



Smalley[®]
Steel Ring Company

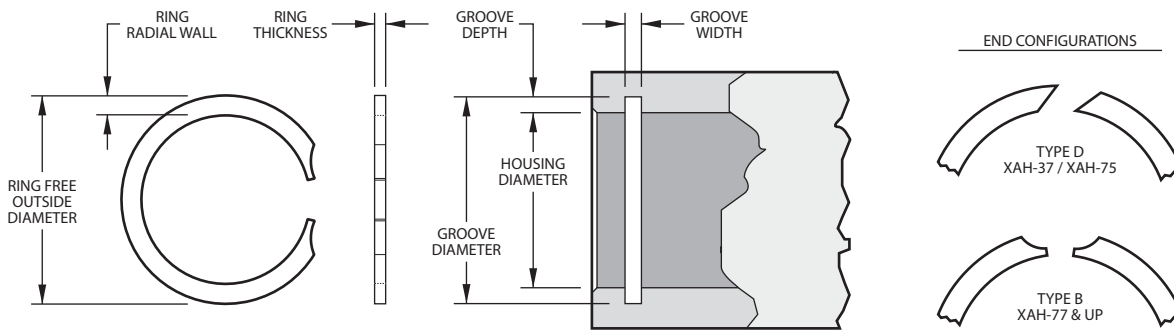
Snap Rings

NEW SUPPLEMENT TO SMALLEY'S CATALOG

- Interchangeable with Eaton Rings
- Over 300 Stock Sizes Available
- Special Designs Available
- No-Tooling-Charges[®]
- .200" - 90" / 5 mm - 2300 mm

