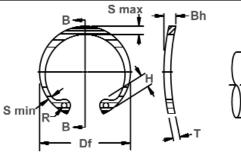
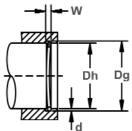


## **Axially Assembled, Internal Bowed**

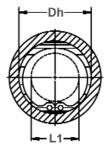
Compensating for accumulated tolerances is what a BHO retaining ring is designed to do in a housing/bore. Once snapped into the groove, bowed rings exert a force or "preload" on the retained parts for the range specified.



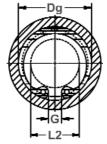
Free Diameter & Ring Measurements with Section B-B



Housing Diameter & Groove Dimensions



Clearance Diameter Compressed in Housing



Clearance Diameter & Gap Width Released in Groove

No.   Pick   Statety   Attack   Pick   Pick   Pick   Pick   Pick   Pick   Statety   Attack   Pick   Pick	RING		HOUSING	1		CDC	OUT 0	175				DING	117F 0 W	FIGUT			CLEA	D DIA	lî TUDIIÇT I I	) (lbo.)
Display   Disp					GROOVE SIZE			DEDTH	H FREE				FIGHT	Weight						
BHO-25   250   1/4   6.4   268   4.001   0.30   +.002   0.09   280   0.15   0.36   0.08   1.15   1.133   426   1.90   1.8   1.002   0.09   0	NO.	١ .	/IAIIIE I EI	•	"		. ****					IIIIOKI	-00	5011	ILIUIII					
BHO-25										DIAII	ILILII									
Bh0-25   250   1/4   64   268   ±.001   030   ±.002   0.09   280   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.015   0.036   0.08   1.15   1.13   4.26   1.90   0.015   0.015   0.025   0.047   0.025   0.047   0.025   0.047   0.025   0.047   0.048   0.025   0.047   0.025   0.047   0.048   0.025   0.047   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.047   0.026   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.048   0.025   0.020   0.025   0.020   0.025   0.020   0.025   0.025   0.020   0.025   0.02																				
BHQ-25   250																		3		
BHO-35							L													_
BHO-31   312   5/16   7.9   330   0.015   0.00   0.00   0.09   3.46   BHO-37   3.75   3/8   9.5   3.97   BHO-43   4.88   7/16   11.1   461   ±.002   0.004   0.012   4.82   ±.010   0.25   0.025   0.047   0.025   0.045   0											Tol.	T	Tol.		Tol.					
BHO-37   3.75   3/8   9.5   397   590   597   597   597   590   597																				
BHO-43						.0015*		000												
BHO-50			-, -																	
BHO-50  .500  1/2  12.7  .530  .502  .055  .130  .542  ± .002  .555  + .003  .015  .548  .003  .015  .548  .003  .015  .548  .003  .015  .548  .003  .015  .568  .004  .005  .002  .055  .000  .007  .620  .008  .007  .77  .27  .30  .2020  .525  .710  .008  .86  .275  .305  .2255  .710  .008  .86  .275  .305  .2255  .710  .008  .86  .275  .305  .2255  .710  .008  .86  .275  .305  .2025  .710  .008  .86  .275  .305  .008  .86  .275  .305  .008  .008  .008  .008  .008  .008  .008  .008  .003  .008  .008  .008  .008  .008  .008  .008  .008  .008  .008  <											±.010				±.006					
BHO-51						.002*					1									
BHO-56  .562  9/16  14.3  .596  .004*  .055  .000  .017  .620  .035  .063  .063  .86  .275  .305  .2253  .710    BHO-62  .625  5/8  15/9  .665  .055  .055  .055  .022  .763  .035  .063  1.2  .34  .38  .2507  .155  .055  .022  .763  .035  .063  1.2  .40  .44  .2741  1280    BHO-75  .750  3/4  19.0  .796  .055  .023  .831  .035  .063  1.2  .40  .44  .2741  1280    BHO-86  .866  -  .22.0  .920  .062  .025  .002  .025  .0042  .073  1.7  .475  .52  .4618  1580    BHO-93  .938  15/16  23.8  1.000  .062  .028  .991  .042  .073  .103  .004  .073 <th></th> <th></th> <th>1/2</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th> </th> <th></th> <th></th> <th></th> <th> </th> <th></th> <th></th> <th></th> <th></th> <th></th>			1/2																	
