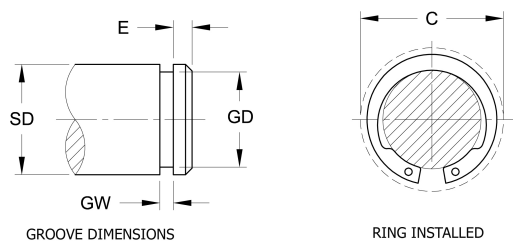


S&M Series XIV External Inverted Ring	SHAFT DIAMETER			RING DIMENSIONS											
	ASME-B18-27-4NA10 MIL-R-21248 MS-16626	DEC. FRAC. INCH	FRAC. DEC. INCH	MM	FREE DIAMETER	THICKNESS	LARGE SECTION	SMALL SECTION	LUG		HOLE DIAMETER				
RING NUMBER	SD	SD	SD	FD	TOL.	T	TOL.	L	TOL.	S	TOL.	U	TOL.	H	TOL.
XIV0050	.500	1/2	12.70	.461		.035		.080		.041		.080		.042	
XIV0056	.562	9/16	14.29	.521		.035		.088		.043		.088		.042	
XIV0059	.594	19/32	15.08	.550		.035		.092	+/- .004	.046	+/- .004	.092	+/- .004	.042	
XIV0062	.625	5/8	15.88	.579		.035		.096		.048		.096		.042	
XIV0068	.688	11/16	17.46	.635	+ .005	.042		.104		.052		.104		.042	+ .010
XIV0075	.750	3/4	19.05	.693	- .010	.042		.112		.056		.112		.042	- .002
XIV0078	.781	25/32	19.84	.722		.042		.116		.057		.116		.042	
XIV0081	.812	13/16	20.64	.751		.042		.120		.060		.120		.050	
XIV0087	.875	7/8	22.23	.810		.042		.128	+/- .005	.064	+/- .005	.128	+/- .005	.050	
XIV0093	.938	15/16	23.81	.867		.042		.136		.068		.136		.050	
XIV0100	.984	63/64	25.40	.925		.042	+/- .002	.144		.072		.144		.050	
XIV0106	1.062	1 1/16	26.99	.982		.050		.147		.073		.147		.078	
XIV0112	1.125	1 1/8	28.58	1.041		.050		.150		.075		.150		.078	
XIV0118	1.188	1 3/16	28.58	1.098	+ .010	.050		.153		.076		.153		.078	
XIV0125	1.250	1 1/4	31.75	1.156	- .015	.050		.157		.079		.157		.078	
XIV0131	1.312	1 5/16	33.34	1.214		.050		.161		.080		.161		.078	
XIV0137	1.375	1 3/8	34.93	1.272		.050		.165		.082		.165		.078	
XIV0143	1.438	1 7/16	36.51	1.333		.050		.169	+/- .006	.085	+/- .006	.169	+/- .006	.078	
XIV0150	1.500	1 1/2	38.10	1.387		.050		.173		.086		.173		.078	
XIV0156	1.562	1 9/16	39.69	1.446		.062		.178		.089		.178		.078	+ .015
XIV0162	1.625	1 5/8	41.28	1.503		.062		.183		.092		.183		.078	- .002
XIV0177	1.750	1 3/4	44.45	1.637	+ .013	.062		.196		.098		.196		.078	
XIV0181	1.812	1 13/16	46.04	1.675	- .020	.062		.199		.100		.199		.078	
XIV0196	1.969	1 31/32	50.00	1.819		.062		.212		.106		.212		.078	
XIV0200	2.000	2	50.80	1.850		.062		.216		.108		.216		.078	
XIV0215	2.125	2 1/8	53.98	1.993	+ .015	.078		.229		.117		.229		.120	
XIV0250	2.500	2 1/2	63.50	2.313	- .025	.078	+/- .003	.259	+/- .007	.130	+/- .007	.259	+/- .007	.120	
XIV0275	2.750	2 3/4	69.85	2.543		.093		.280		.140		.280		.120	
XIV0287	2.875	2 7/8	73.03	2.659		.093		.290		.145		.290		.120	
XIV0315	3.156	3 5/32	80.17	2.920	+ .020	.093	+/- .003	.316		.159		.316		.120	
XIV325	3.250	3 1/4	82.50	3.006	- .030	.093		.324		.162		.324		.120	
XIV0350	3.500	3 1/2	88.90	3.237		.109		.345	+/- .008	.173	+/- .008	.345	+/- .008	.125	
XIV0393	3.938	3 15/16	100.00	3.642		.109		.368		.183		.368		.125	

Rings must not be over-expanded during installation, since this will lead to ring failure. Providing groove has been machined to recommended dimensions, play between the groove diameter and the inside ring diameter indicates that the ring has been over-expanded.