Eaton[®] Style Snap Rings

XAH SERIES



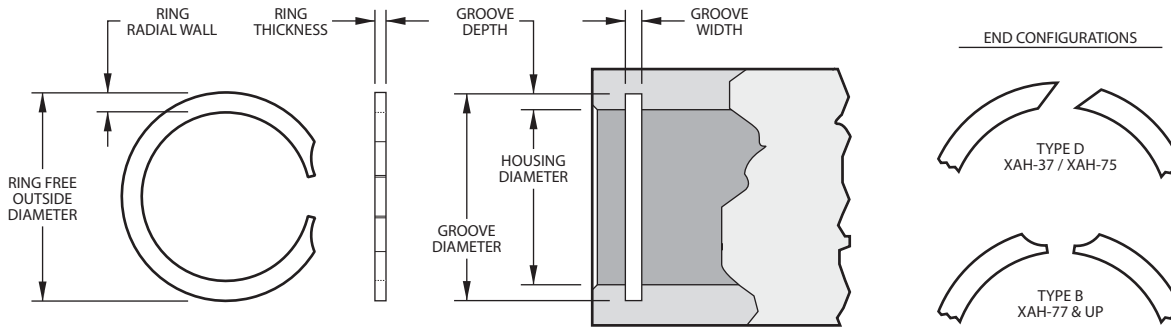
Material: Steel
SAE 1060 to 1075

Material hardness
information on
back cover

Smalley Part Number	Housing Diameter	RING			GROOVE		THRUST CAPACITY	
		Outside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XAH-37	.375	.400	.035	.025	.395	.028	265	1,174
XAH-43	.438	.467	.035	.025	.462	.028	372	1,371
XAH-50	.500	.530	.040	.035	.524	.039	424	2,073
XAH-51	.512	.542	.040	.035	.536	.039	434	2,123
XAH-56	.562	.600	.048	.035	.590	.039	556	2,331
XAH-62	.625	.670	.048	.035	.657	.039	707	2,592
XAH-68	.688	.733	.048	.035	.720	.039	778	2,853
XAH-75	.750	.799	.048	.035	.786	.039	954	3,110
XAH-77	.777	.827	.062	.042	.813	.046	989	3,906
XAH-81	.812	.867	.062	.042	.852	.046	1,148	4,082
XAH-87	.875	.934	.062	.042	.919	.046	1,361	4,398
XAH-90	.901	.961	.078	.042	.945	.046	1,401	4,529
XAH-93	.938	1.003	.078	.042	.986	.046	1,591	4,715
XAH-100	1.000	1.070	.078	.042	1.052	.046	1,696	5,027
XAH-102	1.023	1.094	.093	.042	1.075	.046	1,880	5,142
XAH-106	1.062	1.134	.093	.050	1.114	.056	1,952	6,272
XAH-112	1.125	1.202	.093	.050	1.181	.056	2,227	6,644
XAH-118	1.188	1.270	.093	.050	1.248	.056	2,519	7,017
XAH-125	1.250	1.337	.109	.050	1.314	.056	2,827	7,383
XAH-131	1.312	1.404	.109	.050	1.380	.056	3,153	7,749
XAH-137	1.375	1.472	.109	.050	1.447	.056	3,499	8,121
XAH-143	1.438	1.535	.125	.050	1.510	.056	3,659	8,493
XAH-145	1.456	1.557	.125	.050	1.532	.056	3,911	8,599
XAH-150	1.500	1.607	.125	.050	1.576	.056	4,029	8,859
XAH-156	1.562	1.668	.125	.062	1.642	.068	4,416	11,002
XAH-162	1.625	1.736	.141	.062	1.709	.068	4,824	11,446
XAH-165	1.653	1.765	.141	.062	1.737	.068	4,907	11,643
XAH-168	1.688	1.804	.156	.062	1.776	.068	5,250	11,889
XAH-175	1.750	1.870	.156	.062	1.842	.068	5,690	12,326
XAH-181	1.812	1.933	.156	.062	1.904	.068	5,892	12,763
XAH-185	1.850	1.975	.156	.062	1.946	.068	6,277	13,030
XAH-187	1.875	2.000	.156	.062	1.971	.068	6,362	13,206
XAH-193	1.938	2.068	.156	.062	2.038	.068	6,849	13,650
XAH-196	1.968	2.098	.156	.062	2.068	.068	6,955	13,862
XAH-200	2.000	2.131	.156	.062	2.100	.068	7,069	14,087
XAH-206	2.062	2.197	.156	.078	2.166	.086	7,579	17,491
XAH-212	2.125	2.260	.156	.078	2.229	.086	7,811	18,025
XAH-218	2.188	2.331	.171	.078	2.296	.086	8,352	18,559
XAH-225	2.250	2.393	.171	.078	2.358	.086	8,588	19,085
XAH-231	2.312	2.459	.171	.078	2.424	.086	9,152	19,611
XAH-237	2.375	2.523	.171	.078	2.487	.086	9,401	20,145
XAH-244	2.440	2.592	.187	.078	2.556	.086	10,003	20,697
XAH-250	2.500	2.653	.187	.078	2.616	.086	10,249	21,206
XAH-253	2.531	2.688	.187	.078	2.651	.086	10,734	21,469
XAH-256	2.562	2.726	.187	.093	2.686	.103	11,228	26,078
XAH-262	2.625	2.790	.187	.093	2.750	.103	11,504	26,719
XAH-268	2.688	2.856	.187	.093	2.816	.103	11,780	27,361
XAH-271	2.717	2.882	.187	.093	2.842	.103	12,291	27,656

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

² Based on a safety factor of 3.



Material: Steel
SAE 1060 to 1075

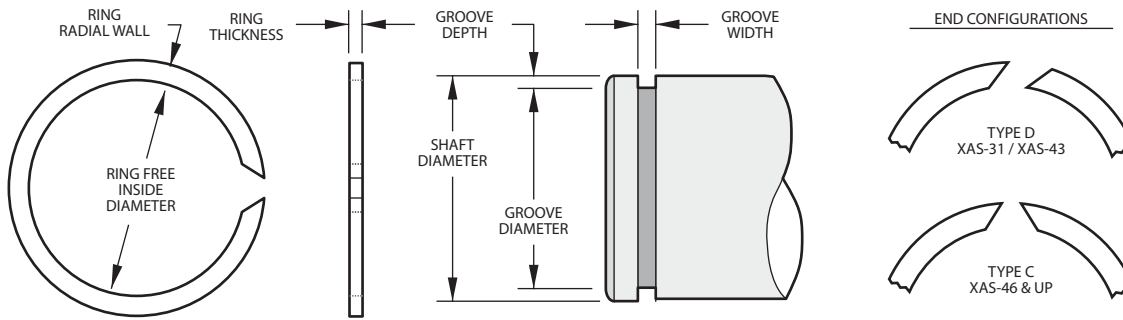
Material hardness
information on
back cover

