

ENDURAKOTE® Plating for Corrosion-Resistant Bearings (Series L, N)

Introduction

ENDURAKOTE® plating protects bearings from corrosion and provides substantial life improvements in hostile environments. ENDURAKOTE® plating is applied over conventional bearing materials such as AISI 52100 steel, and offers the benefit of corrosion resistance normally found only in stainless steel bearings. The coating is applied to each entire bearing race ring, including the paths, thus leaving no area exposed. Other commercial chrome or cadmium coatings normally accepted and used cannot be applied to the path due to the rolling contact stresses. ENDURAKOTE® plating is hard chromium, electrodeposited by a proprietary process which achieves a true molecular bond, and will not flake or peel even under the high contact stresses experienced in the bearing paths.

Laboratory and field testing results have proven the benefits of this process. Severe salt spray testing has shown that bearings with ENDURAKOTE® plating withstand corrosion as well as or better than AISI 440C stainless steel. The hard, dense exterior surface formed by the coating is extremely wear resistant and is excellent in the retention of the lubricant film. Conventional life testing of AISI 52100 steel bearings with ENDURAKOTE® plating has shown that no life de-rating is necessary. In fact, the extremely hard surface of ENDURAKOTE® plating protects the bearing from surface generated damage which can promote premature failure. Since the coating is capable of withstanding extremely high temperatures, the bearings are limited by the bearing materials or lubricant used.

The coating used for ENDURAKOTE® plating can be applied to any type of bearing and to most bearing materials. Its primary advantage is to utilize stock materials such as AISI 52100, etc. with their economies, and convert them to wear and corrosion resistant bearings. This is particularly beneficial for larger diameter bearings or where quick delivery is critical. Thus, cost savings can be achieved over more exotic or specialized materials. Also, stock bearings can have ENDURAKOTE® plating applied for quick delivery.

The net result is that we can offer bearings with the capacity of conventional bearing steels and the corrosion resistance of AISI 440C stainless steel from standard AISI 52100 stock components.

Application

ENDURAKOTE® plating provides corrosion resistance and is effective in increasing wear resistance in sliding surface contacts such as the lands where the cage pilots. The micro-surface composition of ENDURAKOTE® plating aids in lubricant dispersion, enhancing base metals to the degree of reducing or eliminating galling, seizing, and high friction, over a wide range of installations and environments.

Advantages

ENDURAKOTE® plating effects a buildup of less than .0002 under normal circumstances. Thus, it can often be applied to stock bearing components which have been specially selected. ENDURAKOTE® plating is compatible with most ferrous and nonferrous metal, allowing maximum flexibility in selection of base material. ENDURAKOTE® plating is normally a final process, and its quality is constant with any given base metal, insuring design reproducibility.

Properties and Characteristics

A. Hardness

ENDURAKOTE® plating, as deposited, has an equivalent hardness in excess of 70 Rockwell "C." When measured by conventional micro-hardness methods, the host material will modify this measurement to some degree.

B. Coefficient of Friction

(Note: Measurements made at 72°F, using other materials for comparison.)

Material	Against Material	Static	—	Sliding
Steel	Steel	0.30	—	0.20
Steel	Brass, Bronze	0.25	—	0.20
Steel	ENDURAKOTE® plating	0.17	—	0.16
Brass, Bronze	ENDURAKOTE® plating	0.15	—	0.13
ENDURAKOTE® plating	ENDURAKOTE® plating	0.14	—	0.12

ENDURAKOTE® Plating (continued)**C. Adhesion**

ENDURAKOTE® plating will not flake, crack, chip, peel or otherwise separate from the base material under standard bend tests or under conditions where severe heat is induced. The adherence is adequate to withstand the extremely high compressive stresses in the contact areas of ball and roller bearings.

D. Effect On Base

The purity of the chromium surface will not be less than 99% as deposited. A comprehensive testing program at KAYDON established that bearings with ENDURAKOTE® plating exhibited load carrying capacities and life expectancy equal to or better than uncoated AISI 52100 steel bearings.

E. Corrosion Resistance

ENDURAKOTE® plating resists attack by most organic and inorganic compounds with a pH within the range of 4 and 11, except sulfuric and hydrochloric acids. Porosity of the base metal, compound concentration and exposure time to the compound become corrosion factors, but ENDURAKOTE® plating greatly enhances the base material. In severe salt spray tests as well as tap water immersion tests, AISI 52100 steel with ENDURAKOTE® plating proved equal to fully hardened AISI 440C stainless steel in resistance to rusting. In many instances, ENDURAKOTE® plating is better for corrosion protection than cadmium plate, zinc plate, phosphates, chromates, black oxide or normal chrome plate. We invite inquiries about and will be pleased to arrange tests to qualify ENDURAKOTE® plating for specific environments.

F. Heat Resistance

REALI-SLIM® bearings with ENDURAKOTE® plating are designed to maintain their operating characteristics over a temperature range from -65°F to 250°F.

G. Surface Quality

ENDURAKOTE® plating conforms to the texture of the existing surface. Ra finish will be improved slightly down to about 8 Ra; below 4 Ra there is little change. ENDURAKOTE® plating has a matte or micro-orange peel surface with very good lubricant retention qualities.

H. Food Industries

ENDURAKOTE® plating is used on food processing equipment.

I. Load Capacity

ENDURAKOTE® plating does not affect the static or dynamic load capacity of the bearing. These values can be found by looking up the corresponding part number starting with "K" in the standard REALI-SLIM® bearing tables.

Bearing Size Capabilities

ENDURAKOTE® plating can be applied to any REALI-SLIM® bearing.

