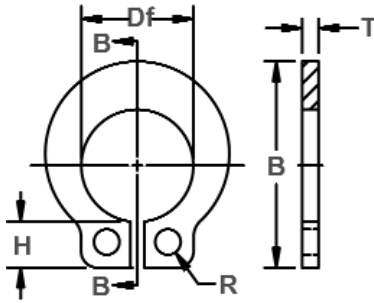




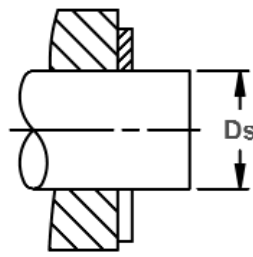
SHF Shaft Rings

External, Self-Locking Friction

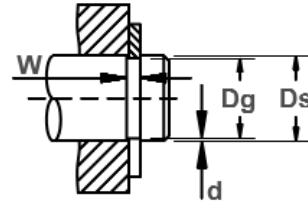
The SHF ring resembles a regular SH ring except that it is designed to function on a shaft without a groove. The design of the ring causes it to exert significant gripping power uniformly on the shaft (except where the gap occurs.)



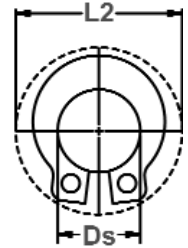
Free Diameter & Ring Measurements
With Section B-B



Without Groove



Optional Use in Groove
(Larger Sizes)



Clearance Diameter
Expanded Over Shaft

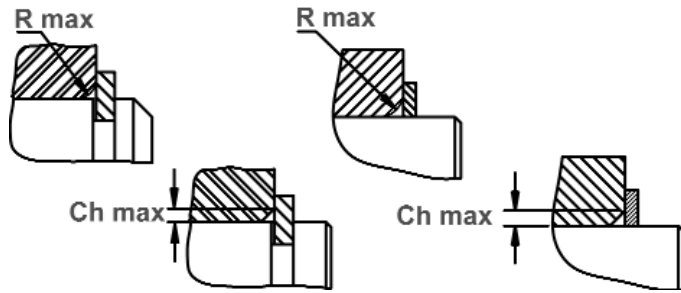
RING NO.	SHAFT DIAMETER				GROOVE SIZE			RING SIZE & WEIGHT				CLEAR.	† THRUST LD. (lbs.)										
					Dg	Tol.	W	Tol.	d	FREE DIAMETER			THICKNESS***	Weight Per 1000 Pcs.	Re-leased over shaft	Allow-able load (lbs.)	Groove Safety factor of 2						
	Ds	Tol.	T	Tol.						lbs.	L2	Pr						Pg					
	FROM	TO	Ds FRACT	Ds mm																			
SHF-6	.058	.060	-	1.5	NOT RECOMMENDED FOR USE WITH GROOVES										.055		.015	±.002	.030	.21	5	NOT RECOMMENDED FOR USE WITH GROOVES	
SHF-7	.078	.080	5/64	2.0											.074	+ .002	.025		±.003	.08	.24		8
SHF-9	.092	.096	3/32	2.4											.089	- .003	.025			.10	.26		8
SHF-12	.123	.127	1/8	3.2											.120		.025			.24	.33		10
SHF-15	.154	.158	5/32	4.0											.150	+ .002	.025			.30	.36		12
SHF-18	.185	.189	3/16	4.8											.181	- .004	.035			.55	.44		20
SHF-19	.195	.199	-	5.0	.187	±.003	.032	.45	.43	30													
SHF-23	.234	.238	15/64	6.0	.228	+ .0005	.041	+ .003	.004	.224	.035	.76	.48	22	70								
SHF-25	.248	.252	1/4	6.3	.240	- .0015	.041	- .000	.005	.238	+ .002-.004	.035	.74	.49	23	90							
SHF-31	.310	.316	5/16	7.9	.303		.048		.005	.298	+ .003	.042	1.39	.68	25	110							
SHF-37	.373	.379	3/8	9.5	.361		.048		.007	.354	- .005	.042	1.72	.74	31	180							
SHF-43	.434	.440	7/16	11.0	.419	+ .001	.056	+ .004	.009	.412		.050	2.61	.81	41	290							
SHF-50	.497	.503	1/2	12.7	.478	- .002	.056	- .000	.011	.470	+ .004	.050	2.91	.90	46	390							
SHF-62	.622	.628	5/8	15.9	.599		.069		.013	.593	- .006	.062	±.004	5.70	1.06	61	570						
SHF-75	.745	.755	3/4	19.0	.718	+ .002-.003	.069		.016	.706		.062		6.88	1.32	66	850						

† 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.

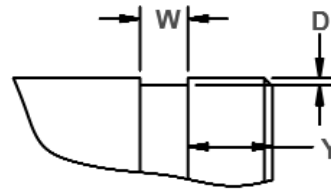
***FOR PLATED RINGS, ADD .002" TO THE LISTED MAXIMUM THICKNESS.

MAXIMUM RING THICKNESS (WHEN USED IN GROOVE) WILL BE A MINIMUM OF .0002" LESS THAN THE LISTED GROOVE WIDTH (W) MINIMUM.



Maximum Corner Radius & Chamfer (With Grooves)

Maximum Corner Radius & Chamfer (Without Grooves)



Exploded Groove Profile & Edge Margin (Y)



Optional Lug Design

RING NO.	ALLOWABLE CORNER RADII & CHAMFERS		EDGE MARGIN	LUG		HOLE		RING HEIGHT	R.P.M. LIMITS Standard material
	R max	Ch max	Y	H	Tol.	R	Tol.	B	
SHF-6	.025	.015	NOT RECOMMENDED FOR USE WITH GROOVES	.066	±.005	.035	±.004	.145	OVER 80000
SHF-7	.036	.022		.071	±.003	.034		.184	
SHF-9	.042	.025		.074		.034	.207		
SHF-12	.054	.032		.078		.042	.268		
SHF-15	.059	.035		.078		.042	.307		
SHF-18	.063	.038		.097		.051	.364		
SHF-19	.064	.039		.104		±.008	.375		
SHF-23	.070	.042		.098		±.003	.422		
SHF-25	.072	.043		.030		.097	.437	77000	
SHF-31	.080	.048		.030	.141	.553	58000		
SHF-37	.086	.051	.030	.141	.620	51000			
SHF-43	.093	.056	.030	.151	.701	44000			
SHF-50	.100	.060	.040	.158	.768	40000			
SHF-62	.120	.072	.045	.180	.948	32000			
SHF-75	.125	.075	.050	.233	1.115	25000			

LARGER SIZES MAY BE AVAILABLE UPON REQUEST.

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

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
SHF	9	15N	82.5-86
	12-18	30N	63-69.5
	25+	C	44-51

HARDNESS RANGES: BERYLLIUM COPPER RINGS

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
SHF	9	15N	77-82
	12-18	30N	54-62
	25+	C	34-43

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

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
SHF	6-9	15N	83.5-86
	12-23	30N	65-69.5
	25+	C	46-51