Smalley Part Number	Housing Diameter	RING			GROOVE		THRUST CAPACITY	
		Outside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XAH-275	2.750	2.918	.187	.093	2.878	.103	12,441	27,992
XAH-281	2.813	2.985	.187	.093	2.945	.103	13,123	28,633
XAH-283	2.834	3.006	.187	.093	2.966	.103	13,221	28,847
XAH-287	2.875	3.056	.187	.093	3.011	.103	13,819	29,264
XAH-300	3.000	3.181	.187	.093	3.136	.103	14,420	30,536
XAH-306	3.062	3.247	.218	.109	3.202	.120	15,151	35,009
XAH-312	3.125	3.311	.218	.109	3.265	.120	15,463	35,729
XAH-315	3.156	3.342	.218	.109	3.296	.120	15,616	36,084
XAH-325	3.250	3.442	.218	.109	3.394	.120	16,540	37,158
XAH-334	3.346	3.539	.218	.109	3.490	.120	17,029	38,256
XAH-346	3.469	3.663	.218	.109	3.613	.120	17,655	39,662
XAH-350	3.500	3.700	.250	.109	3.648	.120	18,308	40,017
XAH-354	3.543	3.745	.250	.109	3.691	.120	18,533	40,508
XAH-356	3.562	3.766	.250	.109	3.710	.120	18,632	40,725
XAH-362	3.625	3.831	.250	.109	3.773	.120	18,961	41,446
XAH-375	3.750	3.962	.250	.109	3.902	.120	20,145	42,875
XAH-387	3.875	4.089	.250	.109	4.027	.120	20,817	44,304
XAH-393	3.938	4.156	.250	.109	4.094	.120	21,712	45,024
XAH-400	4.000	4.221	.250	.109	4.156	.120	22,054	45,733
XAH-412	4.125	4.355	.250	.109	4.285	.120	23,326	47,162
XAH-425	4.250	4.485	.250	.109	4.410	.120	24,033	48,592
XAH-433	4.330	4.565	.250	.109	4.490	.120	24,486	49,506
XAH-443	4.436	4.670	.250	.109	4.596	.120	25,085	50,718
XAH-450	4.500	4.744	.250	.109	4.664	.120	26,083	51,450
XAH-462	4.625	4.875	.250	.109	4.795	.120	27,788	52,879
XAH-475	4.750	5.011	.281	.109	4.926	.120	29,547	54,308
XAH-500	5.000	5.265	.281	.109	5.180	.120	31,809	57,167
XAH-525	5.250	5.530	.312	.125	5.435	.139	34,141	65,732
XAH-537	5.375	5.660	.312	.125	5.565	.139	36,094	67,297
XAH-550	5.500	5.796	.312	.125	5.696	.139	38,100	68,862
XAH-575	5.750	6.050	.312	.125	5.950	.139	40,644	71,992
XAH-600	6.000	6.309	.312	.125	6.204	.139	43,260	75,122
XAH-625	6.250	6.568	.343	.156	6.458	.174	45,946	94,130
XAH-650	6.500	6.832	.343	.156	6.712	.174	48,703	97,895
XAH-662	6.625	6.975	.343	.156	6.845	.174	51,512	99,778
XAH-675	6.750	7.100	.343	.156	6.970	.174	52,484	101,660
XAH-700	7.000	7.350	.343	.156	7.220	.174	54,428	105,426
XAH-725	7.250	7.630	.375	.187	7.500	.209	64,059	123,654
XAH-750	7.500	7.890	.375	.187	7.750	.209	66,268	127,918
XAH-800	8.000	8.400	.375	.187	8.250	.209	70,686	136,446
XAH-825	8.250	8.665	.437	.187	8.540	.209	84,558	141,478
XAH-850	8.500	8.915	.437	.187	8.790	.209	87,120	145,766
XAH-875	8.750	9.205	.500	.187	9.080	.209	102,053	150,053
XAH-900	9.000	9.455	.500	.187	9.330	.209	104,968	154,340
XAH-905	9.055	9.509	.500	.187	9.384	.209	105,610	155,283
XAH-950	9.500	9.955	.500	.187	9.830	.209	110,800	162,915
XAH-984	9.840	10.295	.500	.187	10.170	.209	114,766	168,745
XAH-1000	10.000	10.455	.500	.187	10.330	.209	116,632	171,489

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

² Based on a safety factor of 3.