Restrictions

KAYDON does not recommend the use of ENDURAKOTE® plating in any low torque or torque-sensitive applications.

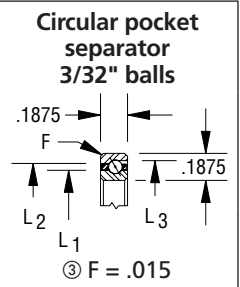
Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearing Selections

Type A Angular Contact

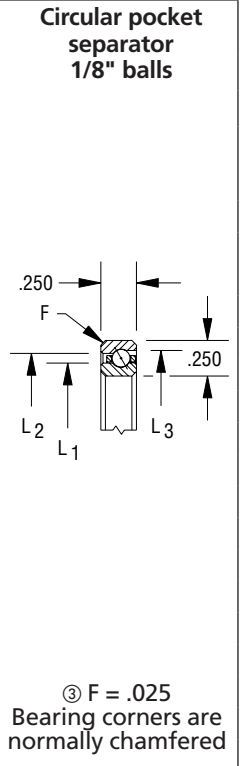
A deep groove bearing with reduced shoulder on one side of inner or outer race ball path. Snapover assembly permits use of a one-piece circular pocket separator and greater ball complement. These bearings will accept radial load and single direction thrust load and are normally used in conjunction with another bearing of similar construction. Type A bearings require the

application of thrust to establish contact angle. Stock bearings are individual units and when purchased as such must be adjusted at installation to desired running clearance or preload. Matched sets are available. KAYDON also offers matched spacers for applications requiring extra precision.

NAA SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NAA10AG0	1.0000	1.3752	1.140	1.235	1.274	340	194	970	450	.025
*NAA15AG0	1.5000	1.8752	1.640	1.735	1.774	480	238	1,380	560	.038
*NAA17AG0	1.7500	2.1252	1.890	1.985	2.024	530	251	1,520	600	.045



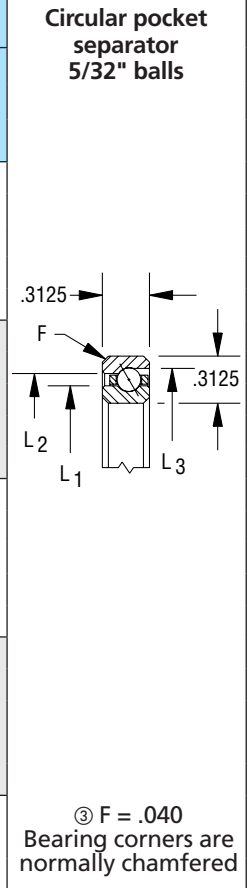
NA SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NA020AR0	2.0000	2.5002	2.186	2.314	2.369	790	405	2,280	960	.10
*NA025AR0	2.5000	3.0002	2.686	2.814	2.869	960	459	2,780	1,100	.12
*NA030AR0	3.0000	3.5002	3.186	3.314	3.367	1,140	507	3,290	1,230	.14
*NA035AR0	3.5000	4.0002	3.686	3.814	3.867	1,310	552	3,790	1,350	.17
*NA040AR0	3.9998	4.5003	4.186	4.314	4.367	1,490	595	4,300	1,470	.19
*NA042AR0	4.2498	4.7503	4.436	4.564	4.615	1,580	616	4,550	1,530	.20
*NA045AR0	4.4998	5.0003	4.686	4.814	4.865	1,660	637	4,810	1,580	.21
*NA047AR0	4.7498	5.2503	4.936	5.064	5.115	1,750	657	5,060	1,640	.22
*NA050AR0	4.9998	5.5003	5.186	5.314	5.365	1,840	676	5,310	1,690	.23
*NA055AR0	5.4998	6.0003	5.686	5.814	5.863	2,020	715	5,820	1,800	.25
*NA060AR0	5.9998	6.5003	6.186	6.314	6.363	2,190	752	6,320	1,900	.28
*NA065AR0	6.4998	7.0003	6.686	6.814	6.861	2,370	788	6,830	2,000	.30
*NA070AR0	6.9998	7.5003	7.186	7.314	7.361	2,540	823	7,340	2,100	.32
*NA075AR0	7.4998	8.0003	7.686	7.814	7.861	2,720	857	7,840	2,190	.34
*NA080AR0	7.9998	8.5003	8.186	8.314	8.359	2,890	890	8,350	2,280	.36
*NA090AR0	8.9998	9.5003	9.186	9.314	9.357	3,240	954	9,360	2,470	.41
*NA100AR0	9.9998	10.5003	10.186	10.314	10.355	3,590	1,014	10,370	2,640	.45
*NA110AR0	10.9998	11.5003	11.186	11.314	11.353	3,940	1,072	11,380	2,810	.50
*NA120AR0	11.9998	12.5003	12.186	12.314	12.349	4,290	1,128	12,390	2,970	.54



① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type A Angular Contact

NB SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NB020AR0	2.0000	2.6252	2.231	2.393	2.464	1,090	601	3,150	1,380	.15
*NB025AR0	2.5000	3.1252	2.731	2.893	2.964	1,340	675	3,860	1,590	.19
*NB030AR0	3.0000	3.6252	3.231	3.393	3.462	1,550	734	4,470	1,750	.22
*NB035AR0	3.5000	4.1252	3.731	3.893	3.962	1,790	801	5,180	1,930	.27
*NB040AR0	3.9998	4.6253	4.231	4.393	4.460	2,040	865	5,890	2,100	.30
*NB042AR0	4.2498	4.8753	4.481	4.643	4.710	2,150	891	6,200	2,170	.31
*NB045AR0	4.4998	5.1253	4.731	4.893	4.960	2,250	917	6,500	2,240	.34
*NB047AR0	4.7498	5.3753	4.981	5.143	5.210	2,390	951	6,910	2,340	.35
*NB050AR0	4.9998	5.6253	5.231	5.393	5.460	2,500	976	7,210	2,410	.37
*NB055AR0	5.4998	6.1253	5.731	5.893	5.958	2,740	1,033	7,920	2,560	.40
*NB060AR0	5.9998	6.6253	6.231	6.393	6.458	2,990	1,088	8,630	2,710	.44
*NB065AR0	6.4998	7.1253	6.731	6.893	6.958	3,200	1,132	9,240	2,840	.47
*NB070AR0	6.9998	7.6253	7.231	7.393	7.456	3,450	1,184	9,960	2,980	.50
*NB075AR0	7.4998	8.1253	7.731	7.893	7.955	3,700	1,235	10,670	3,120	.54
*NB080AR0	7.9998	8.6253	8.231	8.393	8.453	3,940	1,284	11,380	3,260	.57
*NB090AR0	8.9998	9.6253	9.231	9.393	9.451	4,400	1,370	12,700	3,510	.64
*NB100AR0	9.9998	10.6253	10.231	10.393	10.449	4,890	1,461	14,120	3,760	.71
*NB110AR0	10.9998	11.6253	11.231	11.393	11.447	5,350	1,540	15,440	4,000	.78
*NB120AR0	11.9998	12.6253	12.231	12.393	12.445	5,840	1,623	16,860	4,240	.85
*NB140AR0	13.9998	14.6253	14.231	14.393	14.439	6,760	1,767	19,500	4,670	.98
*NB160AR0	15.9998	16.6253	16.231	16.393	16.433	7,710	1,907	22,250	5,100	1.12
*NB180AR0	17.9998	18.6253	18.231	18.393	18.425	8,660	2,038	24,990	5,510	1.26
*NB200AR0	19.9998	20.6253	20.231	20.393	20.416	9,610	2,162	27,730	5,900	1.40



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 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

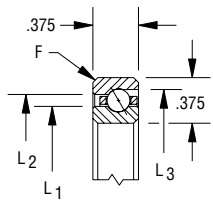
CONTACT KAYDON AT—
 KAYDON Corporation • Muskegon, Michigan 49443
 Telephone: 231/755-3741 • Fax: 231/759-4102

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 Website: www.kaydonbearings.com

Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type A Angular Contact

NC SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NC040AR0	3.9998	4.7503	4.277	4.473	4.554	2,550	1,153	7,360	2,770	.44
*NC042AR0	4.2498	5.0003	4.527	4.723	4.804	2,710	1,194	7,820	2,880	.46
*NC045AR0	4.4998	5.2503	4.777	4.973	5.052	2,860	1,234	8,270	2,990	.49
*NC047AR0	4.7498	5.5003	5.027	5.223	5.302	3,020	1,274	8,720	3,100	.51
*NC050AR0	4.9998	5.7503	5.277	5.473	5.552	3,180	1,313	9,170	3,200	.54
*NC055AR0	5.4998	6.2503	5.777	5.973	6.052	3,440	1,374	9,920	3,370	.58
*NC060AR0	5.9998	6.7503	6.277	6.473	6.550	3,750	1,448	10,820	3,580	.64
*NC065AR0	6.4998	7.2503	6.777	6.973	7.050	4,060	1,519	11,720	3,770	.68
*NC070AR0	6.9998	7.7503	7.277	7.473	7.550	4,320	1,575	12,470	3,930	.74
*NC075AR0	7.4998	8.2503	7.777	7.973	8.048	4,630	1,642	13,380	4,120	.78
*NC080AR0	7.9998	8.7503	8.277	8.473	8.548	4,950	1,708	14,280	4,300	.84
*NC090AR0	8.9998	9.7503	9.277	9.473	9.546	5,520	1,822	15,930	4,630	.98
*NC100AR0	9.9998	10.7503	10.277	10.473	10.544	6,140	1,942	17,730	4,970	1.04
*NC110AR0	10.9998	11.7503	11.277	11.473	11.542	6,720	2,047	19,390	5,280	1.14
*NC120AR0	11.9998	12.7503	12.277	12.473	12.540	7,290	2,147	21,040	5,570	1.23
*NC140AR0	13.9998	14.7503	14.277	14.473	14.535	8,490	2,347	24,500	6,170	1.43
*NC160AR0	15.9998	16.7503	16.277	16.473	16.529	9,680	2,533	27,950	6,730	1.63
*NC180AR0	17.9998	18.7503	18.277	18.473	18.523	10,880	2,707	31,410	7,280	1.83
*NC200AR0	19.9998	20.7503	20.277	20.473	20.517	12,030	2,863	34,720	7,780	2.03
*NC250AR0	24.9998	25.7503	25.277	25.473	25.500	14,900	3,233	43,280	9,010	2.52
*NC300AR0	29.9998	30.7503	30.277	30.473	30.484	17,960	3,561	51,850	10,160	3.02