BHO-62  .625  5/8  15.9  .665  .055  .020  .694  .035  .063  .10  .34  .38  .2507  .1050    BHO-78  .750  .3/4  1.9.0  .796  .055  .022  .783  .035  .063  .1.2  .40  .44  .2741  1280    BHO-77  .777  -  19.7  .825  .062  .022  .989  .042  .073  .1.7  .475  .52  .4618  .1580    BHO-81  .812  13/16  20.6  .862  .062  .025  .901  .042  .073  .1.7  .475  .52  .4618  .1580    BHO-86  .866  -  .22.9  .935 062  .028  .971  .042  .073  .1.9  .49  .54  .4872  .1710    BHO-90  .901  -  .22.9  .935 003  .062  .028  .971  .042  .073 02  .05 <th></th> <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th> </th> <th></th> <th></th> <th></th> <th>±.007</th> <th></th> <th></th> <th></th> <th></th> <th></th>			-												±.007					
BHO-68   688   11/16   17.5   .732   .055   .022   .763   .035   .035   .035   .035   .063   .1.3   .4.4   .2741   .1280   .084   .086   .0862   .024   .085   .083   .035   .083   .0						.004*		000			1									
BHO-75  .750  3/4  19.0  .796  .055  .023  .831  .035  .042  .035  .042  .062  .024  .859  .042  .073  .1.7  .475  .52  .481  1580  .082  .082  .062  .023  .831  .042  .073  .073  .1.7  .475  .52  .481  1580  .082  .082  .082  .082  .082  .082  .082  .083  .042  .073  .1.7  .475  .52  .481  .181  .198  .408  .086  .086  .022.0  .929  .062  .028  .971  .042  .042  .004  .073  .073  .2.1  .545  .60  .527  .2080    BHO-100  1.000  1  .25.4  1.066  .062  .031  1.104  .042  .073  ±.002  2.2  .565  .62  .543  .229  .208  .2.2  .565  .62  .543  .299 <th< th=""><th></th><th></th><th>-, -</th><th></th><th></th><th>   </th><th></th><th></th><th></th><th></th><th>1</th><th></th><th></th><th></th><th> </th><th></th><th></th><th></th><th></th><th></th></th<>			-, -								1									
BHO-77  .777  -  19.7  825  .062  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .062  .092  .093  .938  .176  .22.2  .931  .002  .082  .091  .042  .062  .086  .028  .971  .042  .042  .073  .042  .054  .497  .179  .49  .54  .4872  .1710  .980  .986  .986  .986  .985  .786  .22.2  .931  .938  .15/16  .23.8  1.000  .062  .031  1.041  .042  .073  .203  .208  .22.2  .566  .62  .5430  .2200  .24  .013  .073  .24  .018  .082  .24  .61  .67  .5684  .4250  .024  .031  .042  .031  .042  .042  .073																				
BHO-81  .812  13/16  20.6  .862  .862  .866  - 22.0  .920  .920  .921  .933  .938  .935  .78  .22.2  .931  .938  .938  .938  .938  .939  .939  .938			3/4						_		1									
BHO-86  .866  -  22.0  .920  .062  .027  .961  .042  .042  .073  ± .002  .273  ± .008  2.0  .54  .59  5177  1980    BHO-90  .901  -  22.9  .959  ± .003  .062  .029  1.000  ± .015  .042  ± .002  .073  ± .008  2.2  .565  .62  5430  2200  2080  BHO-100  .000  1  25.4  1.066  .062  .031  1.041  .042  .042  .073  ± .008  2.2  .565  .62  5430  2200    BHO-100  1.000  1  25.4  1.066  .062  .033  1.111  .042  .073  ± .002  2.7  .665  .73  6039  2800    BHO-160  1.062  1-1/16  27.0  1.130  .070  .036  1.249  .050  .085  .085  .47  .685  .75  .7562  .3050			-																	
BHO-87  .875  7/8  22.2  .931  .062  .028  .971  .042  .002  .073  ± .002  .073  ± .002  .073  ± .002  .073  ± .002  .073  ± .002  .073  ± .003  .022  .565  .62  5430  .2200    BHO-100  1.000  1  25.4  1.066  .062  .033  1.116  .042  .042  .073  ± .002  2.4  .61  .67  .5684  .245    BHO-100  1.002  - 25.0  1.091  .062  .034  1.136  .042  .042  .073  ± .002  2.4  .61  .67  .5684  .245    BHO-106  1.062  1-1/16  27.0  1.130  .070  .034  1.180  .050  .085  .3.7  .685  .75  .7562  3050    BHO-112  1.125  1-1/48  1.317  1.330  .070  .034  1.318  .050  .085  .085  4.3			13/16						12-2											
BHO-90			-								1				1					
