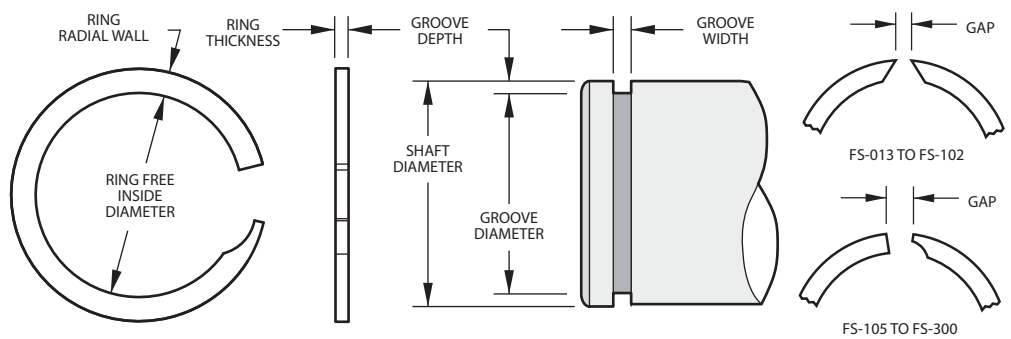


Stock Items available in carbon steel and 302 stainless steel.



Groove Compatible with DIN 471



Product Dimensions All dimensions are in millimeters unless otherwise specified.

Smalley Part Number ^{1,4}	Shaft Diameter	Ring			Groove		Thrust Capacity	
		Inside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (N) ²	Ring Shear (N) ³
FS-013	13.00	12.27	1.40	.94	12.40	1.10	1,931	10,591
FS-014	14.00	13.31	1.40	.94	13.40	1.10	2,077	11,396
FS-015	15.00	14.15	1.40	.94	14.30	1.10	2,602	12,224
FS-016	16.00	14.98	1.65	.94	15.20	1.10	3,172	13,029
FS-017	17.00	16.06	1.65	.94	16.20	1.10	3,367	13,838
FS-018	18.00	16.82	1.90	1.15	17.00	1.30	4,457	17,953
FS-019	19.00	17.81	1.90	1.15	18.00	1.30	4,702	18,941
FS-020	20.00	18.80	1.90	1.15	19.00	1.30	4,951	19,928
FS-021	21.00	19.79	1.90	1.15	20.00	1.30	5,200	20,942
FS-022	22.00	20.83	1.90	1.15	21.00	1.30	5,445	21,930
FS-023	23.00	21.77	1.90	1.15	22.00	1.30	5,698	22,939
FS-024	24.00	22.50	2.15	1.15	22.90	1.30	6,539	23,927
FS-025	25.00	23.70	2.15	1.15	23.90	1.30	6,806	24,914
FS-026	26.00	24.64	2.15	1.15	24.90	1.30	7,082	25,929
FS-027	27.00	25.50	2.15	1.15	25.90	1.30	7,353	26,916
FS-028	28.00	26.32	3.25	1.44	26.60	1.60	9,702	33,179
FS-029	29.00	27.15	3.25	1.44	27.60	1.60	10,053	34,385
FS-030	30.00	28.35	3.25	1.44	28.60	1.60	10,395	35,559
FS-032	32.00	29.87	3.25	1.44	30.30	1.60	13,073	37,939
FS-033	33.00	31.07	3.25	1.44	31.30	1.60	13,478	39,113
FS-034	34.00	31.96	3.25	1.44	32.30	1.60	13,892	40,319
FS-035	35.00	32.57	3.25	1.44	33.00	1.60	16,899	41,493
FS-036	36.00	33.64	4.01	1.69	34.00	1.85	17,375	50,038
FS-038	38.00	35.62	4.01	1.69	36.00	1.85	18,344	52,827
FS-040	40.00	37.02	4.01	1.69	37.50	1.85	24,265	55,621
FS-042	42.00	39.08	4.01	1.69	39.50	1.85	25,484	58,410
FS-045	45.00	42.05	4.01	1.69	42.50	1.85	27,303	62,578
FS-046	46.00	43.10	4.01	1.69	43.50	1.85	27,904	63,952
FS-047	47.00	44.03	4.01	1.69	44.50	1.85	28,504	65,331
FS-048	48.00	44.89	4.01	1.69	45.50	1.85	29,118	66,741
FS-050	50.00	46.50	5.08	1.93	47.00	2.15	36,529	75,282
FS-052	52.00	48.48	5.08	1.93	49.00	2.15	37,974	78,266
FS-054	54.00	50.46	5.08	1.93	51.00	2.15	39,438	81,287
FS-055	55.00	51.45	5.08	1.93	52.00	2.15	40,163	82,777
FS-056	56.00	52.44	5.08	1.93	53.00	2.15	40,906	84,307
FS-058	58.00	54.42	5.08	1.93	55.00	2.15	42,352	87,287
FS-060	60.00	56.55	5.08	1.93	57.00	2.15	43,819	90,308
FS-062	62.00	58.32	5.08	1.93	59.00	2.15	45,283	93,328
FS-063	63.00	59.37	5.08	1.93	60.00	2.15	46,008	94,823
FS-065	65.00	61.35	5.08	2.41	62.00	2.65	47,471	116,641
FS-067	67.00	63.35	5.08	2.41	64.00	2.65	48,939	120,240
FS-068	68.00	64.45	5.08	2.41	65.00	2.65	49,660	122,019
FS-070	70.00	66.22	5.08	2.41	67.00	2.65	51,128	125,618
FS-072	72.00	68.28	5.08	2.41	69.00	2.65	52,591	129,221
FS-075	75.00	71.25	5.08	2.41	72.00	2.65	54,780	134,599

¹ Add suffix "-S02" for 302 stainless steel.