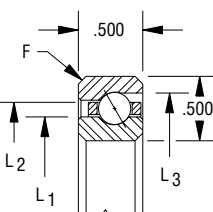
Circular pocket separator
3/16" balls



③ F = .040
Bearing corners are normally chamfered

ND SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*ND040AR0	3.9998	5.0003	4.370	4.630	4.741	3,550	1,819	10,260	4,260	.80
*ND042AR0	4.2498	5.2503	4.620	4.880	4.991	3,750	1,876	10,830	4,420	.84
*ND045AR0	4.4998	5.5003	4.870	5.130	5.241	3,950	1,931	11,400	4,570	.88
*ND047AR0	4.7498	5.7503	5.120	5.380	5.490	4,150	1,986	11,970	4,720	.93
*ND050AR0	4.9998	6.0003	5.370	5.630	5.740	4,340	2,040	12,540	4,870	.98
*ND055AR0	5.4998	6.5003	5.870	6.130	6.238	4,740	2,145	13,680	5,160	1.06
*ND060AR0	5.9998	7.0003	6.370	6.630	6.738	5,130	2,247	14,820	5,440	1.15
*ND065AR0	6.4998	7.5003	6.870	7.130	7.236	5,530	2,346	15,960	5,720	1.24
*ND070AR0	6.9998	8.0003	7.370	7.630	7.736	5,920	2,442	17,100	5,990	1.33
*ND075AR0	7.4998	8.5003	7.870	8.130	8.236	6,320	2,536	18,240	6,250	1.42
*ND080AR0	7.9998	9.0003	8.370	8.630	8.734	6,710	2,627	19,380	6,510	1.52
*ND090AR0	8.9998	10.0003	9.370	9.630	9.732	7,500	2,803	21,660	7,010	1.69
*ND100AR0	9.9998	11.0003	10.370	10.630	10.732	8,290	2,972	23,940	7,500	1.87
*ND110AR0	10.9998	12.0003	11.370	11.630	11.730	9,080	3,133	26,220	7,960	2.05
*ND120AR0	11.9998	13.0003	12.370	12.630	12.728	9,870	3,288	28,500	8,420	2.23
*ND140AR0	13.9998	15.0003	14.370	14.630	14.724	11,450	3,582	33,060	9,290	2.57
*ND160AR0	15.9998	17.0003	16.370	16.630	16.718	13,030	3,856	37,620	10,130	2.93
*ND180AR0	17.9998	19.0003	18.370	18.630	18.712	14,610	4,113	42,180	10,930	3.29
*ND200AR0	19.9998	21.0003	20.370	20.630	20.705	16,190	4,356	46,740	11,710	3.65
*ND210AR0	20.9998	22.0003	21.370	21.630	21.700	16,981	4,472	49,020	12,086	3.83
*ND250AR0	24.9998	26.0003	25.370	25.630	25.688	20,140	4,908	58,140	13,540	4.54
*ND300AR0	29.9998	31.0003	30.370	30.630	30.672	24,090	5,397	69,540	15,260	5.44

Circular pocket separator
1/4" balls



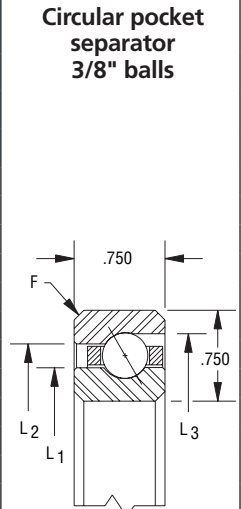
③ F = .060
Bearing corners are normally chamfered

① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type A Angular Contact

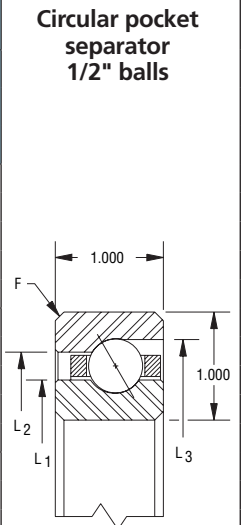
Section 2-Selection Tables

NF SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NF040AR0	3.9998	5.5003	4.555	4.945	5.115	6,350	3,736	18,340	8,420	1.92
*NF042AR0	4.2498	5.7503	4.805	5.195	5.365	6,600	3,805	19,050	8,630	2.04
*NF045AR0	4.4998	6.0003	5.060	5.445	5.615	7,090	3,966	20,460	9,050	2.14
*NF047AR0	4.7498	6.2503	5.305	5.695	5.865	7,330	4,034	21,160	9,260	2.26
*NF050AR0	4.9998	6.5003	5.555	5.945	6.115	7,570	4,101	21,870	9,460	2.37
*NF055AR0	5.4998	7.0003	6.055	6.445	6.613	8,310	4,319	23,980	10,060	2.59
*NF060AR0	5.9998	7.5003	6.555	6.945	7.113	9,040	4,530	26,100	10,650	2.72
*NF065AR0	6.4998	8.0003	7.055	7.445	7.613	9,770	4,734	28,220	11,220	2.94
*NF070AR0	6.9998	8.5003	7.555	7.945	8.113	10,510	4,932	30,330	11,770	3.16
*NF075AR0	7.4998	9.0003	8.055	8.445	8.610	11,000	5,052	31,740	12,130	3.39
*NF080AR0	7.9998	9.5003	8.555	8.945	9.110	11,730	5,242	33,860	12,670	3.61
*NF090AR0	8.9998	10.5003	9.555	9.945	10.108	13,190	5,608	38,090	13,700	3.95
*NF100AR0	9.9998	11.5003	10.555	10.945	11.106	14,420	5,890	41,620	14,530	4.40
*NF110AR0	10.9998	12.5003	11.555	11.945	12.106	15,880	6,227	45,850	15,500	4.75
*NF120AR0	11.9998	13.5003	12.555	12.945	13.104	17,100	6,487	49,380	16,290	5.20
*NF140AR0	13.9998	15.5003	14.555	14.945	15.102	19,790	7,043	57,140	17,950	5.76
*NF160AR0	15.9998	17.5003	16.555	16.945	17.098	22,480	7,563	64,890	19,540	6.78
*NF180AR0	17.9998	19.5003	18.555	18.945	19.096	25,410	8,103	73,360	21,210	7.67
*NF200AR0	19.9998	21.5003	20.555	20.945	21.092	28,100	8,562	81,120	22,680	8.47
*NF250AR0	24.9998	26.5003	25.555	25.945	26.085	34,700	9,585	100,200	26,100	10.50
*NF300AR0	29.9998	31.5003	30.555	30.945	31.075	41,540	10,533	119,900	29,430	12.50
*NF350AR0	34.9998	36.5003	35.555	35.945	36.064	48,380	11,382	139,700	32,580	14.60
*NF400AR0	39.9998	41.5003	40.555	40.945	41.054	55,220	12,147	159,400	35,580	16.60