*C=Ring clearance diameter after ring is applied into groove.

For plated, phosphate-coated, and stainless steel rings, the maximum ring thickness may not be exceeded by .002".



APPROX. WT. PER 1000 RINGS (Lbs.)	ROCKWELL HARDNESS (CARBON STEEL W/O PLATING)	Static Thrust Load (Lbs.) Sharp Corner Abutment		RING CLEARANCE	GROOVE DIMENSIONS				EDGE MARGIN	S&M Series XIV External Inverted Ring
		RING	GROOVE		DIAMETER		WIDTH			ASME-B18-27-4NA10 MIL-R-21248 MS-16626
					TR	TG**	C*	GD		
1.00	30N 67.5-71.0	1100	280	.67	.468	+/- .002	.039	+ .003 - .000	.048	XIV0050
1.25	30N 67.5-71.0	1200	315	.75	.530	+/- .003	.039		.048	XIV0056
1.48	30N 67.5-71.0	1300	355	.79	.559		.039		.052	XIV0059
1.64	30N 67.5-71.0	1370	400	.83	.588		.039		.055	XIV0062
2.41	30N 67.5-71.0	2200	500	.91	.646		.046		.063	XIV0068
2.75	30N 67.5-71.0	2400	610	.99	.704		.046		.069	XIV0075
3.00	30N 67.5-71.0	2500	660	1.03	.733		.046		.072	XIV0078
3.25	30N 67.5-71.0	2600	715	1.07	.762		.046		.075	XIV0081
3.75	C 49-53	2800	830	1.14	.821		.046		.081	XIV0087
4.41	C 49-53	3000	920	1.23	.882		.046		.084	XIV0093
4.66	C 49-53	3200	1000	1.29	.926		.046	.087	XIV0100	
6.06	C 49-52	4100	1200	1.38	.998	.056	.096	XIV0106		
6.55	C 49-52	4400	1300	1.45	1.059	.056	.099	XIV0112		
6.89	C 49-52	4600	1400	1.52	1.118	+/- .004	.056	.105	XIV0118	
7.50	C 49-52	4900	1600	1.59	1.176	.056	.111	XIV0125		
8.00	C 49-52	5100	1800	1.66	1.232	.056	.120	XIV0131		
8.50	C 49-52	5400	2000	1.73	1.291	.056	.126	XIV0137		
9.00	C 49-52	5600	2200	1.80	1.350	.056	.132	XIV0143		
10.00	C 49-52	5800	2500	1.87	1.406	.056	.141	XIV0150		
13.00	C 49-52	7600	2600	1.95	1.468	.068	.141	XIV0156		
13.60	C 49-52	7900	2700	2.02	1.529	.068	.144	XIV0162		
16.00	C 49-52	8600	3100	2.18	1.650	+/- .005	.068	.150	XIV0177	
17.00	C 49-52	8800	3300	2.24	1.708	.068	.156	XIV0181		
20.30	C 49-52	9500	3900	2.43	1.857	.068	.168	XIV0196		
20.50	C 49-52	9700	4000	2.47	1.886	.068	.171	XIV0200		
29.60	C 49-52	13000	4500	2.62	2.003	.086	.183	XIV0215		
42.60	C 49-52	15300	6100	3.05	2.360	.086	.210	XIV0250		
58.00	C 49-52	20000	7200	3.34	2.602	.103	.222	XIV0275		
65.00	C 49-52	21000	7500	3.49	2.721	+/- .006	.103	.231	XIV0287	
77.50	C 49-52	23000	9000	3.82	2.986	.103	.255	XIV0315		
88.00	C 49-52	24000	10000	3.76	3.076	.103	.261	XIV325		
106.00	C 49-52	29000	11000	4.22	3.316	.120	.276	XIV0350		
123.00	C 49-52	34200	14700	4.51	3.734	.120	.306	XIV0393		

TG **=Groove wall thrust loads shown are for grooves machined in cold-rolled steel with a tensile yield strength of 45,000 psi.

For housing material with greater or lesser yield strength, groove wall thrust load increases or decreases proportionally.

Standard Material= is Carbon Spring Steel (SAE 1060-1090)

Standard finish= Oil-dipped