BHO-93  .938  15/16  23.8  1.000  .004*  .062  .031  1.041  .042  .042  .073  .073  .27  .665  .73  6039  2800    BHO-102  1.023  -  26.0  1.091  .062  .034  1.136  .042  .073  .27  .665  .73  6039  2800    BHO-106  1.062  1-1/16  27.0  1.130  .070  .034  1.136  .050  .085  .073  .28  .69  .755  6141  3000    BHO-112  1.125  1-1/8  28.6  1.197  .070  .034  1.319  .050  .085  .085  4.0  .745  .815  8019  300    BHO-118  1.181  -  30.0  1.255  .070  .037  1.319  .050  .085  .085  4.0  .745  .815  8019  3400    BHO-125  1.259  -  32.0  1.339  .005			7/8							_	1									
BHO-100  1.000  1  25.4  1.066  .062  .033  1.111  .042  .073  2.7  .665  .73  6039  2800    BHO-102  1.023  -  26.0  1.091  .062  .034  1.136  .042  .042  .073  2.8  .69  .755  6141  3000    BHO-112  1.125  1-1/6  27.0  1.130  .070  .034  1.180  .050  .085  .085  .4.0  .745  .815  8019  3400    BHO-118  1.181  - 3/16  30.2  1.262  .070  .037  1.319  .050  .085  4.3  .79  .86  8526  370    BHO-125  1.259  -  32.0  1.339  .004  .070  .040  1.388  ±.025  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-131  1.312  1.5/16  33.3  1.39  .070  .043											±.015		±.002		±.008					
BHO-102  1.023  -  26.0  1.091  .062  .034  1.136  .042  .073  2.8  .69  .755  6141  3000    BHO-106  1.062  1-1/16  27.0  1.130  .070  .034  1.180  .050  .085  .085  .37  .685  .75  7562  3050    BHO-118  1.181  -  30.0  1.255  .070  .037  1.319  .050  .085  .085  .4.0  .745  .815  8019  .3400    BHO-125  1.250  1-1/4  31.7  1.330  ±.004  .070  .040  1.388  ±.025  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-131  1.312  1-5/16  33.3  1.396  .070  .042  1.456  .050  .085  .085  ±.012  4.8  .875  .955  8932  4250    BHO-137  1.378  -  35.0  1.464<			15/16			.004*														
BHO-106  1.062  1-1/16  27.0  1.130  .070  .034  1.180  .050  .085  .3.7  .685  .75  7562  3050    BHO-118  1.181  -  30.0  1.255  .070  .036  1.249  .050  .085  .085  .4.0  .745  .815  8019  3400    BHO-118  1.181  -  30.0  1.255  .070  .037  1.319  .050  .085  .085  .4.0  .745  .815  8019  3400    BHO-118  1.188  1-3/16  30.2  1.262  .070  .037  1.319  .050  .085  .085  .4.3  .79  .86  8526  3700    BHO-125  1.259  -  32.0  1.339  .005*  .040  1.388  ± .025  .050  .085  ± .012  4.8  .875  .955  8932  4250    BHO-137  1.378  -  35.0  1.461  .070  .043 <th></th> <th></th> <th>1</th> <th></th>			1																	
BHO-112  1.125  1-1/8  28.6  1.197    BHO-118  1.181  -  30.0  1.255    BHO-118  1.181  -  30.0  1.255    BHO-125  1.250  1-1/4  31.7  1.330    BHO-125  1.259  -  32.0  1.339    BHO-131  1.312  1-5/16  33.3  1.396    BHO-137  1.375  1-3/8  34.9  1.461    BHO-145  1.456  -  35.0  1.464    BHO-145  1.456  -  37.0  1.548    BHO-145  1.456  -  37.0  1.548  0.070  0.045  1.596  0.050  0.050  0.085  4.8  8.85  9.65  8932  4250    BHO-143  1.438  1-7/16  36.5  1.528  0.070  0.043  1.526  0.050  0.085  0.085  5.1  .99  1.07  9846  5050    BHO-156  1.500  1-1/2										1.136										
BHO-118  1.181  -  30.0  1.255    BHO-118  1.188  1-3/16  30.2  1.250    BHO-125  1.250  1-1/4  31.7  1.330    BHO-125  1.259  -  32.0  1.339    BHO-131  1.312  1-5/16  33.3  1.396    BHO-137  1.375  1-3/8  34.9  1.461    BHO-143  1.438  1-7/16  36.5  1.528    BHO-143  1.438  1-7/16  36.5  1.528    BHO-156  1.500  1-1/2  38.1  1.594    BHO-156  1.562  1-9/16  39.7  1.658		1.062	1-1/16													3.7				
BHO-118  1.188  1-3/16  30.2  1.262    BHO-125  1.250  1-1/4  31.7  1.330  ±.004  .070  .040  1.388  ±.025  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-137  1.375  1-3/8  34.9  1.461  .070  .043  1.526  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-137  1.378  -  35.0  1.464  .070  .043  1.526  .050  .050  .085  5.1  .99  1.07  9846  5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .043  1.526  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .044  1.616  .050  .085  .085  5.8  1.06  1.15  10353 <t< th=""><th></th><th>1.125</th><th>1-1/8</th><th>28.6</th><th>1.197</th><th></th><th>.070</th><th></th><th>.036</th><th>1.249</th><th></th><th>.050</th><th></th><th>.085</th><th></th><th>4.0</th><th>.745</th><th>.815</th><th></th><th></th></t<>		1.125	1-1/8	28.6	1.197		.070		.036	1.249		.050		.085		4.0	.745	.815		
