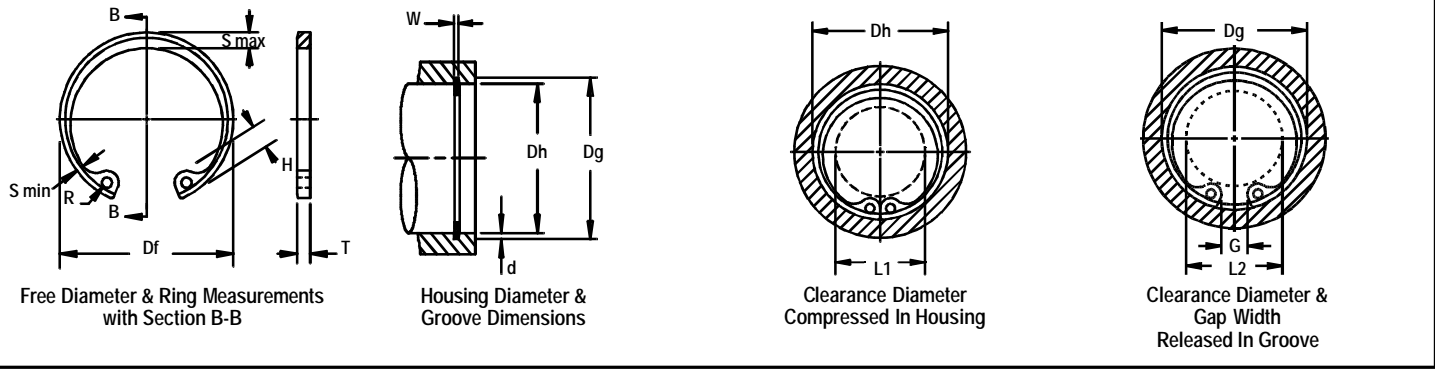




# Rotor Clip VHO Retaining Rings

## Internal Retaining Rings For End-Play Take Up

A 15° beveled edge along with a complementary groove angle combine to eliminate end play when the ring is installed.