③ F = .080
Bearing corners are normally chamfered

NG SERIES										
KAYDON Bearing Number	Dimensions in Inches					Capacities in Pounds ^①				Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	C'Bore Dia. L ₃	Radial		Thrust		
						Static ^②	Dyn.	Static ^②	Dyn.	
*NG040AR0	3.9998	6.0003	4.742	5.258	5.491	9,480	6,281	27,360	13,630	3.61
*NG042AR0	4.2498	6.2503	4.992	5.508	5.741	9,950	6,438	28,730	14,090	3.83
*NG045AR0	4.4998	6.5003	5.242	5.758	5.989	10,430	6,562	30,100	14,530	3.95
*NG047AR0	4.7498	6.7503	5.492	6.008	6.239	10,900	6,745	31,460	14,970	4.17
*NG050AR0	4.9998	7.0003	5.742	6.258	6.489	11,370	6,897	32,830	15,400	4.42
*NG055AR0	5.4998	7.5003	6.242	6.758	6.989	12,320	7,192	35,570	16,240	4.73
*NG060AR0	5.9998	8.0003	6.742	7.258	7.489	13,270	7,480	38,300	17,060	5.07
*NG065AR0	6.4998	8.5003	7.242	7.758	7.987	14,220	7,761	41,040	17,870	5.41
*NG070AR0	6.9998	9.0003	7.742	8.258	8.487	15,160	8,035	43,780	18,650	5.87
*NG075AR0	7.4998	9.5003	8.242	8.758	8.987	16,110	8,303	46,510	19,420	6.20
*NG080AR0	7.9998	10.0003	8.742	9.258	9.485	17,060	8,566	49,250	20,180	6.54
*NG090AR0	8.9998	11.0003	9.742	10.258	10.485	18,960	9,073	54,720	21,640	7.22
*NG100AR0	9.9998	12.0003	10.742	11.258	11.483	20,850	9,561	60,190	23,060	8.00
*NG110AR0	10.9998	13.0003	11.742	12.258	12.481	22,750	10,027	65,660	24,440	8.68
*NG120AR0	11.9998	14.0003	12.742	13.258	13.481	24,640	10,481	71,140	25,780	9.47
*NG140AR0	13.9998	16.0003	14.742	15.258	15.478	28,430	11,338	82,080	28,360	10.90
*NG160AR0	15.9998	18.0003	16.742	17.258	17.474	32,220	12,142	93,020	30,830	12.40
*NG180AR0	17.9998	20.0003	18.742	19.258	19.472	36,020	12,898	104,000	33,200	13.80
*NG200AR0	19.9998	22.0003	20.742	21.258	21.468	39,810	13,612	114,900	35,490	15.20
*NG220AR0	21.9998	24.0003	22.742	23.258	23.468	43,598	14,290	125,856	37,712	16.63
*NG250AR0	24.9998	27.0003	25.742	26.258	26.461	49,280	15,239	142,300	40,920	18.80
*NG300AR0	29.9998	32.0003	30.742	31.258	31.451	58,760	16,687	169,600	46,020	22.50
*NG350AR0	34.9998	37.0003	35.742	36.258	36.440	68,240	17,982	197,000	50,840	26.20
*NG400AR0	39.9998	42.0003	40.742	41.258	41.430	77,720	19,153	224,400	55,440	29.80



③ F = .080
Bearing corners are normally chamfered

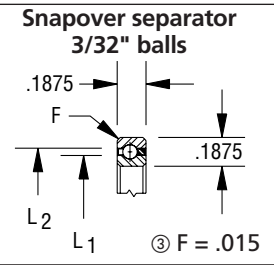
① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearing Selections

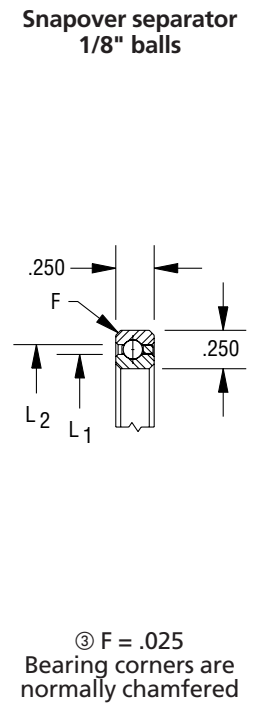
Type C Radial Contact

A Conrad assembled bearing designed primarily for application of radial load—deep ball grooves also permit application of thrust load in either direction – often used in conjunction with another bearing.