BHO-125  1.250  1-1/4  31.7  1.330  ±.004  .070  .040  1.388  ±.025  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-131  1.312  1-5/16  33.3  1.396  .070  .040  1.388  ±.025  .050  .085  ±.012  4.8  .875  .955  8932  4250    BHO-137  1.375  1-3/8  34.9  1.461  .070  .043  1.526  .050  .050  .085  5.1  .99  1.07  .9440  4700    BHO-137  1.378  -  35.0  1.464  .070  .043  1.526  .050  .085  .085  5.1  .99  1.07  .9846  .5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .046  1.616  .050  .085  .085  5.1  .99  1.07  .9846  .5050    BHO-150  1.500  1-1/2	BHO-118	1.181	-			]	.070		.037	1.319				.085	]	4.3	.79			
BHO-125  1.259  -  32.0  1.339  .005*  .040  1.388  .050  .085  .085  .885  .965  8932  4250    BHO-137  1.375  1-3/8  34.9  1.461  .070  .043  1.526  .050  .050  .085  .085  .51  .99  1.07  .9846  .5050    BHO-137  1.378  -  35.0  1.464  .070  .043  1.526  .050  .085  .51  .99  1.07  .9846  .5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .043  1.526  .050  .085  5.1  .99  1.07  .9846  .5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .044  1.616  .050  .085  .085  5.1  .99  1.07  .9846  .5050    BHO-150  1.500  1-1/2  38.1  1.594  .070  .044  1.660 <th< th=""><th></th><th>1.188</th><th>1-3/16</th><th></th><th>1.262</th><th>]</th><th></th><th></th><th>.037</th><th>1.319</th><th></th><th></th><th></th><th></th><th></th><th>4.3</th><th></th><th></th><th></th><th></th></th<>		1.188	1-3/16		1.262	]			.037	1.319						4.3				
BHO-131  1.312  1-5/16  33.3  1.396  .070  .042  1.456  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-137  1.378  -  35.0  1.464  .070  .043  1.526  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .045  1.596  .050  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-145  1.456  -  37.0  1.548  .070  .046  1.616  .050  .085  .085  5.8  1.06  1.15  10353  5500    BHO-156  1.562  1-9/16  39.7  1.658  .070  .048  1.734  .062  .085  .085  6.5  1.12  1.21  10708  6000    BHO-156  1.575  -  40.0  1.671  +.005			1-1/4								±.025				±.012	4.8				
BHO-137  1.375  1-3/8  34.9  1.461  .070  .043  1.526  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .045  1.596  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-145  1.456  -  37.0  1.548  .070  .046  1.616  .050  .085  .085  5.8  1.06  1.15  10353  5500    BHO-150  1.500  1-1/2  38.1  1.594  .070  .046  1.616  .050  .085  .085  6.4  1.08  1.17  10455  5700    BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  8.9  1.14  1.23  13906  6350    BHO-156  1.525  1-5/8  41.3  1.725  .005*  .048	BHO-125	1.259		32.0	1.339	.005*	.070		.040	1.388		.050		.085		4.8	.885	.965	8932	
BHO-137  1.378  -  35.0  1.464  .070  .043  1.526  .050  .085  .085  5.1  .99  1.07  9846  5050    BHO-143  1.438  1-7/16  36.5  1.528  .070  .045  1.596  .050  .085  .085  5.8  1.06  1.15  10353  5500    BHO-150  1.500  1-1/2  38.1  1.594  .070  .047  1.660  .050  .085  6.4  1.08  1.17  10455  5700    BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  8.9  1.14  1.23  13906  6350    BHO-156  1.575  -  40.0  1.671  ±.005  .048  1.734  +.035  .062  ±.003  .115  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .000 <th< th=""><th></th><th>1.312</th><th>1-5/16</th><th></th><th>1.396</th><th></th><th></th><th></th><th>.042</th><th>1.456</th><th></th><th>.050</th><th></th><th>.085</th><th></th><th>5.0</th><th></th><th>1.01</th><th>9440</th><th></th></th<>		1.312	1-5/16		1.396				.042	1.456		.050		.085		5.0		1.01	9440	
