.0015	.018		.015	±.002	.215		.015	310
5100-025	1/4	.250	-	.230	±.002	.029		.025	±.002	.225		.025	700
5100-027	-	.276	7	.255	±.002	.029		.025	±.002	.250		.025	770
5100-028	9/32	.281	-	.261	±.002	.029		.025	±.002	.256		.025	785
5100-031	5/16	.312	-	.290	±.002	.029		.025	±.002	.281		.025	940
5100-034	11/32	.344	-	.321	±.002	.029		.025	±.002	.309		.025	960
5100-035	-	.354	9	.330	±.002	.029		.025	±.002	.320		.025	990
5100-037	3/8	.375	-	.352	±.002	.029	+0.003	.025	±.002	.338	+0.002	.025	1050
5100-039	-	.394	10	.369	±.002	.029	-0.000	.025	±.002	.354	-0.005	.025	1100
5100-040	13/32	.406	-	.382	±.002	.029		.025	±.002	.366		.025	1180
5100-043	7/16	.438	-	.412	±.002	.029		.025	±.002	.395		.025	1220
5100-046	15/32	.469	-	.443	±.002	.029		.025	±.002	.428		.025	1300
5100-050	1/2	.500	-	.468	±.002	.039		.035	±.002	.461		.035	1980
5100-055	-	.551	14	.519	±.002	.039		.035	±.002	.509		.035	2180
5100-056	9/16	.562	-	.530	±.002	.039		.035	±.002	.521		.035	2200
5100-059	19/32	.594	-	.559	±.003	.039		.035	±.002	.550		.035	2350
5100-062	5/8	.625	-	.588	±.003	.039		.035	±.002	.579		.035	2460
5100-066	-	.669	17	.629	±.003	.039		.035	±.002	.621		.035	2650
5100-068	43/64	.672	-	.631	±.003	.039		.035	±.002	.621		.035	2650
5100-075	11/16	.688	-	.646	±.003	.046		.042	±.002	.635	+0.005	.042	4050
5100-078	3/4	.750	-	.704	±.003	.046	+0.003	.042	±.002	.693	-0.010	.042	4420
5100-081	25/32	.781	-	.733	±.003	.046	-0.000	.042	±.002	.722		.042	4600
5100-084	13/16	.812	-	.762	±.003	.046		.042	±.002	.751		.042	4800
5100-087	7/8	.875	-	.821	±.003	.046		.042	±.002	.810		.042	5150
5100-093	15/16	.938	-	.882	±.003	.046		.042	±.002	.867		.042	5600
5100-098	63/64	.984	25	.926	±.003	.046		.042	±.002	.910		.042	5800
5100-100	1	1.000	-	.940	±.003	.046		.042	±.002	.925		.042	6000
5100-102	-	1.023	26	.961	±.003	.046		.042	±.002	.946		.042	6050
5100-106	1 1/16	1.062	-	.998	±.004	.056		.050	±.002	.982		.050	7500
5100-112	1 1/8	1.125	-	1.059	±.004	.056		.050	±.002	1.041		.050	7900
5100-118	1 3/16	1.188	-	1.118	±.004	.056		.050	±.002	1.098		.050	8400
5100-125	1 1/4	1.250	-	1.176	±.004	.056	+0.004	.050	±.002	1.156	+0.010	.050	8800
5100-131	1 5/16	1.312	-	1.232	±.004	.056	-0.000	.050	±.002	1.214	-0.015	.050	9300
5100-137	1 3/8	1.375	-	1.291	±.004	.056		.050	±.002	1.272		.050	9700
5100-143	1 7/16	1.438	-	1.350	±.004	.056		.050	±.002	1.333		.050	10200
5100-150	1 1/2	1.500	-	1.406	±.004	.056		.050	±.002	1.387		.050	10550
5100-156	1 9/16	1.562	-	1.468	±.005	.068		.062	±.002	1.446		.062	13700
5100-162	1 5/8	1.625	-	1.529	±.005	.068		.062	±.003	1.503		.062	14200
5100-168	1 11/16	1.688	-	1.589	±.005	.068		.062	±.003	1.560		.062	14800
5100-175	1 3/4	1.750	-	1.650	±.005	.068	+0.004	.062	±.003	1.618	+0.013	.062	15300
5100-177	-	1.722	45	1.669	±.005	.068	-0.000	.062	±.003	1.637	-0.020	.062	15500
5100-181	1 13/16	1.812	-	1.708	±.005	.068		.062	±.003	1.675		.062	15850
5100-187	1 7/8	1.875	-	1.769	±.005	.068		.062	±.003	1.735		.062	16400
5100-196	-	1.968	50	1.857	±.005	.068		.062	±.003	1.819		.062	16900
5100-200	2	2.000	-	1.886	±.005	.068		.062	±.003	1.850		.062	17500
5100-206	2 1/16	2.062	-	1.946	±.006	.086		.078	±.003	1.906		.078	22750
5100-212	2 1/8	2.125	-	2.003	±.006	.086	+0.005	.078	±.003	1.964	+0.015	.078	23400
5100-215	2 5/32	2.156	-	2.032	±.006	.086	-0.000	.078	±.003	1.993	-0.025	.078	23800
5100-225	2 1/4	2.250	-	2.120	±.006	.086		.078	±.003	2.081		.078	24800