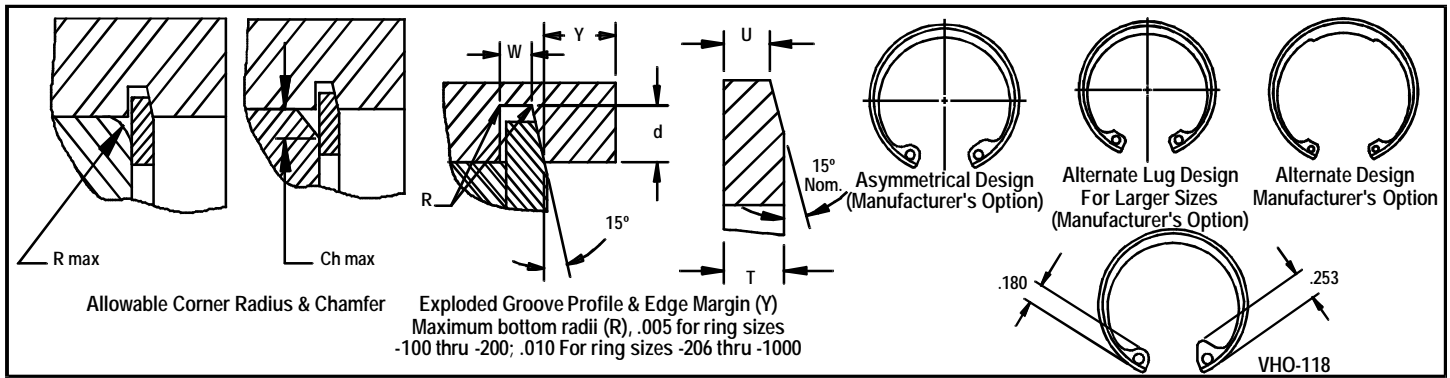
RING NO.	HOUSING DIAMETER			GROOVE SIZE				RING SIZE & WEIGHT						CLEARANCE			
	Diameter			Diameter	Width	Depth	FREE DIAMETER	THICKNESS***	THICKNESS BEVELED END	Weight Per 1000 Pcs.	Compressed in housing	Released in groove					
	Dh DEC	Dh FRACT	Dh mm	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	U	Tol.	lbs.	L1	L2
VHO-100	1.000	1	25.4	1.076	+0.003	.036		.038	1.111	+0.015	.042		.033		2.7	.665	.70
VHO-102	1.023	-	26.0	1.101	-.000	.036		.039	1.136	-.010	.042		.033		2.8	.69	.725
VHO-106	1.062	1-1/16	27.0	1.138		.044		.038	1.180		.050		.041		3.7	.685	.72
VHO-112	1.125	1-1/8	28.6	1.205		.043		.040	1.249		.050		.040		4.0	.745	.78
VHO-118	1.181	-	30.0	1.265		.043		.042	1.319		.050		.040		4.3	.66	.69
VHO-118	1.188	1-3/16	30.2	1.272		.043		.042	1.319		.050		.040		4.3	.67	.70
VHO-125	1.250	1-1/4	31.7	1.342		.042		.046	1.388	+0.025	.050	±.002	.039		4.8	.875	.92
VHO-125	1.259	-	32.0	1.351		.042		.046	1.388	-.020	.050		.039		4.8	.885	.93
VHO-131	1.312	1-5/16	33.3	1.408		.042		.048	1.456		.050		.039		5.0	.93	.97
VHO-137	1.375	1-3/8	34.9	1.475		.041		.050	1.526		.050		.038		5.1	.99	1.03
VHO-137	1.378	-	35.0	1.478	+0.004	.041	+0.005	.050	1.526		.050		.038	±.001	5.1	.99	1.03
VHO-143	1.438	1-7/16	36.5	1.542	-.000	.040	-.000	.052	1.596		.050		.037		5.8	1.06	1.11
VHO-145	1.456	-	37.0	1.562	.005*	.040		.053	1.616		.050		.037		6.4	1.08	1.13
VHO-150	1.500	1-1/2	38.1	1.604		.040		.052	1.660		.050		.037		6.5	1.12	1.17
VHO-156	1.562	1-9/16	39.7	1.674		.052		.056	1.734		.062		.048		8.9	1.10	1.15
VHO-156	1.575	-	40.0	1.687		.052		.056	1.734		.062		.048		8.9	1.11	1.16
VHO-162	1.625	1-5/8	41.3	1.743		.051		.059	1.804		.062		.047		10.0	1.16	1.22
VHO-165	1.653	-	42.0	1.773		.051		.060	1.835		.062		.047		10.4	1.17	1.22
VHO-168	1.688	1-11/16	42.9	1.810	+0.005	.050		.061	1.874	+0.035	.062		.046		10.8	1.23	1.29
VHO-175	1.750	1-3/4	44.4	1.878	-.000	.050		.064	1.942	-.025	.062		.046		10.3	1.26	1.31
VHO-181	1.812	1-13/16	46.0	1.944	.005*	.050		.066	2.012		.062		.046		11.5	1.32	1.38
VHO-185	1.850	-	47.0	1.984		.050		.067	2.054		.062		.046		12.8	1.35	1.42