BHO-143  1.438  1-7/16  36.5  1.528  .070  .045  1.596  .050  .085  .085  5.8  1.06  1.15  10353  5500    BHO-150  1.500  1-1/2  38.1  1.594  .070  .045  1.660  .050  .085  6.4  1.08  1.17  10455  5700    BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  8.9  1.14  1.23  13906  6350    BHO-156  1.575  -  40.0  1.671  ±.005  .048  1.734  +.035  .062  ±.005  .115  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .000  .050  .062  ±.003  .115  ±.015  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*	BH0-137	1.375	1-3/8	34.9	1.461		.070		.043	1.526		.050		.085		5.1	.99	1.07	9846	
BHO-145  1.456  -  37.0  1.548  .070  .046  1.616  .050  .085  6.4  1.08  1.17  10455  5700    BHO-150  1.500  1-1/2  38.1  1.594  .070  .047  1.660  .050  .085  6.4  1.08  1.17  10455  5700    BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .084  1.734  +.035  .062  ±.003  .115  ±.015  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .000  .050  .062  ±.003  .115  ±.015  8.9  1.15  1.24  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*	BH0-137	1.378	-	35.0	1.464		.070		.043	1.526		.050		.085	]	5.1	.99	1.07	9846	5050
BHO-150  1.500  1-1/2  38.1  1.594  .070  .047  1.660  .050  .085  6.5  1.12  1.21  10708  6000    BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  8.9  1.14  1.23  13906  6350    BHO-156  1.575  -  40.0  1.671  ±.005  .100  +.005  .048  1.734  +.035  .062  ±.003  .115  ±.015  8.9  1.15  1.24  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .1804 025  .062  ±.003  .115  ±.015  8.9  1.15  1.24  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .1804 025  .062  .115  ±.015  8.9  1.15  1.24  13906  6350    BHO-162  1.625  1-5/8	BH0-143	1.438	1-7/16	36.5	1.528		.070		.045	1.596		.050		.085	]	5.8	1.06	1.15	10353	5500
BHO-156  1.562  1-9/16  39.7  1.658  .100  .048  1.734  .062  .115  .8.9  1.14  1.23  13906  6350    BHO-156  1.575  -  40.0  1.671  ±.005  .100  +.005  .048  1.734  +.035  .062  ±.003  .115  ±.015  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .100 000  .050  1.804 025  .062  ±.003  .115  ±.015  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .100 050  .062  ±.005  .115  ±.015  8.9  1.14  1.23  13906  6350    BHO-162  1.625  1-5/8  41.3  1.725  .005*  .100  .050  .1804 025  .062  .115  ±.015  8.9  1.15 <th>BHO-145</th> <th>1.456</th> <th>-</th> <th>37.0</th> <th>1.548</th> <th></th> <th>.070</th> <th></th> <th>.046</th> <th>1.616</th> <th></th> <th>.050</th> <th></th> <th>.085</th> <th></th> <th>6.4</th> <th>1.08</th> <th>1.17</th> <th>10455</th> <th>5700</th>	BHO-145	1.456	-	37.0	1.548		.070		.046	1.616		.050		.085		6.4	1.08	1.17	10455	5700
<b>BHO-156</b> 1.575 - 40.0 1.671 ±.005 .100 +.005 .048 1.734 +.035 .062 ±.003 .115 ±.015 8.9 1.15 1.24 13906 6350 <b>BHO-162</b> 1.625 1-5/8 41.3 1.725 .005* .100000 .050 1.804025 .062 .115 ±.015 8.9 1.15 1.25 14413 6900	BH0-150	1.500	1-1/2	38.1	1.594		.070		.047	1.660		.050		.085		6.5	1.12	1.21	10708	
<b>BHO-162</b> 1.625 1-5/8 41.3 1.725 .005* .100000 .050 1.804025 .062 .115 10.0 1.15 1.25 14413 6900	BHO-156	1.562	1-9/16	39.7	1.658		.100		.048	1.734		.062		.115		8.9	1.14	1.23	13906	6350
	BH0-156	1.575	-	40.0	1.671	±.005	.100	+.005	.048	1.734	+.035	.062	±.003	.115	±.015	8.9	1.15	1.24	13906	6350
	BH0-162	1.625	1-5/8		1.725	.005*	.100	000	.050	1.804	025					10.0	1.15	1.25	14413	6900
<b>BHO-175</b>   1.750   1-3/4   44.4   1.858   .100   .054   1.942   .062   .115   10.3   1.26   1.36   15580   8050	BH0-175	1.750	1-3/4	44.4	1.858		.100		.054	1.942		.062		.115	]	10.3	1.26	1.36	15580	8050