Full Range Available To Size 10 Inches

# ANSI (Inch) Retaining Rings External



**.125" to 10.00"**  
Standard Material  
12 to 20 Beryllium Cooper  
25 up Carbon Spring Steel

Standard Finish  
12 to 23 Finish  
25 up Phosphate

Ametric® Part No.	Shaft Diameter S			Groove Diameter Width				Ring Free Dia.						Approx Weight Per 100 Pieces	Dia. C Fitted Approx. Inches	Thrust Load lbs.	
	Fraction Inch	Decimal Inch	mm	G Inch	Total Inch	W Inch	Total Inch	n (min)	T Inch	Total Inches	F Inches	Total Inches	L (max)				b
5100-231	2 5/16	2.312	-	2.178		.086	.210	.078		2.139		.272	.222	.123	28.0	2.94	25400
5100-237	2 3/8	2.375	-	2.239		.086	.213	.078		2.197	+ .015	.236	.228	.123	29.2	3.01	26150
5100-243	2 7/16	2.438	-	2.299		.086	.217	.078		2.255	- .025	.236	.228	.123	29.5	3.07	26900
5100-250	2 1/2	2.500	-	2.360		.086	.219	.078		2.313		.236	.228	.123	29.7	3.12	27600
5100-255	-	2.559	65	2.419		.086	.219	.078		2.377		.258	.250	.123	33.9	3.18	28200
5100-262	2 5/8	2.625	-	2.481		.086	.225	.078		2.428		.236	.228	.123	35	3.25	29000
5100-268	2 11/16	2.688	-	2.541		.086	.230	.078		2.485		.273	.246	.123	36	3.32	29600
5100-275	2 3/4	2.750	-	2.602		.103	.231	.093		2.543		.284	.275	.123	42.5	3.45	36100
5100-287	2 7/8	2.875	-	2.721		.103	.240	.093		2.659		.268	.260	.123	48.5	3.57	37800
5100-293	2 15/16	2.938	-	2.779		.103	.247	.093		2.717		.268	.260	.123	50.0	3.64	38700
5100-300	3	3.000	-	2.838		.103	.252	.093		2.775		.268	.260	.123	52.0	3.69	39500
5100-306	3 1/16	3.062	-	2.898		.103	.255	.093		2.832		.268	.260	.123	47.5	3.74	40300
5100-312	3 1/8	3.125	-	2.957		.103	.261	.093		2.892	+ .020	.305	.272	.123	58.0	3.82	41100
5100-315	3 5/32	3.156	-	2.986	±.006	.103	+ .005	.264	.093	±.003	- .030	.284	.276	.123	59.0	3.85	41500
5100-325	3 1/4	3.250	-	3.076		.103	- .000	.270	.093			3.006	.284	.123	62.0	3.95	42800
5100-334	3 11/32	3.346	85	3.166		.103	.279	.093		3.092		.284	.276	.123	64.0	4.04	44000
5100-343	3 7/16	3.438	-	3.257		.103	.280	.093		3.179		.284	.276	.123	66.0	4.14	45300
5100-350	3 1/2	3.500	-	3.316		.120	.285	.109		3.237		.320	.285	.123	72.0	4.25	53900
5100-354	-	3.543	90	3.357		.120	.288	.109		3.277		.320	.288	.123	73.0	4.29	54650
5100-362	3 5/8	3.625	-	3.435		.120	.294	.109		3.352		.323	.315	.123	76.0	4.37	55900
5100-368	3 11/16	3.688	-	3.493		.120	.301	.109		3.410		.335	.302	.123	80.0	4.43	56800
5100-375	3 3/4	3.750	-	3.552		.120	.306	.109		3.468		.337	.310	.123	83.0	4.50	57700
5100-387	3 7/8	3.875	-	3.673		.120	.312	.109		3.584		.335	.318	.123	88.0	4.60	59600
5100-393	3 15/16	3.938	100	3.734		.120	.315	.109		3.642		.323	.318	.123	95.0	4.70	60700
5100-400	4	4.000	-	3.792		.120	.321	.109		3.700		.352	.344	.123	101.0	4.78	61700
5100-425	4 1/4	4.250	-	4.065		.120	.287	.109		3.989		.323	.318	.123	112.0	5.09	65500
5100-437	4 3/8	4.375	-	4.190		.120	.287	.109		4.106		.323	.318	.123	115.0	5.22	67400
5100-450	4 1/2	4.500	-	4.310		.120	.294	.109		4.223		.323	.285	.123	121.0	5.37	69300
5100-475	4 3/4	4.750	-	4.550		.120	.309	.109		4.458		.352	.303	.123	133.0	5.67	73200
5100-500	5	5.000	127	4.790		.120	.324	.109		4.692		.352	.344	.151	149.0	5.96	77000
5100-525	5 1/4	5.250	-	5.030		.139	.339	.125		4.927		.457	.372	.151	190.0	6.27	92700
5100-550	5 1/2	5.500	-	5.265	±.007	.139	+ .006	.363	.125	±.004	+ .020	.457	.390	.151	202.0	6.57	97200
5100-575	5 3/4	5.750	-	5.505		.139	- .000	.378	.125		- .040	.457	.408	.151	220.0	6.86	101600
5100-600	6	6.000	-	5.745		.139	.393	.125		5.631		.457	.381	.151	240.0	7.16	105900
5100-625	6 1/4	6.250	-	5.985		.174	.409	.156		5.866		.508	.396	.151	282.0	7.46	137700
5100-650	6 1/2	6.500	-	6.225		.174	.425	.156		6.100	+ .020	.508	.438	.151	330.0	7.87	143300
5100-675	6 3/4	6.750	-	6.465		.174	.440	.156		6.335	- .050	.508	.458	.182	356.0	8.06	148800
5100-700	7	7.000	-	6.705	±.008	.174	+ .008	.455	.156	±.005		.508	.460	.182	388.0	8.36	154000
5100-750	7 1/2	7.500	-	7.180		.209	- .000	.492	.187			.632	.507	.182	584.0	8.96	198200
5100-800	8	8.000	-	7.660		.209	.522	.187		7.508		.632	.540	.182	640.0	9.56	211400
5100-850	8 1/2	8.500	-	8.140		.209	.562	.187		7.977	+ .020	.632	.573	.182	692.0	10.16	224600
5100-900	9	9.000	-	8.620		.209	.582	.187		8.445	- .060	.632	.609	.182	737.0	10.75	237800
5100-950	9 1/2	9.500	-	9.100		.209	.612	.187		8.915		.632	.625	.182	785.0	11.34	251000
5100-1000	10	10.000	254	9.575		.209	.650	.187		9.385		.632	.625	.182	910.0	11.94	264200