VHO-187	1.875	1-7/8	47.6	2.011		.050		.068	2.054		.062		.046		12.8	1.37	1.44
VHO-193	1.938	1-15/16	49.2	2.082		.049		.072	2.141		.062		.045		13.3	1.44	1.51
VHO-200	2.000	2	50.8	2.144		.048		.072	2.210		.062		.044		14.0	1.5	1.57
VHO-206	2.047	-	52.0	2.195		.065		.074	2.280		.078		.060		18.0	1.52	1.59
VHO-206	2.062	2-1/16	52.4	2.210		.065		.074	2.280		.078		.060		18.0	1.54	1.61
VHO-212	2.125	2-1/8	54.0	2.279		.065		.077	2.350		.078		.060		19.4	1.58	1.65
VHO-218	2.165	-	55.0	2.327		.064		.081	2.415		.078		.059		19.6	1.61	1.69
VHO-218	2.188	2-3/16	55.6	2.350	+0.006	.064		.081	2.415	+0.040	.078	±.003	.059	±.0015	19.6	1.64	1.72
VHO-225	2.250	2-1/4	57.1	2.420	-.000	.064		.085	2.490	-.030	.078		.059		21.8	1.69	1.77
VHO-231	2.312	2-5/16	58.7	2.484	.006*	.063	+0.007	.086	2.535		.078		.058		22.6	1.75	1.82
VHO-237	2.375	2-3/8	60.3	2.552		.063	-.000	.089	2.630		.078		.058		23.2	1.81	1.89
VHO-244	2.440	2-7/16	62.0	2.618		.062		.089	2.702		.078		.057		25.4	1.86	1.94
VHO-250	2.500	2-1/2	63.5	2.684		.062		.092	2.775		.078		.057		25.5	1.91	2
VHO-250	2.531	2-17/32	64.3	2.717		.062		.093	2.775		.078		.057		25.5	1.94	2.03
VHO-256	2.562	2-9/16	65.1	2.750		.078		.094	2.844		.093		.072		34.0	1.95	2.04
VHO-262	2.625	2-5/8	66.7	2.820		.077		.097	2.910		.093		.071		34.5	2.02	2.11
VHO-268	2.677	-	68.0	2.876		.077		.099	2.980		.093		.071		35.0	2.05	2.15
VHO-268	2.688	2-11/16	68.3	2.887		.077		.099	2.980		.093		.071		35.0	2.06	2.16
VHO-275	2.750	2-3/4	69.8	2.955		.076		.102	3.050		.093		.070	±.002	35.5	2.12	2.21
VHO-281	2.812	2-13/16	71.4	3.020		.076		.104	3.121		.093		.070		36.0	2.18	2.27
VHO-281	2.835	-	72.0	3.043		.076		.104	3.121		.093		.070		36.0	2.21	2.31
VHO-287	2.875	2-7/8	73.0	3.085		.076		.105	3.191		.093		.070		41.0	2.22	2.32
VHO-295	2.953	-	75.0	3.178		.074		.112	3.325		.093		.068		42.5	2.3	2.41
VHO-300	3.000	3	76.2	3.225		.074		.112	3.325		.093		.068		42.5	2.35	2.46
VHO-306	3.062	3-1/16	77.8	3.290		.089	+0.008	.114	3.418	±.055	.109		.082	±.0025	53.0	2.41	2.51
VHO-312	3.125	3-1/8	79.4	3.355		.089	-.000	.115	3.488		.109		.082		56.0	2.47	2.58

