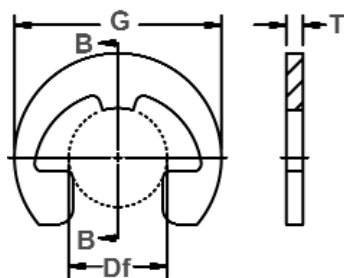




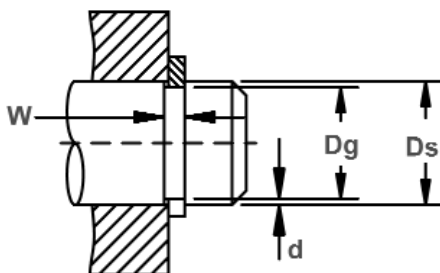
# RE Shaft Rings

## Radially Assembled, External Reinforced 'E'

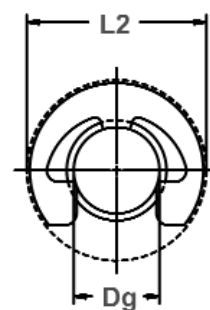
The RE retaining ring is a reinforced version of the E ring, which will accommodate higher thrust loadings and RPM. RE rings function in the same groove as regular E rings, so that you can change from one to the other without re-engineering the application.



Free Diameter & Ring Measurements with Section B-B



Shaft Diameter & Groove Dimensions



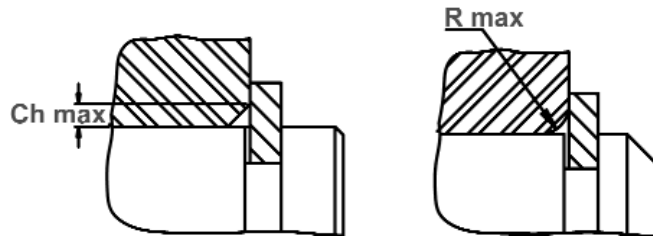
Clearance Diameter Installed In Groove

RING NO.	SHAFT DIAMETER			GROOVE SIZE			RING SIZE & WEIGHT					CLEARANCE DIA.		THRUST LD. (lbs.)			
				DIAMETER		WIDTH	DEPTH	FREE DIAMETER		THICKNESS***	Weight. Per 1000 Pcs.	Free Out-Side Dia.	Installed In Groove	Sqr. Corner Abutment			
	Ds DEC	Ds FRACT	Ds mm	Dg	Tol.	W	Tol.	d	Df	Tol.		T	Tol.	lbs.	Ref. G	L2	Pr
RE-9	.094	3/32	2.4	.074	+.002	.020	+.002	.010	.072	+.001	.015		.07	.206	.219	51	13
RE-12	.125	1/8	3.2	.095	-.000	.020	-.000	.015	.093	-.003	.015		.13	.270	.283	76	25
RE-15	.156	5/32	4.0	.116	.0015*	.029		.020	.113	+.002-.003	.025		.31	.335	.35	152	40
RE-18	.188	3/16	4.8	.147		.029		.020	.143		.025		.39	.375	.39	183	50
RE-21	.219	7/32	5.6	.188	±.002	.029		.015	.182	±.003	.025	±.002	.54	.446	.46	223	50
RE-25	.250	1/4	6.3	.210	.002*	.029		.020	.204		.025		.71	.516	.53	254	75
RE-31	.312	5/16	7.9	.250	±.003	.029	+.003	.031	.242		.025		.85	.588	.61	305	135
RE-37	.375	3/8	9.5	.303	.003*	.039	-.000	.036	.292		.035		1.5	.660	.68	528	190
RE-43	.438	7/16	11.1	.343		.039		.047	.332		.035		1.9	.746	.77	609	285
RE-50	.500	1/2	12.7	.396	±.003	.046		.052	.385	±.004	.042		3.2	.810	.83	832	360
RE-56	.562	9/16	14.3	.437	.004*	.046		.062	.430		.042		3.5	.870	.89	944	480

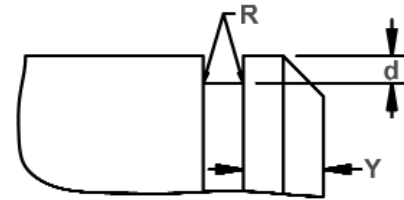
\*F.I.M. (FULL INDICATOR MOVEMENT)-MAXIMUM ALLOWABLE DEVIATION OF CONCENTRICITY BETWEEN GROOVE AND SHAFT.

† BASED ON HOUSINGS/SHAFTS MADE OF COLD ROLLED STEEL. FOR AN EXPLANATION OF FORMULAS USED TO DERIVE THRUST LOAD AND OTHER PERFORMANCE DATA, CONTACT THE ROTOR CLIP ENGINEERING DEPT.

\*\*\* FOR PLATED RINGS, ADD .002" TO THE LISTED MAXIMUM THICKNESS. MAXIMUM RING THICKNESS WILL BE A MINIMUM OF .0002" LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.



Maximum Corner Radius & Chamfer



Exploded Groove Profile & Edge Margin (Y)  
Maximum bottom radii (R), .005 for ring sizes -9 thru -25; .010 for ring sizes -31 thru -43; .015 for ring sizes -50 thru -56

RING NO.	ALLOWABLE CORNER RADII & CHAMFERS		MAX. LOAD W/ R MAX or Ch max (in lbs.)	EDGE MARGIN	R.P.M. LIMITS Standard Material
	R max	Ch max			
RE-9	.045	.033	50	.020	90000
RE-12	.045	.033	75	.030	70000
RE-15	.065	.050	150	.040	60000
RE-18	.065	.050	180	.040	50000
RE-21	.065	.050	220	.031	43000
RE-25	.065	.050	250	.040	38000
RE-31	.070	.055	300	.062	32000
RE-37	.070	.055	520	.072	28000
RE-43	.070	.055	600	.094	24000
RE-50	.080	.060	820	.104	20000
RE-56	.080	.060	930	.124	17000

NOTE: CONTACT ROTOR CLIP FOR AVAILABILITY OF SIZES LISTED. LARGER SIZES MAY BE AVAILABLE UPON REQUEST.

HARDNESS RANGES: STAINLESS STEEL RINGS (PH 15-7MO)

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
RE	9&12	15N	82.5-86
	15-31	30N	63-69.5
	37+	C	44-51

HARDNESS RANGES: BERYLLIUM COPPER RINGS

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
RE	9&12	15N	77-82
	15-31	30N	54-62
	37+	C	34-43

HARDNESS RANGES: CARBON STEEL RINGS (SAE 1060-1090)

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
RE	9&12	15N	84.5-87
	15-31	30N	66.5-71
	37+	C	47-52