Full Range Available To Size 10 Inches

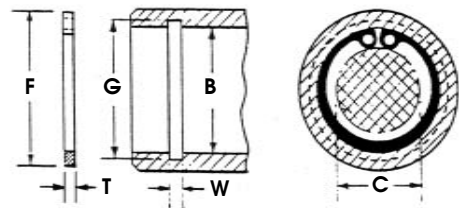


# ANSI (Inch) Retaining Rings

## Internal

**.250" to 10.00"**  
 Standard Material  
 Carbon Spring Steel

Standard Finish  
 Phosphate



Ametric® Part No.	Shaft Diameter B			Groove Diameter Width					Ring Thickness Free Dia.							Approx Weight Per 100 Pieces	Dia. C Fitted Approx. Inches	Thrust Load lbs.			
	Fraction Inch	Decimal Inch	mm	G Inch	Total Inch	W Inch	Total Inch	n (min)	T Inch	Total Inches	F Inches	Total Inches	L (max)	b	h (min)						
5000-025	1/4	.250	-	.268	±.001	.018	+0.02	-	.015	±.002	.280	+0.10	-	-	-	-	.11	420			
5000-031	5/16	.312	-	.330		.018	-0.00	-	.015		.346	-0.05	-	-	-	-	.17	520			
5000-037	3/8	.375	-	.397	±.002	.029	+0.03	-	.025	±.002	.415	+0.10	-	-	-	-	.20	1050			
5000-043	7/16	.438	-	.461		.029		-	.025		.482		.23	1220							
5000-045	29/64	.453	-	.477		.029		-	.025		.498		.25	1280							
5000-050	1/2	.500	-	.530		.039		-	.035		.548		.26	1980							
5000-051	-	.513	13	.542		.039		-0.00	-		.035		.560	+0.10	-	-	-	-	-	.27	2030
5000-056	9/16	.562	-	.596		.039		-	.035		.620		-0.05	.28	2220						
5000-062	5/8	.625	-	.665		.039		-	.035		.694		-	.34	2460						
5000-068	11/16	.688	-	.732		.039		-	.035		.763		-	.40	2690						
5000-075	3/4	.750	19	.796		.039		-	.035		.831		-	.45	3000						
5000-077	-	.777	19.7	.825		±.003		.046	-		.042		.859	±.002	.912	+0.15	-	-	-	-	.48
5000-081	13/16	.812	-	.862	.046		-	.042	.901	.49	4800										
5000-086	-	.866	22	.920	.046		-	.042	.961	.54	5100										
5000-087	7/8	.875	-	.931	.046		-	.042	.971	.55	5150										
5000-090	-	.901	22.9	.959	.046		-	.042	1.000	-0.10	.56	5350									
5000-093	15/16	.938	-	1.000	.046		-	.042	1.041	.61	5600										
5000-100	1	1.000	-	1.066	.046		-	.042	1.111	.66	6000										
5000-102	-	1.023	26	1.091	.046		-	.042	1.136	.69	6050										
5000-106	1 1/16	1.062	27	1.130	±.004		.056	-	.050	1.180	±.002	1.249	+0.25		-		-	-	-	.69	7500
5000-112	1 1/8	1.125	-	1.197			.056	-	.050	1.249		.74			7900						
5000-118	1 3/16	1.188	30	1.262		.056	-	.050	1.319	.80		8400									
5000-125	1 1/4	1.250	32	1.339		.056	-	.050	1.388	.88		8800									
5000-131	1 5/16	1.312	-	1.396		.056	-	.050	1.456	.93		9300									