XAS SERIES



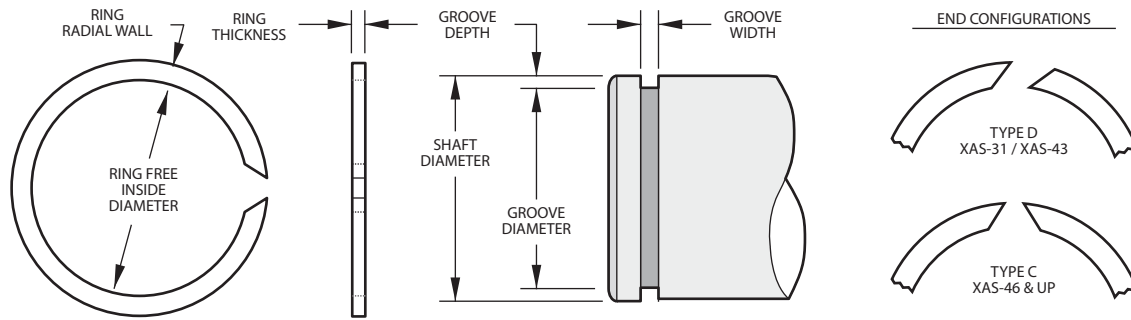
Material: Steel
SAE 1060 to 1075

Material hardness
information on
back cover

Smalley Part Number	Shaft Diameter	RING			GROOVE		THRUST CAPACITY	
		Inside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XAS-31	.312	.281	.040	.025	.290	.028	243	977
XAS-34	.344	.312	.040	.025	.322	.028	267	1,077
XAS-35	.354	.320	.040	.025	.330	.028	300	1,108
XAS-37	.375	.341	.040	.025	.351	.028	318	1,174
XAS-39	.393	.359	.040	.025	.369	.028	333	1,231
XAS-40	.406	.372	.040	.025	.382	.028	344	1,271
XAS-43	.438	.402	.040	.025	.412	.028	402	1,371
XAS-46	.469	.433	.040	.025	.443	.028	431	1,468
XAS-50	.500	.464	.048	.035	.474	.039	459	2,073
XAS-55	.551	.514	.048	.035	.524	.039	526	2,285
XAS-56	.562	.524	.048	.035	.534	.039	556	2,331
XAS-59	.594	.555	.048	.035	.566	.039	588	2,463
XAS-62	.625	.586	.062	.035	.597	.039	619	2,592
XAS-66	.669	.630	.062	.035	.640	.039	686	2,774
XAS-68	.688	.644	.062	.042	.656	.046	778	3,458
XAS-75	.750	.703	.062	.042	.716	.046	901	3,770
XAS-78	.781	.733	.062	.042	.745	.046	994	3,926
XAS-81	.812	.764	.062	.042	.776	.046	1,033	4,082
XAS-87	.875	.820	.078	.042	.835	.046	1,237	4,398
XAS-93	.938	.881	.078	.042	.896	.046	1,392	4,715
XAS-98	.984	.925	.078	.042	.940	.046	1,530	4,946
XAS-100	1.000	.941	.093	.042	.956	.046	1,555	5,027
XAS-102	1.023	.962	.093	.042	.977	.046	1,663	5,142
XAS-106	1.062	1.000	.093	.050	1.016	.056	1,727	6,272
XAS-112	1.125	1.060	.093	.050	1.075	.056	1,988	6,644
XAS-118	1.188	1.121	.093	.050	1.136	.056	2,183	7,017
XAS-125	1.250	1.179	.093	.050	1.194	.056	2,474	7,383
XAS-131	1.312	1.232	.093	.050	1.250	.056	2,875	7,749
XAS-137	1.375	1.291	.109	.050	1.309	.056	3,207	8,121
XAS-143	1.438	1.351	.109	.050	1.370	.056	3,456	8,493
XAS-150	1.500	1.408	.109	.050	1.430	.056	3,711	8,859
XAS-156	1.562	1.467	.125	.062	1.490	.068	3,975	11,002
XAS-162	1.625	1.527	.125	.062	1.551	.068	4,250	11,446
XAS-168	1.687	1.581	.125	.062	1.611	.068	4,531	11,882
XAS-175	1.750	1.640	.125	.062	1.670	.068	4,948	12,326
XAS-177	1.771	1.657	.141	.062	1.687	.068	5,258	12,474
XAS-181	1.812	1.698	.141	.062	1.728	.068	5,379	12,763
XAS-187	1.875	1.759	.156	.062	1.789	.068	5,699	13,206
XAS-196	1.969	1.849	.156	.062	1.879	.068	6,263	13,869
XAS-200	2.000	1.880	.156	.062	1.910	.068	6,362	14,087
XAS-206	2.062	1.936	.156	.078	1.966	.086	6,996	17,491
XAS-212	2.125	1.997	.156	.078	2.027	.086	7,360	18,025
XAS-215	2.156	2.026	.156	.078	2.056	.086	7,620	18,288
XAS-225	2.250	2.116	.156	.078	2.146	.086	8,270	19,085
XAS-231	2.312	2.174	.187	.078	2.204	.086	8,825	19,611
XAS-237	2.375	2.235	.187	.078	2.265	.086	9,233	20,145
XAS-243	2.437	2.295	.187	.078	2.325	.086	9,647	20,671
XAS-250	2.500	2.356	.187	.078	2.386	.086	10,073	21,206

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

² Based on a safety factor of 3.