<sup>\*</sup>F.I.M. (FULL INDICATOR MOVEMENT)-MAXIMUM ALLOWABLE DEVIATION OF CONCENTRICITY BETWEEN GROOVE AND HOUSING.

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

RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS
BH0	25&31	15N	82.5-86
	37-102	30N	63-69.5
	106+	С	44-51



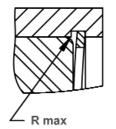
<sup>1</sup> BASED ON HOUSINGS/SHAFTS MADE OF COLD ROLLED STEEL. FOR AN EXPLANATION OF FORMULAS USED TO DERIVE THRUST LOAD AND OTHER PERFORMANCE DATA, CONTACT THE ROTOR CLIP ENGINEERING DEPT.

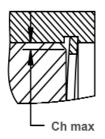
<sup>\*\*\*</sup> FOR PLATED RINGS, ADD .002" TO THE LISTED MAXIMUM THICKNESS.

## www.rotorclip.com

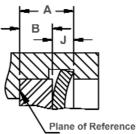
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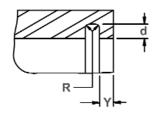




Maximum Corner Radius & Chamfer



Outer Groove Location A max = B min + J max A min = B max + J min



Exploded Groove Profile & Edge Margin (Y) Maximum bottom radii (R), .005 for ring sizes -25 thru -100; .010 for ring sizes -102 and over

