

RING NO.	SHAFT DIAMETER				RING SIZE & WEIGHT							CLEAR. Installed on shaft	THRUST LOAD Allowable load (lbs.) P'r	RPM LIMITS Standard Material
	Ds DEC		Ds FRACT	Ds mm	FREE DIAMETER		THICKNESS***		NOTCH DIA. R	MAXIMUM SECTION S MAX	Weight Per 1000 Pcs. lbs.			
	FROM	TO			Df	Tol.	T	TOL.				L2		
RG-9	.092	.096	3/32	2.4	.089	+ .002	.025	± .002	.040	.045	.14	.30	8	OVER 80,000
RG-12	.123	.127	1/8	3.2	.119	- .003	.025		.040	.054	.19	.34	10	
RG-15	.154	.158	5/32	4.0	.149	+ .002	.025		.040	.078	.27	.38	13	
RG-18	.185	.189	3/16	4.8	.179	- .004	.035		.048	.085	.45	.44	18	
RG-25	.248	.252	1/4	6.3	.238		.035		.048	.100	.74	.54	22	
RG-31	.310	.316	5/16	7.9	.298	+ .003	.042		.052	.114	1.1	.66	32	
RG-37	.373	.379	3/8	9.5	.356	- .005	.042		.052	.130	1.5	.76	42	

† VALUES SHOWN APPLY TO RINGS INSTALLED ON A SHAFT MADE OF LOW CARBON STEEL.  
 FOR AN EXPLANATION OF FORMULAS USED TO DERIVE THRUST LOAD AND OTHER PERFORMANCE DATA, CONTACT THE ROTOR CLIP ENGINEERING DEPARTMENT.  
 \*\*\*FOR PLATED RINGS, ADD .002" TO THE LISTED MAXIMUM THICKNESS.

TABLE 3: HARDNESS RANGES-ROTOR CLIP CARBON STEEL RINGS (SAE 1060-1090)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
RG	9-15	30N	65.8-70.2
	18-37	C	47-52

**Hardness Ranges For TX, TY Retaining Rings**

TABLE 1: HARDNESS RANGES-ROTOR CLIP STAINLESS STEEL RINGS (PH 15-7 MO)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TX	9-37(.010thick)	15N	82.5-86*
	all over .010	15N	82.5-86

TABLE 2: HARDNESS RANGES-ROTOR CLIP BERYLLIUM COPPER RINGS

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TX	9-37(.010thick)	15N	77-82*
	all over .010	15N	77-82

TABLE 3: HARDNESS RANGES-ROTOR CLIP CARBON STEEL RINGS (SAE 1060-1090)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TX	9-37(.010thick)	15N	84-86*
	all over .010	15N	84-86

TABLE 1: HARDNESS RANGES-ROTOR CLIP STAINLESS STEEL RINGS (PH 15-7 MO)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TY	9-21,25-37	15N	82.5-86*
	24,43&over	15N	82.5-86

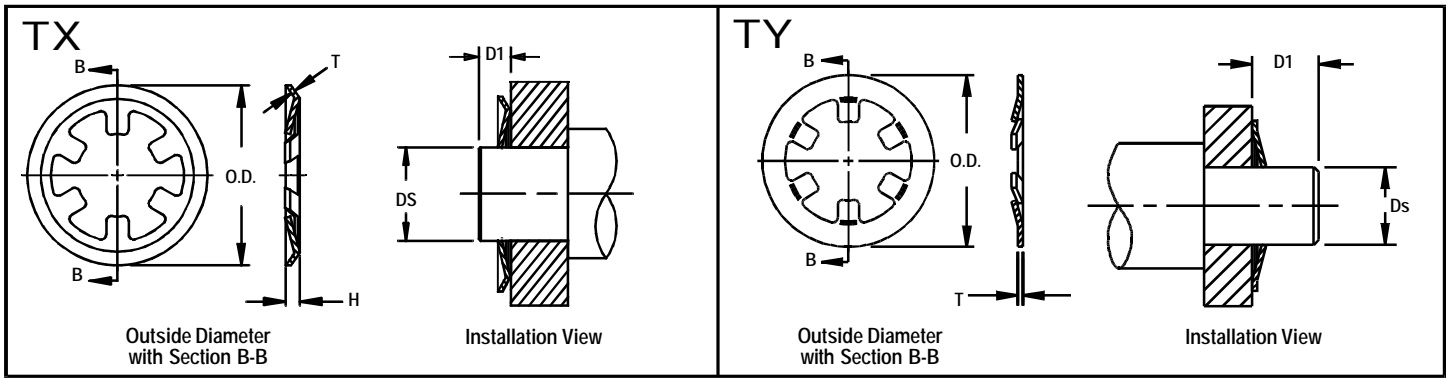
TABLE 2: HARDNESS RANGES-ROTOR CLIP BERYLLIUM COPPER RINGS

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TY	9-21,25-37	15N	77-82*
	24,43&over	15N	77-82

TABLE 3: HARDNESS RANGES-ROTOR CLIP CARBON STEEL RINGS (SAE 1060-1090)

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
TY	9-21,25-37	15N	84-86*
	24,43&over	15N	84-86

\*Hardness cannot be checked with any degree of accuracy directly on these rings.