Material: Steel
SAE 1060 to 1075

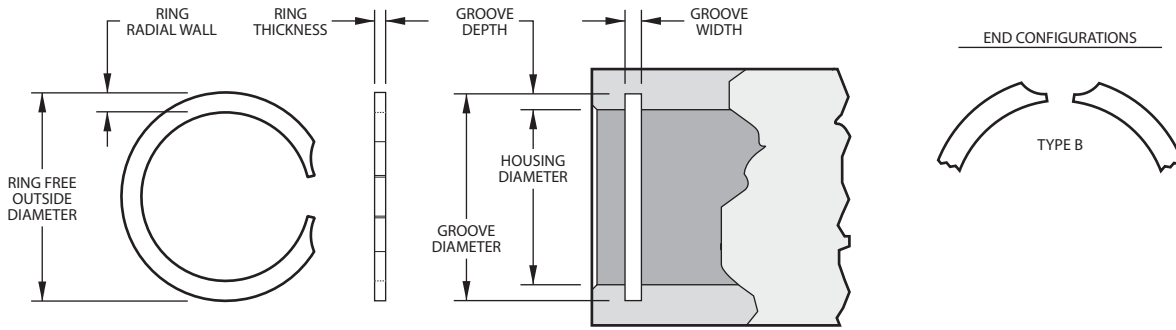
Material hardness
information on
back cover

Smalley Part Number	Shaft Diameter	RING			GROOVE		THRUST CAPACITY	
		Inside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XAS-255	2.559	2.413	.187	.078	2.443	.086	10,491	21,706
XAS-262	2.625	2.475	.187	.078	2.505	.086	11,133	22,266
XAS-268	2.687	2.535	.187	.078	2.565	.086	11,586	22,792
XAS-275	2.750	2.594	.187	.093	2.624	.103	12,246	27,992
XAS-287	2.875	2.713	.187	.093	2.743	.103	13,413	29,264
XAS-293	2.937	2.771	.187	.093	2.801	.103	14,117	29,895
XAS-300	3.000	2.830	.218	.093	2.860	.103	14,844	30,536
XAS-306	3.062	2.890	.218	.093	2.920	.103	15,367	31,167
XAS-312	3.125	2.951	.218	.093	2.981	.103	15,904	31,809
XAS-315	3.156	2.980	.218	.093	3.010	.103	16,285	32,124
XAS-325	3.250	3.070	.250	.093	3.100	.103	17,230	33,081
XAS-334	3.344	3.160	.250	.093	3.190	.103	18,201	34,038
XAS-343	3.437	3.251	.250	.093	3.281	.103	18,950	34,984
XAS-350	3.500	3.305	.250	.109	3.340	.120	19,792	40,017
XAS-354	3.543	3.346	.250	.109	3.381	.120	20,286	40,508
XAS-362	3.625	3.423	.250	.109	3.458	.120	21,396	41,446
XAS-368	3.687	3.482	.250	.109	3.517	.120	22,153	42,155
XAS-375	3.750	3.541	.250	.109	3.576	.120	23,061	42,875
XAS-387	3.875	3.657	.281	.109	3.697	.120	24,378	44,304
XAS-393	3.938	3.713	.281	.109	3.758	.120	25,052	45,024
XAS-400	4.000	3.771	.281	.109	3.816	.120	26,012	45,733
XAS-425	4.250	4.016	.281	.109	4.066	.120	27,638	48,592
XAS-437	4.375	4.141	.281	.109	4.191	.120	28,451	50,021
XAS-450	4.500	4.255	.312	.109	4.310	.120	30,218	51,450
XAS-475	4.750	4.495	.312	.109	4.550	.120	33,576	54,308
XAS-500	5.000	4.730	.312	.109	4.790	.120	37,110	57,167
XAS-525	5.250	4.970	.375	.125	5.030	.139	40,821	65,732
XAS-550	5.500	5.206	.375	.125	5.266	.139	45,486	68,862
XAS-575	5.750	5.446	.375	.125	5.506	.139	49,586	71,992
XAS-590	5.900	5.600	.375	.125	5.656	.139	50,880	73,870
XAS-600	6.000	5.687	.375	.125	5.746	.139	53,863	75,122
XAS-625	6.250	5.916	.437	.156	5.986	.174	58,316	94,130
XAS-650	6.500	6.151	.437	.156	6.226	.174	62,946	97,895
XAS-675	6.750	6.386	.437	.156	6.466	.174	67,752	101,660
XAS-700	7.000	6.621	.437	.156	6.706	.174	72,736	105,426
XAS-725	7.250	6.840	.500	.187	6.930	.209	81,996	124,330
XAS-750	7.500	7.090	.500	.187	7.180	.209	84,823	128,617
XAS-800	8.000	7.560	.500	.187	7.660	.209	96,133	137,191
XAS-850	8.500	8.050	.500	.187	8.160	.209	102,141	145,766
XAS-900	9.000	8.545	.500	.187	8.660	.209	108,149	154,340
XAS-925	9.250	8.800	.500	.187	8.910	.209	111,153	158,627
XAS-950	9.500	9.040	.500	.187	9.160	.209	114,158	162,915
XAS-1000	10.000	9.535	.500	.187	9.660	.209	120,166	171,489