NAA SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NAA10CLO	1.0000	1.3752	1.140	1.235	290	188	.026
*NAA15CLO	1.5000	1.8752	1.640	1.735	400	225	.039
*NAA17CLO	1.7500	2.1252	1.890	1.985	460	242	.045



NA SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NA020CP0	2.0000	2.5002	2.186	2.314	680	393	.10
*NA025CP0	2.5000	3.0002	2.686	2.814	830	442	.13
*NA030CP0	3.0000	3.5002	3.186	3.314	990	487	.15
*NA035CP0	3.5000	4.0002	3.686	3.814	1,140	530	.18
*NA040CP0	3.9998	4.5003	4.186	4.314	1,290	571	.19
*NA042CP0	4.2498	4.7503	4.436	4.564	1,370	591	.20
*NA045CP0	4.4998	5.0003	4.686	4.814	1,440	610	.22
*NA047CP0	4.7498	5.2503	4.936	5.064	1,520	629	.23
*NA050CP0	4.9998	5.5003	5.186	5.314	1,590	648	.24
*NA055CP0	5.4998	6.0003	5.686	5.814	1,750	685	.25
*NA060CP0	5.9998	6.5003	6.186	6.314	1,900	720	.28
*NA065CP0	6.4998	7.0003	6.686	6.814	2,050	754	.30
*NA070CP0	6.9998	7.5003	7.186	7.314	2,200	787	.31
*NA075CP0	7.4998	8.0003	7.686	7.814	2,350	820	.34
*NA080CP0	7.9998	8.5003	8.186	8.314	2,500	851	.38
*NA090CP0	8.9998	9.5003	9.186	9.314	2,810	912	.44
*NA100CP0	9.9998	10.5003	10.186	10.314	3,110	969	.50
*NA110CP0	10.9998	11.5003	11.186	11.314	3,410	1,025	.52
*NA120CP0	11.9998	12.5003	12.186	12.314	3,720	1,078	.56



① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.

② Static capacities are non-brinell limits based on rigid support from the shaft and housing.

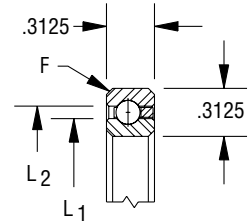
③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.

* Contact KAYDON for lead time and minimum purchase requirement.

Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type C Radial Contact

NB SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NB020CP0	2.0000	2.6252	2.231	2.393	930	577	.16
*NB025CP0	2.5000	3.1252	2.731	2.893	1,140	644	.20
*NB030CP0	3.0000	3.6252	3.231	3.393	1,340	707	.24
*NB035CP0	3.5000	4.1252	3.731	3.893	1,540	767	.27
*NB040CP0	3.9998	4.6253	4.231	4.393	1,750	825	.30
*NB042CP0	4.2498	4.8753	4.481	4.643	1,830	846	.31
*NB045CP0	4.4998	5.1253	4.731	4.893	1,950	880	.33
*NB047CP0	4.7498	5.3753	4.981	5.143	2,030	901	.34
*NB050CP0	4.9998	5.6253	5.231	5.393	2,150	933	.38
*NB055CP0	5.4998	6.1253	5.731	5.893	2,360	984	.41
*NB060CP0	5.9998	6.6253	6.231	6.393	2,560	1,034	.44
*NB065CP0	6.4998	7.1253	6.731	6.893	2,760	1,082	.47
*NB070CP0	6.9998	7.6253	7.231	7.393	2,970	1,129	.50
*NB075CP0	7.4998	8.1253	7.731	7.893	3,170	1,175	.53
*NB080CP0	7.9998	8.6253	8.231	8.393	3,370	1,219	.57
*NB090CP0	8.9998	9.6253	9.231	9.393	3,780	1,304	.66
*NB100CP0	9.9998	10.6253	10.231	10.393	4,190	1,386	.73
*NB110CP0	10.9998	11.6253	11.231	11.393	4,590	1,464	.75
*NB120CP0	11.9998	12.6253	12.231	12.393	5,000	1,539	.83
*NB140CP0	13.9998	14.6253	14.231	14.393	5,810	1,680	1.05
*NB160CP0	15.9998	16.6253	16.231	16.393	6,620	1,812	1.20
*NB180CP0	17.9998	18.6253	18.231	18.393	7,440	1,936	1.35
*NB200CP0	19.9998	20.6253	20.231	20.393	8,250	2,053	1.50

Snapover separator
5/32" balls



③ F = .040
Bearing corners are normally chamfered

- ① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
- ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
- ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
- * Contact KAYDON for lead time and minimum purchase requirement.

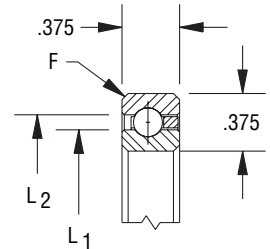
CONTACT KAYDON AT—
 KAYDON Corporation • Muskegon, Michigan 49443
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Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type C Radial Contact

NC SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NC040CP0	3.9998	4.7503	4.277	4.473	2,100	1,073	.45
*NC042CP0	4.2498	5.0003	4.527	4.723	2,220	1,108	.47
*NC045CP0	4.4998	5.2503	4.777	4.973	2,340	1,143	.48
*NC047CP0	4.7498	5.5003	5.027	5.223	2,460	1,176	.50
*NC050CP0	4.9998	5.7503	5.277	5.473	2,590	1,209	.58
*NC055CP0	5.4998	6.2503	5.777	5.973	2,830	1,274	.59
*NC060CP0	5.9998	6.7503	6.277	6.473	3,070	1,337	.63
*NC065CP0	6.4998	7.2503	6.777	6.973	3,310	1,397	.68
*NC070CP0	6.9998	7.7503	7.277	7.473	3,550	1,457	.73
*NC075CP0	7.4998	8.2503	7.777	7.973	3,790	1,514	.78
*NC080CP0	7.9998	8.7503	8.277	8.473	4,030	1,570	.84
*NC090CP0	8.9998	9.7503	9.277	9.473	4,510	1,678	.94
*NC100CP0	9.9998	10.7503	10.277	10.473	4,990	1,781	1.06
*NC110CP0	10.9998	11.7503	11.277	11.473	5,470	1,879	1.16
*NC120CP0	11.9998	12.7503	12.277	12.473	5,950	1,974	1.25
*NC140CP0	13.9998	14.7503	14.277	14.473	6,910	2,154	1.52
*NC160CP0	15.9998	16.7503	16.277	16.473	7,880	2,321	1.73
*NC180CP0	17.9998	18.7503	18.277	18.473	8,840	2,478	1.94
*NC200CP0	19.9998	20.7503	20.277	20.473	9,800	2,626	2.16
*NC250CP0	24.9998	25.7503	25.277	25.473	12,200	2,962	2.69
*NC300CP0	29.9998	30.7503	30.277	30.473	14,610	3,260	3.21