RING NO.	SHAFT DIAMETER				OUTSIDE DIAMETER		No. of prongs	*** RING HEIGHT		* THICKNESS **Standard T Tol.	i Thrust Ld. @ Std. T lbs.	Wght. Per 1000 Pcs. @ Std. T lbs.	* Thick-ness Optional T Tol.	i Thrust Ld. @ Opt. T lbs.	WEIGHT Per 1000 Pcs @ Opt. T lbs.	Min. Distance Face of part to end of shaft D1	
	Ds DEC		Ds FRACT	Ds mm	O.D.	Tol.		H	Tol.								
	FROM	TO															
TX-9	.091	.097	3/32	2.39	.326	±.005	3	.029	±.010 ±.001	27	.16	±.015 ±.002	45	.25	.058		
TX-12	.121	.129	1/8	3.17	.366		4	.029		39	.19		57	.30	.058		
TX-15	.152	.160	5/32	3.96	.397		4	.029		46	.22		70	.35	.058		
TX-18	.184	.192	3/16	4.77	.444		6	.031		±.007	56		.27	85	.42	.062	
TX-25	.246	.254	1/4	6.35	.522		6	.042		±.008	112		.55	58	.39	.074	
TX-31	.308	.316	5/16	7.92	.584		8	.042			112		.64	60	.44	.074	
TX-37	.371	.379	3/8	9.53	.645		8	.042			122		.74	65	.48	.074	
TX-43	.432	.442	7/16	11.1	.737		10	.045			±.009		122	.96			.090
TX-50	.495	.505	1/2	12.7	.828		10	.054			±.010		122	1.27			.108
TX-56	.557	.567	9/16	14.27	.889		12	.054					127	1.38			.108
TX-62	.620	.630	5/8	15.88	.951	12	.054	±.010	137			1.47			.108		
TX-75	.745	.755	3/4	19.05	1.076	14	.054	142	1.65					.108			
TX-87	.870	.880	7/8	22.23	1.203	16	.054	142	1.96					.108			
TX-100	.995	1.005	1	25.4	1.327	18	.054	142	2.29					.108			

\*FOR PLATED RINGS ADD .002" TO MAXIMUM THICKNESS AND HEIGHT.  
 \*\* STANDARD THICKNESS FOR STAINLESS STEEL IS AS FOLLOWS:TX-9-TX-37, .010"; TX-43-TX-100, .015".  
 \*\*\* FOR TX-9-TX-18 OPTIONAL THICKNESS (.015"), ADD .005" TO RING HEIGHT VALUES (H) SHOWN.  
 FOR TX-25-TX-37 OPTIONAL THICKNESS (.010), DEDUCT .005" FROM RING HEIGHT VALUES (H) SHOWN.  
 FOR HARDNESS SPECIFICATIONS SEE PAGE 94.

RING NO.	SHAFT DIAMETER Inches				OUTSIDE DIAMETER		No. Of Prongs	THICKNESS*		i Thrust Load lbs.	WEIGHT Per 1000 Pcs. lbs.	Min. Distance Face of part to end of shaft D1		
	Ds DEC		Ds FRACT	Ds mm	O.D.	Tol.		T	Tol.					
	FROM	TO												
TY-9	.093	.095	3/32	2.39	.250	±.005	3	.010 ±.001	13	.09	.040			
TY-12	.124	.126	1/8	3.17	.325		4		20	.14	.040			
TY-15	.155	.157	5/32	3.96	.356		4		25	.17	.040			
TY-18	.187	.189	3/16	4.77	.387		6		35	.20	.040			
TY-21	.218	.220	7/32	5.56	.418		6		35	.21	.040			
TY-24	.239	.241	-	6.10	.460		6		.015	±.002	40	.35	.060	
TY-25	.249	.251	1/4	6.35	.450		6		.015 ±.002	40	.23	.040		
TY-31	.311	.313	5/16	7.92	.512		6			.010	±.001	45	.26	.040
TY-37	.374	.376	3/8	9.53	.575		6			45	.27	.040		
TY-43	.437	.439	7/16	11.1	.638		6			50	.47	.060		
TY-50	.498	.502	1/2	12.7	.750	6	50	.72		.060				
TY-56	.560	.564	9/16	14.27	.812	6	50	.75		.060				
TY-62	.623	.627	5/8	15.88	.875	7	50	.82		.060				
TY-75	.748	.752	3/4	19.05	1.000	8	55	.97		.060				
TY-87	.873	.877	7/8	22.23	1.125	10	60	1.1		.060				
TY-100	.998	1.002	1	25.4	1.250	10	65	1.2		.060				

\* FOR PLATED RINGS ADD .002" TO MAXIMUM THICKNESS AND HEIGHT.  
 LARGER SIZES MAY BE AVAILABLE UPON REQUEST.  
 † 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 HARDNESS SPECIFICATIONS SEE PAGE 94.