² Based on a groove material yield strength of 310 N/mm² and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 126-127 for How to Order.

Stock Items available in carbon steel and 302 stainless steel.

Product Dimensions All dimensions are in millimeters unless otherwise specified.

Smalley Part Number ^{1,4}	Shaft Diameter	Ring			Groove		Thrust Capacity	
		Inside Diameter	Radial Wall	Thickness	Diameter	Width	Groove Yield (N) ²	Ring Shear (N) ³
FS-077	77.00	73.23	5.08	2.41	74.00	2.65	56,230	138,153
FS-078	78.00	74.06	5.08	2.41	75.00	2.65	56,968	139,977
FS-080	80.00	75.70	6.02	2.41	76.50	2.65	68,342	143,575
FS-082	82.00	77.68	6.02	2.41	78.50	2.65	70,033	147,134
FS-085	85.00	80.65	6.30	2.91	81.50	3.15	72,595	175,656
FS-088	88.00	83.60	6.30	2.91	84.50	3.15	75,175	181,906
FS-090	90.00	85.80	6.30	2.91	86.50	3.15	76,865	185,998
FS-095	95.00	90.68	6.30	2.91	91.50	3.15	81,140	196,340
FS-098	98.00	93.70	6.30	2.91	94.50	3.15	83,702	202,536
FS-100	100.00	95.50	6.30	2.91	96.50	3.15	85,415	206,682
FS-102	102.00	97.23	6.30	2.91	98.50	3.15	87,127	210,828
FS-105	105.00	99.83	6.73	3.89	101.00	4.15	102,687	276,951
FS-108	108.00	102.87	6.73	3.89	104.00	4.15	105,619	284,855
FS-110	110.00	104.90	6.73	3.89	106.00	4.15	107,580	290,149
FS-115	115.00	109.85	6.73	3.89	111.00	4.15	112,473	303,346
FS-120	120.00	115.06	6.73	3.89	116.00	4.15	117,344	316,478
FS-125	125.00	119.75	6.73	3.89	121.00	4.15	122,237	329,676
FS-130	130.00	124.70	6.73	3.89	126.00	4.15	127,130	342,873
FS-135	135.00	129.65	6.73	3.89	131.00	4.15	132,023	356,071
FS-140	140.00	134.42	6.73	3.89	136.00	4.15	136,916	369,269
FS-145	145.00	139.55	6.73	3.89	141.00	4.15	141,809	382,467
FS-150	150.00	143.50	8.03	3.89	145.00	4.15	181,986	395,665
FS-155	155.00	148.45	8.03	3.89	150.00	4.15	188,026	408,796
FS-160	160.00	153.40	8.03	3.89	155.00	4.15	194,094	421,994
FS-165	165.00	158.40	8.03	3.89	160.00	4.15	200,166	435,192
FS-170	170.00	163.30	8.03	3.89	165.00	4.15	206,237	448,683
FS-175	175.00	168.25	8.03	3.89	170.00	4.15	212,305	461,890
FS-180	180.00	173.20	8.03	3.89	175.00	4.15	218,377	475,097
FS-185	185.00	177.62	8.03	3.89	180.00	4.15	224,417	488,232
FS-190	190.00	183.35	8.03	3.89	185.00	4.15	230,489	501,439
FS-195	195.00	188.05	8.03	3.89	190.00	4.15	236,556	514,646
FS-200	200.00	193.00	8.03	3.89	195.00	4.15	242,628	527,853
FS-205	205.00	196.95	11.05	4.87	199.00	5.15	299,454	641,438
FS-210	210.00	201.67	11.05	4.87	204.00	5.15	306,763	657,096
FS-220	220.00	211.80	11.05	4.87	214.00	5.15	321,344	688,327
FS-230	230.00	221.70	11.05	4.87	224.00	5.15	335,961	719,638
FS-240	240.00	231.89	11.05	4.87	234.00	5.15	350,578	750,953
FS-250	250.00	241.50	11.05	4.87	244.00	5.15	365,199	782,264
FS-260	260.00	249.59	12.70	4.87	252.00	5.15	505,300	813,500
FS-270	270.00	259.30	12.70	4.87	262.00	5.15	524,748	844,811
FS-280	280.00	268.83	12.70	4.87	272.00	5.15	544,200	876,126
FS-290	290.00	279.10	12.70	4.87	282.00	5.15	563,599	907,357
FS-300	300.00	289.00	12.70	4.87	292.00	5.15	583,051	938,673

¹ Add suffix "-S02" for 302 stainless steel.

² Based on a groove material yield strength of 310 N/mm² and a safety factor of 2.

³ Based on a safety factor of 3.

⁴ See pages 126-127 for How to Order.