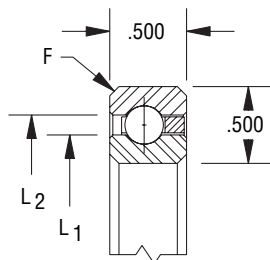
Snapover separator
3/16" balls



③ F = .040
Bearing corners are normally chamfered

ND SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*ND040CP0	3.9998	5.0003	4.370	4.630	3,080	1,755	.78
*ND042CP0	4.2498	5.2503	4.620	4.880	3,190	1,787	.83
*ND045CP0	4.4998	5.5003	4.870	5.130	3,420	1,861	.88
*ND047CP0	4.7498	5.7503	5.120	5.380	3,530	1,892	.94
*ND050CP0	4.9998	6.0003	5.370	5.630	3,760	1,964	1.00
*ND055CP0	5.4998	6.5003	5.870	6.130	4,100	2,063	1.06
*ND060CP0	5.9998	7.0003	6.370	6.630	4,450	2,160	1.16
*ND065CP0	6.4998	7.5003	6.870	7.130	4,790	2,254	1.22
*ND070CP0	6.9998	8.0003	7.370	7.630	5,130	2,345	1.31
*ND075CP0	7.4998	8.5003	7.870	8.130	5,470	2,434	1.41
*ND080CP0	7.9998	9.0003	8.370	8.630	5,810	2,520	1.53
*ND090CP0	8.9998	10.0003	9.370	9.630	6,500	2,688	1.72
*ND100CP0	9.9998	11.0003	10.370	10.630	7,180	2,847	1.88
*ND110CP0	10.9998	12.0003	11.370	11.630	7,870	3,000	2.06
*ND120CP0	11.9998	13.0003	12.370	12.630	8,550	3,148	2.25
*ND140CP0	13.9998	15.0003	14.370	14.630	9,920	3,427	2.73
*ND160CP0	15.9998	17.0003	16.370	16.630	11,290	3,688	3.10
*ND180CP0	17.9998	19.0003	18.370	18.630	12,650	3,933	3.48
*ND200CP0	19.9998	21.0003	20.370	20.630	14,020	4,164	3.85
*ND210CP0	20.9998	22.0003	21.370	21.630	14,706	4,274	4.04
*ND250CP0	24.9998	26.0003	25.370	25.630	17,440	4,689	4.79
*ND300CP0	29.9998	31.0003	30.370	30.360	20,860	5,153	5.73

Snapover separator
1/4" balls



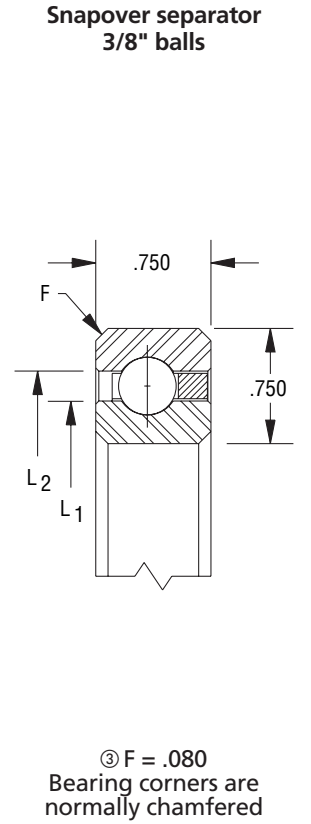
③ F = .060
Bearing corners are normally chamfered

① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

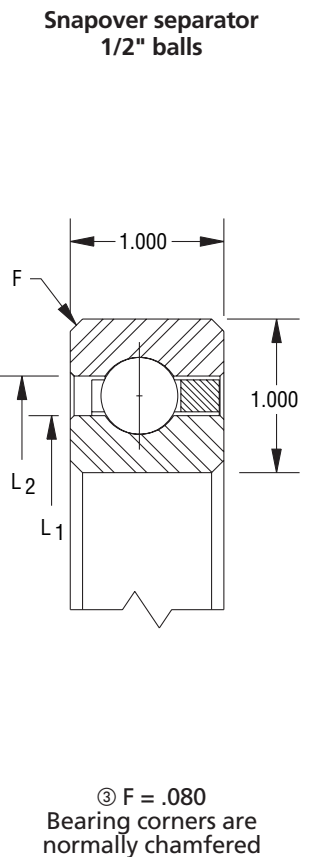
Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type C Radial Contact