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

² Based on a safety factor of 3.

XDH SERIES



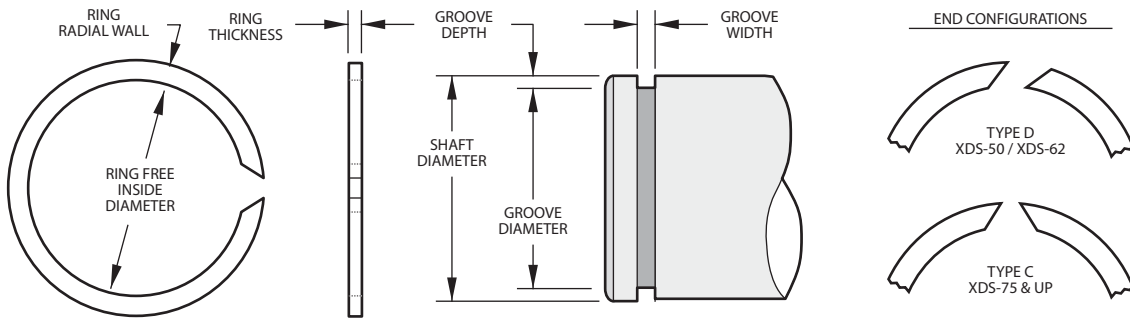
Material: Steel
SAE 1060 to 1075

Material hardness
information on
back cover

Smalley Part Number	Housing Diameter	RING			GROOVE		THRUST CAPACITY	
		Outside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XDH-112	1.125	1.196	.093	.042	1.181	.046	2,227	5,655
XDH-125	1.250	1.330	.093	.042	1.310	.046	2,651	6,283
XDH-137	1.375	1.460	.093	.042	1.435	.046	2,916	6,912
XDH-150	1.500	1.600	.125	.042	1.580	.046	4,241	7,540
XDH-162	1.625	1.725	.125	.042	1.705	.046	4,595	8,168
XDH-175	1.750	1.855	.125	.042	1.830	.046	4,948	8,796
XDH-187	1.875	1.990	.156	.042	1.965	.046	5,964	9,425
XDH-200	2.000	2.115	.156	.042	2.090	.046	6,362	10,053
XDH-206	2.062	2.177	.156	.042	2.152	.046	6,559	10,365
XDH-218	2.187	2.302	.156	.042	2.277	.046	6,957	10,993
XDH-231	2.312	2.432	.156	.042	2.402	.046	7,354	11,621
XDH-243	2.437	2.557	.156	.042	2.527	.046	7,752	12,250
XDH-256	2.562	2.682	.156	.042	2.652	.046	8,149	12,878
XDH-300	3.000	3.154	.187	.062	3.124	.068	13,148	21,130
XDH-325	3.250	3.404	.187	.062	3.374	.068	14,243	22,891
XDH-350	3.500	3.654	.187	.062	3.624	.068	15,339	24,652
XDH-375	3.750	3.904	.187	.062	3.874	.068	16,434	26,413
XDH-400	4.000	4.155	.187	.062	4.125	.068	17,671	28,174
XDH-425	4.250	4.429	.218	.078	4.394	.086	21,630	36,050
XDH-450	4.500	4.679	.218	.078	4.644	.086	22,902	38,170
XDH-475	4.750	4.929	.218	.078	4.894	.086	24,175	40,291
XDH-500	5.000	5.184	.218	.078	5.144	.086	25,447	42,412
XDH-525	5.250	5.434	.218	.078	5.394	.086	26,719	44,532
XDH-575	5.750	5.934	.218	.078	5.894	.086	29,264	48,773
XDH-600	6.000	6.220	.250	.093	6.160	.103	33,929	61,073
XDH-650	6.500	6.730	.250	.093	6.660	.103	36,757	66,162
XDH-700	7.000	7.240	.250	.093	7.160	.103	39,584	71,251
XDH-725	7.250	7.500	.250	.093	7.410	.103	40,998	73,796
XDH-750	7.500	7.760	.250	.093	7.660	.103	42,412	76,341
XDH-800	8.000	8.285	.250	.093	8.160	.103	45,239	81,430

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.
² Based on a safety factor of 3.