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

\*\*\*FOR PLATED RINGS ADD .002" TO THE LISTED MAXIMUM THICKNESS (T) AND BEVELED END THICKNESS (U) VALUES.

For a technical concern,  
Please ask for our Technical Sales Department.

# 1-800-55-ROTOR



RING NO.	ALLOWABLE CORNER RADII & CHAMFERS		MAX. LOAD w/ R max or Ch max (in lbs.) Pr	EDGE MARGIN Y	END-PLAY TAKE-UP In.	LUG HEIGHT		MAXIMUM SECTION		MINIMUM SECTION		HOLE DIAMETER		GAP WIDTH Ring in groove G min	THRUST LD. (lbs.) Sqr. corner abutment	
	R max	Ch max				H	Tol.	S max	Tol.	S min	Tol.	R	Tol.		Pr	Pg
VHO-100	.042	.034	1650	.057	.005	.155		.104	±.005	.052	±.005	.062	+.010	.145	6039	1600
VHO-102	.042	.034	1650	.058	.005	.155		.106		.054		.062	-.002	.150	6141	1700
VHO-106	.044	.035	2400	.057	.005	.180		.110		.055		.078		.143	7562	1700
VHO-112	.047	.036	2400	.060	.005	.180		.116		.057		.078		.157	8019	1900
VHO-118	.047	.036	2400	.063	.0055	.180		.120		.058		.078		.150	8526	2100
VHO-118	.047	.036	2400	.063	.0055	.180		.120		.058		.078		.169	8526	2100
VHO-125	.048	.038	2400	.069	.006	.180		.124	±.006	.062	±.006	.078		.184	8932	2400
VHO-125	.048	.038	2400	.069	.006	.180		.124		.062		.078		.209	8932	2400
VHO-131	.048	.038	2400	.072	.006	.180		.130		.062		.078		.198	9440	2650
VHO-137	.048	.038	2400	.075	.0065	.180		.130		.063		.078		.211	9846	2900
VHO-137	.048	.038	2400	.075	.0065	.180		.130		.063		.078		.219	9846	2900
VHO-143	.048	.038	2400	.078	.007	.180		.133		.065		.078		.221	10353	3100
VHO-145	.048	.038	2400	.078	.007	.180		.133		.065		.078		.226	10455	3250
VHO-150	.048	.038	2400	.078	.007	.180		.133		.066		.078		.238	10708	3300
VHO-156	.064	.050	3900	.084	.0075	.202		.157		.078		.078		.238	13906	3600
VHO-156	.064	.050	3900	.084	.0075	.202		.157		.078		.078		.275	13906	3600
VHO-162	.064	.050	3900	.088	.008	.227		.164		.082		.078		.242	14413	4000
VHO-165	.064	.050	3900	.090	.008	.230		.167		.083		.078		.245	14718	4200
VHO-168	.064	.050	3900	.091	.008	.227		.170		.085		.078	+.015	.255	15022	4300
VHO-175	.064	.050	3900	.096	.0085	.234	±.005	.171		.083		.078	-.002	.267	15580	4700
VHO-181	.064	.050	3900	.099	.009	.230		.170	±.007	.084	±.007	.093		.277	16139	5050
VHO-185	.064	.050	3900	.100	.009	.234		.170		.085		.093		.245	16443	5200
VHO-187	.064	.050	3900	.102	.009	.234		.170		.085		.093		.310	16697	5400
VHO-193	.064	.050	3900	.108	.0095	.230		.170		.085		.093		.328	17255	5900
VHO-200	.064	.050	3900	.108	.0095	.230		.170		.085		.093		.332	17763	6100
VHO-206	.076	.061	6200	.111	.0095	.250		.186		.091		.093		.311	23091	6500
VHO-206	.078	.062	6200	.111	.0095	.250		.186		.091		.093		.349	23091	6500
VHO-212	.078	.062	6200	.115	.010	.260		.195		.096		.093		.345	23751	7000
VHO-218	.078	.062	6200	.121	.010	.264		.199		.098		.093		.323	24462	7450
VHO-218	.078	.062	6200	.121	.010	.264		.199		.098		.093		.373	24462	7450
VHO-225	.078	.062	6200	.127	.0105	.270		.203		.099		.093		.368	25223	8050
VHO-231	.078	.062	6200	.129	.011	.270		.206		.100		.093		.362	25832	8400
VHO-237	.078	.062	6200	.133	.0115	.270		.207		.102		.093		.374	26542	8900
VHO-244	.078	.062	6200	.133	.012	.280		.209		.103		.110		.386	27304	9100
VHO-250	.078	.062	6200	.138	.012	.280		.210		.103		.110		.398	28014	9600
VHO-250	.078	.062	6200	.139	.0125	.280		.210		.103		.110		.460	28014	9600
VHO-256	.088	.070	9000	.141	.0125	.300		.222		.109		.110		.400	34206	10200
VHO-262	.088	.070	9000	.145	.013	.290		.226		.111		.110		.418	35068	10800
VHO-268	.090	.072	9000	.148	.013	.300		.230		.113		.110		.393	35931	11300
VHO-268	.090	.072	9000	.148	.013	.300		.230		.113		.110		.423	35931	11300
VHO-275	.092	.074	9000	.153	.014	.300		.234		.115		.110		.442	36642	11800
VHO-281	.088	.070	9000	.156	.014	.300		.230		.115		.110		.459	37504	12200
VHO-281	.088	.070	9000	.156	.014	.300		.230		.115		.110		.512	37504	12200
VHO-287	.092	.074	9000	.157	.014	.300		.240		.120		.110		.451	38367	12600
VHO-295	.092	.074	9000	.168	.015	.300		.250		.122		.110		.449	40093	14200
VHO-300	.092	.074	9000	.168	.015	.300		.250		.122		.110		.568	40093	14200
VHO-306	.097	.078	12000	.171	.015	.310	±.008	.254	±.008	.126	±.008	.125		.473	47807	14800
VHO-312	.099	.079	12000	.172	.0155	.310		.259		.129		.125		.469	48822	15200

