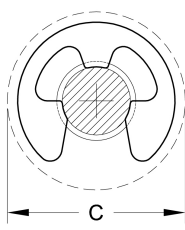
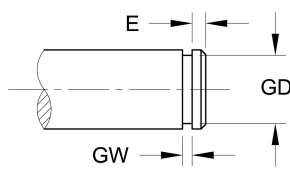


S&M Series XE, XEX & XEY External E-Ring	SHAFT DIAMETER			RING DIMENSIONS				APPROX. WT. PER 1000 RINGS (Lbs.)	
	ASME-B18-27-1NA3 MIL-R-21248 MS 16633	DEC. EQUIV. INCH	FRAC. EQUIV. INCH	MM	FREE DIAMETER	THICKNESS	DIAMETER		
RING NUMBER	SD	SD	SD	FD	TOL.	T	TOL.	D	
XEX0004	.040		1.00	.025	+ .001 - .003	.010	+/- .001	.079	.01
XEX0006	.062	1/16	1.59	.051		.010		.140	.02
XEY0006	.062	1/16	1.59	.051		.020		.187	.03
XE0006	.062	1/16	1.59	.051		.010	.156	.09	
XEX0009	.094	3/32	2.38	.069		.015	.230	.06	
XE0009	.094	3/32	2.38	.073		.015	.187	.09	
XEX0011	.110	7/64	2.78	.076		.015	.375	.25	
XE0012	.125	1/8	3.18	.094		.015	.230	.09	
XEX0014	.140	9/64	3.57	.100		.015	.203	.08	
XEY0014	.140	9/64	3.57	.108		.015	.250	.10	
XE0014	.140	9/64	3.57	.102		.025	.270	.20	
XE0015	.156	5/32	3.97	.114		.025	.282	.21	
XEX0017	.172	11/64	4.37	.125		.025	.312	.25	
XEX0018	.188	3/16	4.76	.122		.025	.375	.26	
XE0018	.188	3/16	4.76	.145		.025	.335	.41	
XEX0021	.219	7/32	5.56	.185		.025	.437	.44	
XE0025	.250	1/4	6.35	.207		.025	.527	.75	
XEX0031	.312	5/16	7.94	.243		+ .002 - .004	.025	+/- .002	.500
XE0037	.375	3/8	9.53	.300	.035		.660		1.35
XE0043	.438	7/16	11.11	.337	.035		.687		1.45
XEX0043	.438	7/16	11.11	.375	.035		.600		.87
XE0050	.500	1/2	12.70	.392	.042		.800		2.50
XE0062	.625	5/8	15.88	.480	.042		.940		3.06
XEX0074	.744		18.90	.616	+ .003 - .005	.050	+/- .003	1.000	3.31
XE0074	.750	3/4	19.05	.616		.050		1.000	3.31
XE0075	.750	3/4	19.05	.574		.050		1.120	5.45
XE0087	.875	7/8	22.23	.668		.050		1.300	7.50
XEX0098	.984	63/64	25.00	.822		.050		1.500	9.38
XE0098	1.000	1	25.40	.822		.050		1.500	9.38
XEX0118	1.188	1 3/16	30.16	1.066	+ .006	.062	+/- .003	1.626	10.50
XEX00137	1.375	1 3/8	34.93	1.213	- .010	.062		1.875	15.20

Installation: rings should not be over-expanded during installation. If groove has been machined to recommended diameter, play between the ring and groove after installation indicates the ring has been expanded excessively; this may lead to application failure. *C=Ring clearance diameter after ring is applied into groove
For plated, phosphate-coated, and stainless steel rings, the maximum ring thickness will not exceed the minimum groove width (GW) minus .0002".



RING INSTALLED



GROOVE DIMENSIONS

ROCKWELL HARDNESS (CARBON STEEL W/O PLATING)	Static Thrust Load (Lbs.) Sharp Corner Abutment		RING CLEARANCE	GROOVE DIMENSIONS				EDGE MARGIN	S&M Series XE, XEX & XEY External E-Ring
	RING	GROOVE		DIAMETER		WIDTH			ASME-B18-27-1NA3 MIL-R-21248 MS 16633
				TR	TG **	C*	GD		
15N 79.0-82.0	13	7	.090	.026	+ .002 - .000	.012	+ .002 - .000	.014	XEX0004
15N 85.0-87.0	20	7	.150	.052		.012		.010	XEX0006
15N 85.0-87.0	20	7	.200	.052		.023		.010	XEY0006
15N 85.0-87.0	40	7	.165	.052		.012		.010	XE0006
15N 85.0-87.0	45	20	.245	.074		.020		.020	XEX0009
15N 85.0-87.0	45	20	.200	.074		.020		.020	XE0009
15N 85.0-87.0	55	40	.390	.079		.020		.030	XEX0011
15N 85.0-87.0	65	45	.240	.095		.020		.030	XE0012
15N 85.0-87.0	70	60	.215	.102		.020		.038	XEX0014
15N 85.0-87.0	70	45	.265	.110		.020		.030	XEY0014
30N 67.5-71.0	150	55	.285	.105	+ .002-.000	.029	.034	XE0014	
30N 67.5-71.0	165	70	.295	.116		.029	.040	XE0015	
30N 67.5-71.0	180	90	.325	.127		.029	.044	XEX0017	
30N 67.5-71.0	195	90	.39	.125		.029	.062	XEX0018	
30N 67.5-71.0	195	135	.35	.147		.029	.040	XE0018	
30N 67.5-71.0	225	75	.45	.188		.029	.030	XEX0021	
30N 67.5-71.0	260	115	.54	.210		.029	.040	XE0025	
30N 67.5-71.0	325	225	.52	.250		.029	.062	XEX0031	
C 48-52	685	315	.68	.303		+ .003 - .000	.039	.072	XE0037
C 48-52	800	485	.71	.343			.039	.094	XE0043
C 48-52	800	290	.62	.380	.039		.058	XEX0043	
C 48-52	1100	600	.82	.396	.046		.104	XE0050	
C 48-52	1370	1040	.96	.485	.046		.140	XE0062	
C 48-52	1940	1050	1.02	.625	.056		.118	XEX0074	
C 48-52	1960	1100	1.02	.625	.056		.124	XEX0074	
C 48-52	1960	1500	1.14	.580	.056		.170	XE0075	
C 48-52	2200	2050	1.32	.675	.056		.200	XE0087	
C 48-52	2570	1710	1.53	.835	.056		.148	XEX0098	
C 48-52	2620	1900	1.53	.835	.056	.164	XEX0098		
C 48-52	3400	1500	1.67	1.079	+ .005-.000	.068	.108	XEX0118	
C 48-52	4100	2300	1.92	1.230		.068	.144	XEX0137	

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

For shaft 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