Material: Steel
SAE 1060 to 1075

Material hardness
information on
back cover

Smalley Part Number	Shaft Diameter	RING			GROOVE		THRUST CAPACITY	
		Inside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (lb) ¹	Ring Shear (lb) ²
XDS-50	.500	.465	.048	.035	.474	.039	459	2,073
XDS-62	.625	.587	.062	.035	.597	.039	619	2,592
XDS-75	.750	.704	.078	.042	.716	.046	901	3,770
XDS-87	.875	.823	.093	.042	.833	.046	1,299	4,398
XDS-100	1.000	.944	.093	.042	.954	.046	1,626	5,027
XDS-112	1.125	1.065	.125	.042	1.077	.046	1,909	5,655
XDS-118	1.187	1.120	.125	.042	1.135	.046	2,182	5,967
XDS-125	1.250	1.179	.125	.042	1.194	.046	2,474	6,283
XDS-131	1.312	1.232	.125	.042	1.252	.046	2,782	6,595
XDS-137	1.375	1.289	.125	.042	1.309	.046	3,207	6,912
XDS-143	1.437	1.349	.125	.042	1.369	.046	3,454	7,223
XDS-150	1.500	1.410	.125	.042	1.430	.046	3,711	7,540
XDS-162	1.625	1.520	.156	.042	1.545	.046	4,595	8,168
XDS-168	1.687	1.582	.156	.042	1.607	.046	4,770	8,480
XDS-175	1.750	1.645	.156	.042	1.670	.046	4,948	8,796
XDS-193	1.937	1.832	.156	.042	1.857	.046	5,477	9,736
XDS-200	2.000	1.895	.156	.042	1.920	.046	5,655	10,053
XDS-218	2.187	2.082	.156	.042	2.107	.046	6,184	10,993
XDS-225	2.250	2.145	.156	.042	2.170	.046	6,362	11,310
XDS-237	2.375	2.270	.156	.042	2.295	.046	6,715	11,938
XDS-250	2.500	2.390	.156	.042	2.420	.046	7,069	12,566
XDS-275	2.750	2.596	.187	.062	2.626	.068	12,052	19,369
XDS-293	2.937	2.783	.187	.062	2.813	.068	12,871	20,687
XDS-300	3.000	2.846	.187	.062	2.876	.068	13,148	21,130
XDS-312	3.125	2.965	.187	.062	3.000	.068	13,806	22,011
XDS-325	3.250	3.090	.187	.062	3.125	.068	14,358	22,891
XDS-337	3.375	3.215	.187	.062	3.250	.068	14,910	23,772
XDS-350	3.500	3.340	.187	.062	3.375	.068	15,463	24,652
XDS-375	3.750	3.570	.218	.078	3.610	.086	18,555	31,809
XDS-400	4.000	3.820	.218	.078	3.860	.086	19,792	33,929
XDS-425	4.250	4.070	.218	.078	4.110	.086	21,029	36,050
XDS-450	4.500	4.320	.218	.078	4.360	.086	22,266	38,170
XDS-475	4.750	4.560	.218	.078	4.610	.086	23,503	40,291
XDS-500	5.000	4.800	.218	.078	4.860	.086	24,740	42,412
XDS-550	5.500	5.280	.250	.093	5.340	.103	31,102	55,983
XDS-600	6.000	5.775	.250	.093	5.840	.103	33,929	61,073
XDS-650	6.500	6.270	.250	.093	6.340	.103	36,757	66,162
XDS-700	7.000	6.765	.250	.093	6.840	.103	39,584	71,251
XDS-750	7.500	7.245	.281	.109	7.320	.120	47,713	85,750
XDS-800	8.000	7.740	.281	.109	7.820	.120	50,894	91,466

¹ Based on a groove material yield strength of 45,000 psi and a safety factor of 2.

² Based on a safety factor of 3.