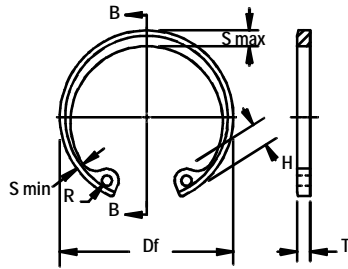
† BASED ON HOUSINGS/SHAFTS MADE OF COLD ROLLED STEEL.  
NOTE: CONTACT ROTOR CLIP FOR AVAILABILITY OF SIZES LISTED.



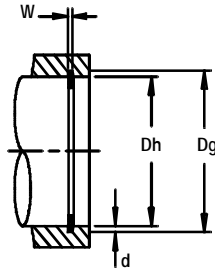
# Rotor Clip VHO Retaining Rings

## Internal Retaining Rings For End-Play Take Up

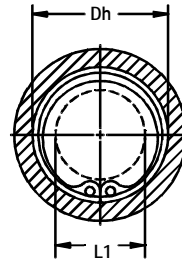
A 15° beveled edge along with a complementary groove angle combine to eliminate end play when the ring is installed.



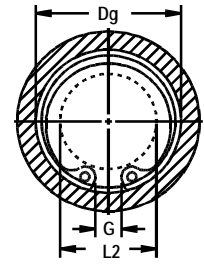
Free Diameter & Ring Measurements with Section B-B