RING NO.	Outer	ANCE groove	TAKE UP Resilient	FORCE Needed	COI	WABLE RNER	MAX LOAD	EDGE MAR-		JG GHT	MAXI SEC	MUM TION		MUM TION		OLE METER	GAP WIDTH
	fac	II to e of ed part	take up of tolerances of A&B	to flatten rings		DII & MFERS	w/ R max or Ch max (in lbs.)	GIN									Ring in groove
	Lasia		J max-	lh-	D	Ob	Div	V		T-1	0	7-1	0 :	T-1	_	T-1	0
BHO-25	J min .020	J max .028	J min	1 <b>bs.</b> 20	.011	.0085	<b>P</b> 'r 190	.027	.065	Tol.	.025	<b>Tol.</b> ±.002	<b>S min</b> .015	<b>Tol.</b> ± .002	.031	Tol.	<b>G min.</b> .047
BHO-31	.020	.028	1	20	.016	.013	190	.027	.066	ł	.033	±.002	.018	002	.031		.055
BHO-37	.030	.038	.008	45	.023	.018	530	.033	.082	±.003			.028		.041		.063
BHO-43	.030	.038	1 .000	40	.027	.021	530	.036	.098	1000	.049	±.003	.029	±.003	.041		.063
BHO-45	.030	.038	1	40	.027	.021	530	.036	.098	i	.050	000	.030	000	.047		.071
BHO-50	.042	.053		120	.027	.021	1100	.045	.114	1	.053		.035		.047		.090
BHO-51	.042	.053	1	115	.027	.021	1100	.045	.114		.053		.035	1	.047		.092
BHO-56	.042	.053	1	100	.027	.021	1100	.051	.132	1	.053		.035	1	.047		.095
BHO-62	.042	.053	1	85	.027	.021	1100	.060	.132	1	.060	±.004	.035	±.004	.062	+.010	.104
BHO-68	.042	.053	1	65	.027	.021	1100	.066	.132	1	.063		.036	1	.062	002	.118
BH0-75	.042	.053	1	45	.032	.025	1100	.069	.142	1	.070		.040	1	.062		.143
BH0-77	.049	.060	]	80	.035	.028	1650	.072	.146	1	.074		.044		.062		.145
BHO-81	.049	.060	]	75	.035	.028	1650	.075	.155	]	.077		.044	]	.062		.153
BHO-86	.049	.060	]	70	.035	.028	1650	.081	.155	]	.081		.045	]	.062		.172
BHO-87	.049	.060	]	70	.035	.028	1650	.084	.155		.084		.045		.062		.179
BHO-90	.049	.060		65	.038	.030	1650	.087	.155		.087	±.005	.047	±.005	.062		.188
BHO-93	.049	.060	]	60	.038	.030	1650	.093	.155		.091		.050		.062		.200
BHO-100	.049	.060	.011	55	.042	.034	1650	.099	.155		.104		.052		.062		.212
BHO-102	.049	.060	]	50	.042	.034	1650	.102	.155		.106		.054		.062		.220
BHO-106	.057	.068		70	.044	.035	2400	.102	.180	±.005			.055		.078		.213
BH0-112	.057	.068		65	.047	.036	2400	.108	.180		.116		.057		.078		.232
BHO-118	.057	.068		60	.047	.036	2400	.111	.180		.120		.058		.078		.226
BHO-118	.057	.068	]	60	.047	.036	2400	.111	.180		.120		.058		.078		.245
BHO-125	.057	.068		55	.048	.038	2400	.120	.180		.124		.062		.078		.265
BHO-125	.057	.068	]	55	.048	.038	2400	.120	.180		.124		.062		.078		.290
BHO-131	.057	.068		50	.048	.038	2400	.126	.180		.130	±.006	.062	±.006	.078	+.015	.284
BHO-137	.057	.068	]	45	.048	.038	2400	.129	.180		.130		.063		.078	002	.297
BHO-137	.057	.068		45	.048	.038	2400	.129	.180		.130		.063		.078		.305
BH0-143	.057	.068	]	40	.048	.038	2400	.135	.180	1	.133		.065		.078		.313
BHO-145	.057	.068		35	.048	.038	2400	.138	.180		.133		.065		.078		.320
BHO-150	.057	.068		35	.048	.038	2400	.141	.180		.133		.066		.078		.340
BHO-156	.075	.095		40	.064	.050	3900	.144	.202		.157		.078		.078		.338
BHO-156	.075	.095	.020	40	.064	.050	3900	.144	.202		.157	±.007	.078	±.007	.078		.374
BHO-162	.075	.095		40	.064	.050	3900	.150	.227		.164		.082		.078		.339
BH0-175	.075	.095		35	.064	.050	3900	.162	.234		.171		.083		.078		.372

LARGER SIZES MAY BE AVAILABLE UPON REQUEST.

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

HARDINESS KANGES: CARBON STEEL KINGS (SAE 1000-1090)											
RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS								
BH0	25&31	15N	86-88								
	37-51	30N	69.5-73								
	56-77	30N	67.5-72								
	81-102	30N	66-71								
	106+	C	47-52								

HARDNESS RANGES: BERYLLIUM COPPER RINGS

TIATIDITEOU TIAI	TIATIBITEOG TIATIGEO: BETT ELIONI GOTT ETT TIINGO											
RING TYPE	SIZE RANGE	SCALE	ROCKWELL HARDNESS									
BH0	25&31	15N	77-82									
	37-102	30N	54-62									
	106+	C	34-43									