View Smalley's complete product catalog at:

www.smalley.com/getcatalog

INTERCHANGE LISTING

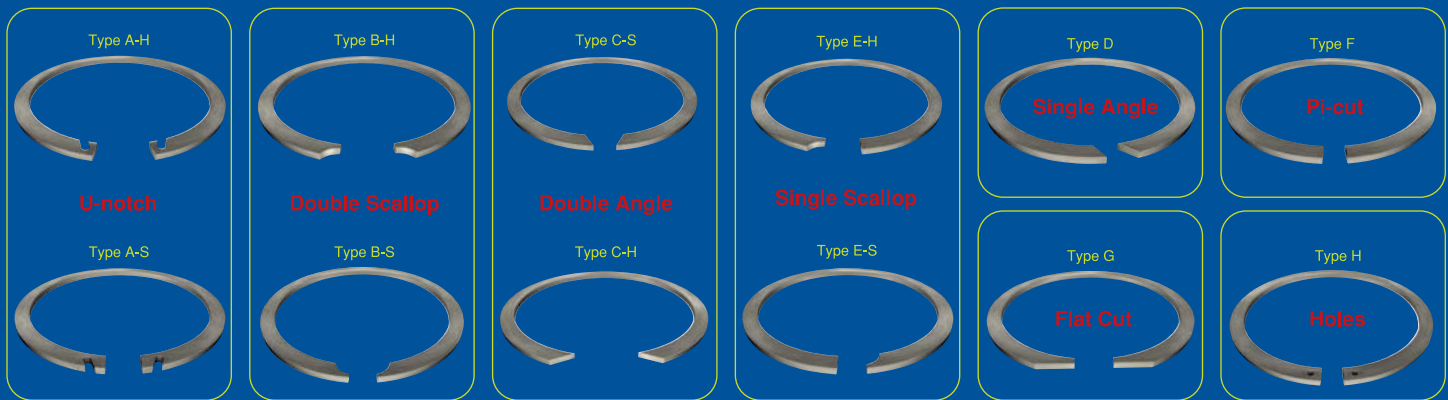
Smalley Retaining Rings are interchangeable with both inch and metric retaining ring and snap ring grooves. Smalley offers FREE SAMPLES of all stock rings to test in your application.

Cross-reference a standard stamped ring (circlip) or snap ring to find the appropriate Smalley Retaining Ring or Snap Ring to fit in your application.

SMALLEY	SPIROLOX	MILITARY MIL-DTL-27426	AEROSPACE AS 3219	METRIC AEROSPACE MA 4035	EUROPEAN SPECIFICATION DIN	WALDES TRUARC	EATON	INDUSTRIAL RETAINING RING	OTHER RINGS	ANDERTON
VH	UR	---	---	---	GROOVE INTERCHANGE ONLY Use a Smalley Retaining Ring to fit into the same groove as these stamped retaining rings (circlips).					
VS	US	---	---	---						
WH	RR	/3	AS 4299 AS 3217	---						
WS	RS	/1	AS 4299 AS 3218	---						
WHT	RRT	---	---	---						
WST	RST	---	---	---	---	---	XAN	---	USC	---
WHM	RRN	/4	AS 4299 AS 3215	---	---	N5000 5008	IN	3000 4000	HO HOI UHO	N1300
WSM	RSN	/2	AS 4299 AS 3216	---	---	5100 5108	EN	3100 4100	SH SHI USH	N1400
DNH	---	---	---	---	DIN 472	---	---	---	DHO	D1300
DNS	---	---	---	---	DIN 471	---	---	---	DSH	D1400
EH	---	---	---	MA 4017	---	---	---	---	---	---
ES	---	---	---	MA 4016	---	---	---	---	---	---
FH	---	---	---	---	DIN 472	---	---	---	DHO	D1300
FS	---	---	---	---	DIN 471	---	---	---	DSH	D1400
XAH	---	---	---	---	---	---	NAN	---	UHB	---
XAS	---	---	---	---	---	---	XAN	---	USC	---
XDH	---	---	---	---	---	---	ND	---	HN	---
XDS	---	---	---	---	---	---	XD	---	SNL	---
XNH	---	---	---	---	---	---	IN	---	UHO	---
XNS	---	---	---	---	---	---	EN	---	USH	---

END CONFIGURATIONS

Smalley offers 4 series of Eaton style snap rings from stock. Additional end types can be manufactured to meet your snap ring requirements. Inquire about the following end types:



MATERIAL HARDNESS

THICKNESS (INCH)	HARDNESS (Rc) MIN
Up to .022	46.0
Over .022 to .050	44.0
Over .050 to .078	42.0
Over .078	40.0

SMALLEY PRODUCTS

To request information or a copy of Smalley's complete Engineering & Parts Catalog, visit us at: www.smalley.com. Smalley is the leading manufacturer of:

- Spirolox® Retaining Rings
- Snap Rings
- Wave Springs