Housing Diameter & Groove Dimensions



Clearance Diameter Compressed In Housing



Clearance Diameter & Gap Width Released In Groove

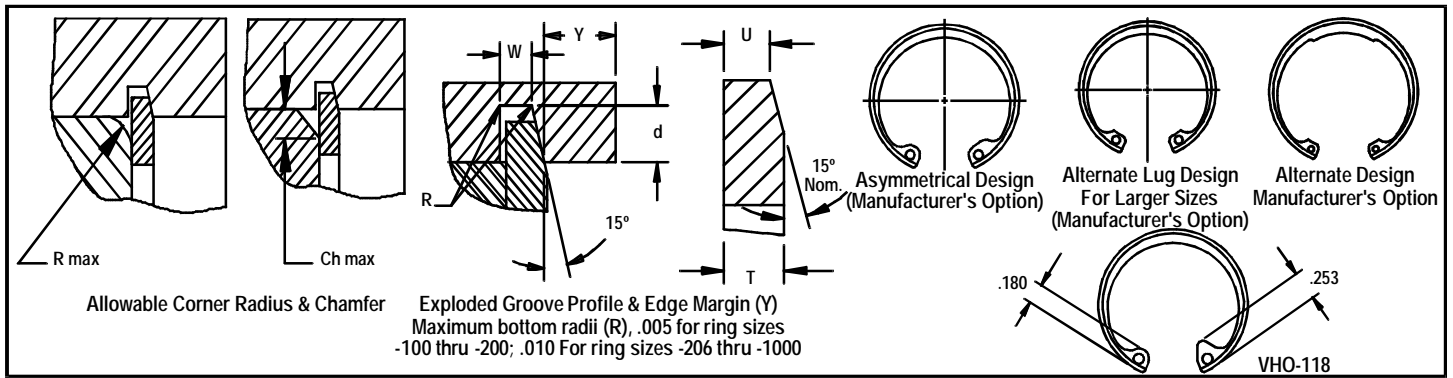
RING NO.	HOUSING			GROOVE SIZE				RING SIZE & WEIGHT					CLEARANCE				
	Diameter			Diameter	Width	Depth	Free Diameter		Thickness***		Thickness Beveled Ends		Wght. Per 1000 Pcs.	Compressed in housing	Released in groove		
	Dh DEC	Dh FRACT	Dh mm	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	U	Tol.	lbs.	L1	L2
VHO-315	3.149	-	80.0	3.381		.089		.116	3.523		.109		.082		57.0	2.49	2.60
VHO-315	3.156	3-5/32	80.2	3.388		.089	+ .008	.116	3.523	± .055	.109	± .003	.082	± .0025	57.0	2.50	2.61
VHO-325	3.250	3-1/4	82.5	3.489		.089	- .000	.119	3.623		.109		.082		60.0	2.54	2.65
VHO-334	3.346	3-11/32	85.0	3.591		.089		.122	3.734		.109		.082		65.0	2.63	2.74
VHO-347	3.469	3-15/32	88.1	3.726	+ .006	.089		.128	3.857		.109		.082		69.0	2.76	2.88
VHO-350	3.500	3-1/2	88.9	3.760	- .000	.089		.130	3.890		.109		.082		71.0	2.79	2.91
VHO-354	3.543	-	90.0	3.806	.006*	.089		.132	3.936		.109		.082		72.0	2.83	2.95
VHO-354	3.562	3-9/16	90.5	3.830		.089		.134	3.936		.109		.082		72.0	2.85	2.97
VHO-362	3.625	3-5/8	92.1	3.900		.089		.137	4.024		.109		.082		73.0	2.91	3.03
VHO-375	3.740	-	95.0	4.030		.089		.145	4.157		.109		.082		78.0	3.02	3.15
VHO-375	3.750	3-3/4	95.2	4.040		.089		.145	4.157		.109		.082		78.0	3.03	3.17
VHO-387	3.875	3-7/8	98.4	4.171		.089		.148	4.291		.109		.082		87.0	3.11	3.25
VHO-393	3.938	3-15/16	100.0	4.236		.089		.149	4.358		.109		.082		88.0	3.17	3.31
VHO-400	4.000	4	101.6	4.302		.089		.151	4.424		.109		.082		93.0	3.23	3.37
VHO-412	4.125	4-1/8	104.8	4.433		.089		.154	4.558		.109		.082		97.0	3.36	3.51
VHO-425	4.250	4-1/4	108.0	4.562		.089		.156	4.691		.109		.082		101.0	3.48	3.63
VHO-433	4.331	-	110.0	4.647		.089		.158	4.756		.109		.082		105.0	3.50	3.65
VHO-450	4.500	4-1/2	114.3	4.824		.089		.162	4.940		.109		.082		111.00	3.66	3.81
VHO-462	4.625	4-5/8	117.5	4.955		.089		.165	5.076		.109		.082		117.00	3.79	3.95
