



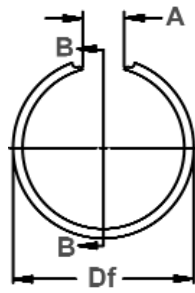
HBL/HBM/HBH

Constant Section

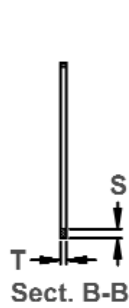
Snap Ring, Internal, Metric

Designed for SAE Standard Metric Bearings.

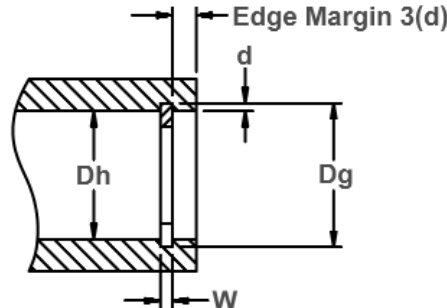
Once installed in the groove of a housing/bore the portion of the ring protruding from the groove holds an assembly in place.



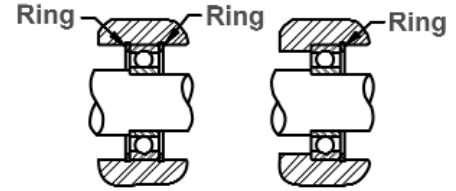
Free Diameter & Ring Measurement with Section B-B



Sect. B-B



Housing Diameter & Groove Dimensions



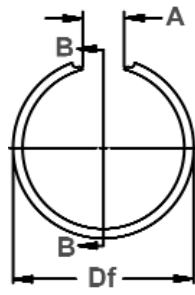
Ring Depicted retaining outer race of bearing in two directions (left) and in one direction (right).

Material: SAE 1060-1075

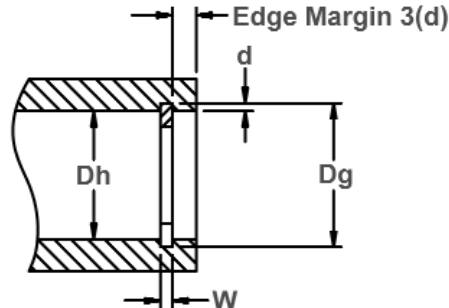
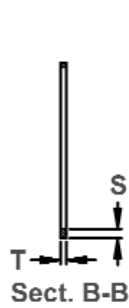
RING NUMBER	BEARING NUMBER			HOUSING DIAMETER		GROOVE SIZE					RING DIMENSIONS					GAP AT MIN. FREE O.D.	
						DIAMETER		WIDTH		DEPTH	FREE DIAMETER		THICKNESS	SECTION			
	LIGHT	MED.	HEAVY	Dh DEC	Dh mm	Dg	TOL.	W	TOL.	d	Df	TOL.	T ±.002	S	TOL.		
HBL-30	200			1.1811	29.93	1.243		.035		.031	1.265		.031	.100	±.003	.375 +.080 -.000	
HBM-30			1.1811	29.93	1.253		.046		.036	1.265		.042	.125	±.005			
HBH-30			1.1811	29.93	1.251		.068		.035	1.271		.062	.109	±.003			
HBL-32	201			1.2598	31.93	1.321		.035		.031	1.349	+.031	.031	.100	.437 +.093 -.000		
HBM-32			1.2598	31.93	1.331		.046		.036	1.343	-.000	.042	.125	±.005			
HBH-32			1.2598	31.93	1.329		.068		.035	1.365		.062	.109	±.003			
HBL-35	202			1.3780	34.92	1.440		.035		.031	1.468		.031	.100			.562 +.093 -.000
HBM-35		300	1.3780	34.92	1.450		.046		.036	1.468		.042	.125	±.005			
HBH-35			1.3780	34.92	1.458		.068		.040	1.486		.062	.140	±.003			
HBL-37			1.4567	36.92	1.518	±.005	.035		.031	1.546		.031	.100	±.003			
HBM-37		301	1.4567	36.92	1.528		.046		.036	1.546		.042	.125	±.005			
HBH-37			1.4567	36.92	1.536		.068		.040	1.564		.062	.140				
HBL-40	203			1.5748	39.91	1.654		.046		.040	1.687		.042			.125	
HBM-40			1.5748	39.91	1.668		.046		.047	1.703		.042	.156				
HBH-40			1.5748	39.91	1.668		.068		.047	1.703		.062	.156				
HBL-42			1.6535	41.90	1.733		.046		.040	1.765		.042	.125		±.005		
HBM-42		302	1.6535	41.90	1.747		.046		.047	1.781	+.046	.042	.156				
HBH-42			1.6535	41.90	1.747		.062		.047	1.781	-.000	.062	.156				
HBL-47	204			1.8504	46.89	1.930		.046		.040	1.968		.042			.125	
HBM-47		303	1.8504	46.89	1.944		.046		.047	1.968		.042	.156				
HBH-47			1.8504	46.89	1.951		.068		.050	1.976		.062	.172				
HBL-52	205			2.0472	51.88	2.137		.046	+.004	.045	2.171		.042			.156	±.005
HBM-52		304	2.0472	51.88	2.141		.046	-.000	.047	2.171		.042	.156				
HBH-52			2.0472	51.88	2.148		.068		.050	2.179		.062	.172				
HBL-62	206			2.4409	61.86	2.530		.068		.045	2.562		.062	.156			
HBM-62		305	2.4409	61.86	2.544		.068		.052	2.562		.062	.156				
HBH-62		403	2.4409	61.86	2.565		.103		.062	2.593		.093	.187				
HBL-72	207			2.8346	71.83	2.934	±.006	.068		.050	2.968		.062	.156	.562 +.093 -.000		
HBM-72		306	2.8346	71.83	2.959		.068		.062	2.984		.062	.187				
HBH-72		404	2.8346	71.83	2.959		.103		.062	3.000		.093	.187				
HBL-80	208			3.1496	79.82	3.249		.068		.050	3.281	+.062	.062	.156			
HBM-80		307	3.1496	79.82	3.274		.068		.062	3.296	-.000	.062	.187				
HBH-80		405	3.1496	79.82	3.274		.103		.062	3.312		.093	.218				
HBL-85	209			3.3465	84.81	3.446		.068		.050	3.484		.062	.156			
HBM-85			3.3465	84.81	3.471		.068		.062	3.500		.062	.187				
HBH-85			3.3465	84.81	3.471		.103		.062	3.500		.093	.218				