5000-137	1 3/8	1.375	35	1.461		.056	-	.050	1.526	.99		9700									
5000-143	1 7/16	1.438	-	1.528		.056	-	.050	1.596	1.06		10200									
5000-145	-	1.456	37	1.548		.056	-	.050	1.616	1.08		10300									
5000-150	1 1/2	1.500	-	1.594		.056	-	.050	1.660	1.12		10550									
5000-156	1 9/16	1.562	-	1.658		.068	+0.04	.062	1.734	1.14		13700									
5000-156	-	1.575	40	1.671	.068	-0.00	.062	1.734	1.15	13700											
5000-162	1 5/8	1.625	-	1.725	.068	-	.062	1.804	1.15	14200											
5000-165	-	1.653	42	1.755	.068	-	.062	1.835	1.17	14500											
5000-168	1 11/16	1.688	-	1.792	±.005	.068	-	.062	1.874	±.002	1.942	+0.35	-	-	-	-	1.21	14800			
5000-175	1 3/4	1.750	-	1.858		.068	-	.062	1.942		1.26		15300								
5000-181	1 13/16	1.812	47	1.922		.068	-	.062	2.012		1.32		15900								
5000-187	1 7/8	1.875	-	1.989		.068	-	.062	2.054		1.39		16450								
5000-193	1 15/16	1.938	-	2.056		.068	-	.062	2.072		1.45		17000								
5000-200	2	2.00	-	2.122		.068	-	.062	2.141		1.50		17500								
5000-206	2 1/16	2.062	52	2.186	±.006	.086	-	.078	2.210	±.003	2.280	+0.40	-	-	-	-	1.54	22750			
5000-212	2 1/8	2.125	-	2.251		.086	-	.078	2.280		1.58		23400								
5000-218	2 3/16	2.188	55	2.318		.086	-	.078	2.350		1.64		24200								
5000-225	2 1/4	2.250	-	2.382		.086	-	.078	2.415		1.69		24850								
5000-231	2 5/16	2.312	-	2.450		.086	-	.078	2.490		1.75		25400								
5000-237	2 3/8	2.375	-	2.517		.086	-	.078	2.560		1.81		26150								
5000-244	2 7/16	2.438	-	2.584		.086	-	.078	2.630		1.86		26900								
5000-250	2 1/2	2.500	-	2.648		.086	+0.05	.078	2.702		1.91		27600								
5000-250	2 17/32	2.531	-	2.681		.086	-0.00	.078	2.775		-0.30		1.94	27650							
5000-262	2 5/8	2.625	-	2.781		.103	-	.093	2.910		2.02		34500								
5000-268	2 11/16	2.688	68	2.848	.103	.240	.093	2.980	.268	.236	.108	35.0	2.06	35400							
5000-275	2 3/4	2.750	-	2.914	.103	.246	.093	3.050	.284	.234	.108	35.0	2.12	36100							
5000-281	2 13/16	2.812	72	2.980	.103	.252	.093	3.121	.284	.230	.108	36.0	2.18	36900							
5000-287	2 7/8	2.875	-	3.051	.103	.264	.093	3.191	.284	.240	.108	41.0	2.22	37800							
5000-300	3	3.000	75	3.182	.103	.2736	.093	3.325	.284	.250	.108	42.5	2.35	39500							

Full Range Available To Size 10 Inches  
 Most Sizes Available in Zinc Plated and Stainless Steel