VHO-475	4.724	-	120.0	5.060		.089		.168	5.213		.109		.082		124.0	3.88	4.04
VHO-475	4.750	4-3/4	120.6	5.086		.089		.168	5.213		.109		.082		124.0	3.90	4.06
VHO-500	5.000	5	127.0	5.346		.089		.173	5.485		.109		.082		136.0	4.08	4.25
VHO-525	5.250	5-1/4	133.3	5.612	+ .007	.102	+ .010	.181	5.770	± .065	.125	± .004	.095	± .003	174.0	4.31	4.48
VHO-537	5.375	5-3/8	136.5	5.739	- .000	.102	- .000	.182	5.910		.125		.095		179.0	4.41	4.58
VHO-550	5.500	5-1/2	139.7	5.864	.006*	.102		.182	6.066		.125		.095		183.0	4.53	4.70
VHO-575	5.750	5-3/4	146.0	6.120		.102		.185	6.336		.125		.095		192.0	4.78	4.96
VHO-600	6.000	6	152.4	6.374		.102		.187	6.620		.125		.095		201.0	5.03	5.21
VHO-625	6.250	6-1/4	158.7	6.642		.129		.196	6.895		.156		.121		266.0	5.24	5.43
VHO-650	6.500	6-1/2	165.1	6.908		.129		.204	7.170		.156		.121		281.0	5.49	5.68
VHO-662	6.625	6-5/8	168.3	7.042		.129		.208	7.308	± .080	.156		.121		305.0	5.60	5.80
VHO-675	6.750	6-3/4	171.4	7.174		.128		.212	7.445		.156		.120		325.0	5.65	5.85
VHO-700	7.000	7	177.8	7.441		.128		.220	7.720		.156		.120		344.0	5.88	6.09
VHO-725	7.250	7-1/4	184.1	7.708	+ .008	.159		.229	7.995		.187		.150		428.0	6.08	6.30
VHO-750	7.500	7-1/2	190.5	7.974	- .000	.159		.237	8.270		.187		.150		485.0	6.33	6.56
VHO-775	7.750	7-3/4	196.8	8.240	.006	.159		.245	8.545		.187		.150		520.0	6.58	6.82
VHO-800	8.000	8	203.2	8.507		.155		.253	8.820		.187		.146		555.0	6.75	6.99
VHO-825	8.250	8-1/4	209.5	8.773		.155		.261	9.095		.187		.146		603.0	7.00	7.25
VHO-850	8.500	8-1/2	215.9	9.040		.151		.270	9.285	± .090	.187	± .005	.142		634.0	7.13	7.39
VHO-875	8.750	8-3/4	222.2	9.307		.151		.278	9.558		.187		.142		653.0	7.38	7.65
VHO-900	9.000	9	228.6	9.573		.151		.286	9.830		.187		.142		732.0	7.63	7.91
VHO-925	9.250	9-1/4	235.0	9.838		.151		.294	10.102		.187		.142		767.0	7.88	8.16
VHO-950	9.500	9-1/2	241.3	10.106		.147		.303	10.375		.187		.138		803.0	7.98	8.27
VHO-975	9.750	9-3/4	247.7	10.372		.147		.311	10.648		.187		.138		833.0	8.23	8.52
VHO-1000	10.000	10	254.0	10.639		.147		.319	10.920		.187		.138		863.0	8.48	8.78