Hardness: All Ring Sizes - HRC 42-52

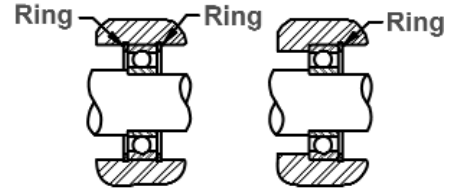




Free Diameter & Ring
Measurement with Section B-B



Housing Diameter &
Groove Dimensions



Ring Depicted retaining outer race of bearing in two directions (left) and in one direction (right).

Material: SAE 1060-1075

RING NUMBER	BEARING NUMBER			HOUSING DIAMETER		GROOVE SIZE					RING DIMENSIONS					GAP AT MIN. FREE O.D.
						DIAMETER		WIDTH		DEPTH	FREE DIAMETER		THICKNESS	SECTION		
	LIGHT	MED.	HEAVY	Dh DEC	Dh mm	Dg	TOL.	W	TOL.	d	Df	TOL.	T ±.002	S	TOL.	
HBL-90	210			3.5433	89.79	3.643		.103		.050	3.687		.093	.156		.687 +.093 -.000
HBM-90		308		3.5433	89.79	3.668		.103		.062	3.703		.093	.187		
HBH-90			406	3.5433	89.79	3.713		.139		.085	3.750		.125	.250		
HBL-100	211			3.9370	100.00	4.062		.103		.062	4.093		.093	.187		
HBM-100		309		3.9370	100.00	4.107		.103		.085	4.140		.093	.250		
HBH-100			407	3.9370	100.00	4.107		.139		.085	4.140		.125	.250		
HBL-110	212			4.3307	110.00	4.455	±.006	.103		.062	4.500	+ .093	.093	.187		
HBM-110		310		4.3307	110.00	4.500		.103		.085	4.531	- .000	.093	.250		
HBH-110			408	4.3307	110.00	4.500		.139		.085	4.531		.125	.250		
HBL-120	213			4.7244	120.00	4.884		.120		.080	4.937		.109	.250		
HBM-120		311		4.7244	120.00	4.912		.120		.094	4.953		.109	.281		
HBH-120			409	4.7244	120.00	4.894		.139		.085	4.937		.125	.250		
HBL-125	214			4.9213	125.00	5.081		.120		.080	5.125		.109	.250		
HBM-125				4.9213	125.00	5.109		.120		.094	5.156		.109	.281		
HBH-125				4.9213	125.00	5.121		.174	+ .004	.100	5.151		.156	.312	±.005	
HBL-130	215			5.1181	130.00	5.278		.120	- .000	.080	5.312		.109	.250		.875 +.125 -.000
HBM-130		312		5.1181	130.00	5.306		.120		.094	5.343		.109	.281		
HBH-130			410	5.1181	130.00	5.318		.174		.100	5.355		.156	.312		
HBL-140	216			5.5118	140.00	5.671		.120		.080	5.703		.109	.250		
HBM-140		313		5.5118	140.00	5.699		.120		.094	5.750	+ .125	.109	.281		
HBH-140			411	5.5118	140.00	5.711	±.007	.174		.100	5.750	- .000	.156	.312		
HBL-150	217			5.9055	150.00	6.065		.120		.080	6.093		.109	.250		
HBM-150		314		5.9055	150.00	6.093		.120		.094	6.125		.109	.281		
HBH-150			412	5.9055	150.00	6.105		.174		.100	6.156		.156	.312		
HBL-160	218			6.2992	160.00	6.459		.120		.080	6.500		.109	.250		
HBM-160		315		6.2992	160.00	6.497		.120		.094	6.550		.109	.281		
HBH-160			413	6.2992	160.00	6.500		.174		.100	6.550		.156	.312		
HBL-170	219			6.6929	170.00	6.892		.139		.100	6.937		.125	.312		
HBM-170		316		6.6929	170.00	6.942		.139		.125	6.982		.125	.375		
HBH-170				6.6929	170.00	6.892		.174		.100	6.937		.156	.312		
HBL-180	220			7.0866	180.00	7.286		.139		.100	7.343		.125	.312		
HBM-180		317		7.0866	180.00	7.336	±.008	.139		.125	7.380	+ .187	.125	.375		
HBH-180			414	7.0866	180.00	7.336		.209		.125	7.381	- .000	.187	.375		
HBL-190	221			7.4803	190.00	7.680		.139		.100	7.718		.125	.312		
HBM-190		318		7.4803	190.00	7.730		.139		.125	7.781		.125	.375		
HBH-190				7.4803	190.00	7.730		.209		.125	7.782		.187	.375		
HBL-200	222			7.8740	200.00	8.074		.139		.100	8.125		.125	.312		
HBM-200		319		7.8740	200.00	8.125		.139		.125	8.187		.125	.375		
HBH-200			416	7.8740	200.00	8.125		.209		.125	8.187		.187	.375		

Hardness: All Ring Sizes - HRC 42-52