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

\*\*\* FOR PLATED RINGS, ADD .002\* TO THE LISTED MAXIMUM THICKNESS (T) AND BEVELED END THICKNESS (U) VALUES.

For a technical concern,  
Please ask for our Technical Sales Department.

# 1-800-55-ROTOR



RING NO.	ALLOWABLE CORNER RADII & CHAMFERS		MAX. LOAD w/R max or Ch max (in lbs.)	EDGE MARGIN	END-PLAY TAKE-UP	LUG HEIGHT		MAXIMUM SECTION		MINIMUM SECTION		HOLE DIAMETER		GAP WIDTH Ring in groove Min.	THRUST LOAD (lbs.) Sqr. corner abutment					
	R max	Ch max				Pr (lbs.)	Y	in.	H	Tol.	S max	Tol.	S min		Tol.	R	Tol.	G	Pr	Pq
VHO-315	.100	.080	12000	.174	.0155	.310		.262		.129		.125		.462	49329	15500				
VHO-315	.100	.080	12000	.174	.0155	.310		.262		.129		.125		.481	49329	15500				
VHO-325	.104	.083	12000	.178	.016	.342		.269		.135		.125		.509	50750	16400				
VHO-334	.108	.086	12000	.183	.0165	.342		.276		.140		.125		.514	52374	17300				
VHO-347	.108	.086	12000	.192	.017	.342		.286		.144		.125		.571	54201	18800				
VHO-350	.110	.088	12000	.195	.017	.342		.289		.142		.125		.574	54709	19300				
VHO-354	.110	.088	12000	.198	.0175	.342		.292		.142		.125	.+.015 -.002	.586	55419	19800				
VHO-354	.110	.088	12000	.201	.018	.342		.292		.142		.125		.643	55419	19800				
VHO-362	.116	.093	12000	.205	.018	.342		.299		.150		.125		.639	56739	21100				
VHO-375	.120	.096	12000	.217	.0195	.342	.±.008	.309	.±.008	.155	.±.008	.125		.647	58566	23100				
VHO-375	.120	.096	12000	.217	.0195	.342		.309		.155		.125		.674	58566	23100				
VHO-387	.123	.098	12000	.222	.020	.370		.319		.160		.125		.680	60494	24300				
VHO-393	.124	.099	12000	.223	.020	.370		.324		.161		.125		.687	61611	24900				
VHO-400	.128	.102	12000	.226	.020	.370		.330		.166		.125		.694	62626	25600				
VHO-412	.130	.104	12000	.231	.021	.370		.330		.171		.125		.718	64554	26900				
VHO-425	.138	.110	12000	.234	.021	.370		.335		.180		.125		.743	66483	28100				
VHO-433	.142	.114	12000	.237	.021	.405		.343		.180		.156		.803	67599	29000				
VHO-450	.146	.117	12000	.243	.022	.405		.351		.181		.156		.787	70340	30900				
VHO-462	.151	.121	12000	.247	.022	.405		.360		.183		.156		.822	72370	32400				
VHO-475	.154	.123	12000	.252	.023	.405		.370		.183		.156		.773	74298	33800				
VHO-475	.154	.123	12000	.252	.023	.405		.370		.183		.156		.843	74298	33800				
VHO-500	.158	.126	12000	.259	.023	.435		.390		.186		.156		.753	78155	38700				
VHO-525	.168	.134	15000	.271	.024	.455		.408	.±.009	.198	.±.009	.156	.+.020 -.005	.886	94091	40300				
VHO-537	.168	.134	15000	.273	.024	.455		.408		.198		.156		.893	96324	41500				
VHO-550	.168	.134	15000	.273	.024	.455		.408		.198		.156		.879	98658	42500				
VHO-575	.168	.134	15000	.277	.025	.455		.408		.198		.156		.905	103124	45100				
VHO-600	.168	.134	15000	.280	.025	.435		.435		.198		.156		.929	107489	47600				
VHO-625	.177	.142	23000	.294	.026	.485		.423		.211		.187		.956	139766	52000				
VHO-650	.181	.145	23000	.306	.027	.485		.438		.219		.187		1.040	145450	56200				
VHO-662	.183	.146	23000	.312	.028	.485		.447		.221		.187		1.063	148190	58400				
VHO-675	.188	.150	23000	.318	.028	.530		.456		.224		.187		.985	151032	60700				
VHO-700	.196	.157	23000	.330	.029	.515		.515		.232		.187		1.037	156615	65300				
VHO-725	.202	.162	34000	.343	.031	.560		.489		.238		.187		1.085	194373	70400				
VHO-750	.208	.166	34000	.355	.032	.560	.±.010	.507		.247		.187		1.138	201173	75400				
VHO-775	.214	.171	34000	.367	.033	.560		.523		.255		.187		1.178	207872	80500				
VHO-800	.220	.176	34000	.379	.034	.600		.540		.262		.187		1.238	214571	85800				
VHO-825	.229	.183	34000	.391	.035	.600		.558		.270	.±.010	.187		1.269	221270	91300				
VHO-850	.235	.188	34000	.405	.036	.660		.573	.±.010	.277		.187		1.444	227969	97300				
VHO-875	.241	.193	34000	.417	.037	.660		.591		.286		.187		1.481	233856	103200				
VHO-900	.249	.199	34000	.429	.038	.660		.609		.294		.187		1.539	241367	109200				
VHO-925	.253	.202	34000	.441	.039	.660		.625		.299		.187		1.559	248066	115300				
VHO-950	.258	.206	34000	.454	.041	.735		.642		.304		.187		1.596	254765	122100				
VHO-975	.263	.210	34000	.466	.042	.735		.658		.309		.187		1.680	261464	128600				
VHO-1000	.270	.216	34000	.478	.043	.735		.675		.315		.187		1.687	268163	135300				

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

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

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
VHO	100&102	30N	63-69.5
	106& over	C	44-51

**TABLE 2: HARDNESS RANGES-ROTOR CLIP**  
BERYLLIUM COPPER RINGS

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
VHO	100&102	30N	54-62
	106& over	C	34-43

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

RING	SIZE RANGE	SCALE	ROCKWELL HARDNESS
VHO	100&102	30N	66-71
	106-347	C	47-52
	350-700	C	44-51
	725-1000	C	40-47