Section 2 - Selection Tables

NF SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NF040CP0	3.9998	5.5003	4.555	4.945	5,360	3,559	1.9
*NF042CP0	4.2498	5.7503	4.805	5.195	5,640	3,655	2.0
*NF045CP0	4.4998	6.0003	5.055	5.445	5,930	3,750	2.1
*NF047CP0	4.7498	6.2503	5.305	5.695	6,210	3,843	2.2
*NF050CP0	4.9998	6.5003	5.555	5.945	6,490	3,936	2.3
*NF055CP0	5.4998	7.0003	6.055	6.445	7,050	4,116	2.5
*NF060CP0	5.9998	7.5003	6.555	6.945	7,620	4,291	2.7
*NF065CP0	6.4998	8.0003	7.055	7.445	8,180	4,461	2.9
*NF070CP0	6.9998	8.5003	7.555	7.945	8,750	4,628	3.2
*NF075CP0	7.4998	9.0003	8.055	8.445	9,310	4,791	3.4
*NF080CP0	7.9998	9.5003	8.555	8.945	9,880	4,949	3.5
*NF090CP0	8.9998	10.5003	9.555	9.945	11,000	5,256	3.9
*NF100CP0	9.9998	11.5003	10.555	10.945	12,130	5,550	4.3
*NF110CP0	10.9998	12.5003	11.555	11.945	13,260	5,833	4.8
*NF120CP0	11.9998	13.5003	12.555	12.945	14,390	6,105	5.2
*NF140CP0	13.9998	15.5003	14.555	14.945	16,650	6,620	6.0
*NF160CP0	15.9998	17.5003	16.555	16.945	18,900	7,104	7.1
*NF180CP0	17.9998	19.5003	18.555	18.945	21,160	7,557	7.9
*NF200CP0	19.9998	21.5003	20.555	20.945	23,420	7,986	8.9
*NF250CP0	24.9998	26.5003	25.555	25.945	29,060	8,963	10.9
*NF300CP0	29.9998	31.5003	30.555	30.945	34,700	9,828	13.0
*NF350CP0	34.9998	36.5003	35.555	35.945	40,350	10,603	15.1
*NF400CP0	39.9998	41.5003	40.555	40.945	45,990	11,302	17.2



NG SERIES							
KAYDON Bearing Number	Dimensions in Inches				Radial Capacities in Pounds ^①		Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Static ^②	Dyn.	
*NG040CP0	3.9998	6.0003	4.742	5.258	8,210	6,115	3.6
*NG042CP0	4.2498	6.2503	4.992	5.508	8,210	6,061	3.8
*NG045CP0	4.4998	6.5003	5.242	5.758	8,760	6,277	4.0
*NG047CP0	4.7498	6.7503	5.492	6.008	9,300	6,487	4.1
*NG050CP0	4.9998	7.0003	5.742	6.258	9,850	6,691	4.3
*NG055CP0	5.4998	7.5003	6.242	6.758	10,400	6,850	4.7
*NG060CP0	5.9998	8.0003	6.742	7.258	11,490	7,241	5.1
*NG065CP0	6.4998	8.5003	7.242	7.758	12,040	7,393	5.4
*NG070CP0	6.9998	9.0003	7.742	8.258	13,130	7,764	5.8
*NG075CP0	7.4998	9.5003	8.242	8.758	13,680	7,911	6.1
*NG080CP0	7.9998	10.0003	8.742	9.258	14,770	8,265	6.5
*NG090CP0	8.9998	11.0003	9.742	10.258	16,420	8,743	7.2
*NG100CP0	9.9998	12.0003	10.742	11.258	18,060	9,204	7.9
*NG110CP0	10.9998	13.0003	11.742	12.258	19,700	9,648	8.6
*NG120CP0	11.9998	14.0003	12.742	13.258	21,340	10,074	9.3
*NG140CP0	13.9998	16.0003	14.742	15.258	24,620	10,886	10.8
*NG160CP0	15.9998	18.0003	16.742	17.258	27,910	11,648	12.3
*NG180CP0	17.9998	20.0003	18.742	19.258	31,190	12,367	13.7
*NG200CP0	19.9998	22.0003	20.742	21.258	34,470	13,044	15.8
*NG220CP0	21.9998	24.0003	22.742	23.258	37,757	13,685	16.8
*NG250CP0	24.9998	27.0003	25.742	26.258	42,680	14,591	19.5
*NG300CP0	29.9998	32.0003	30.742	31.258	50,890	15,963	23.3
*NG350CP0	34.9998	37.0003	35.742	36.258	59,100	17,195	27.1
*NG400CP0	39.9998	42.0003	40.742	41.258	67,310	18,307	30.8



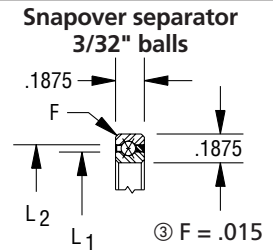
① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
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Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearing Selections

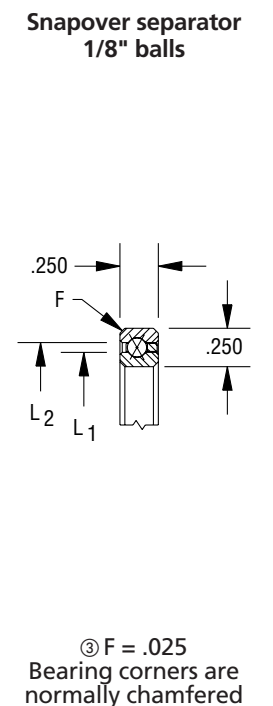
Type X Four-Point Contact

A Conrad-assembled bearing designed for applications involving multiple loads. Unique internal geometry permits application of radial load, thrust load in either direction, and moment load, individually or in any combination. A single four-point contact bearing may replace two bearings in many applications.

NAA SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NAA10XL0	1.0000	1.3752	1.140	1.235	290	247	730	370	170	110	.026
*NAA15XL0	1.5000	1.8752	1.640	1.735	400	296	1,000	460	340	187	.039
*NAA17XL0	1.7500	2.1252	1.890	1.985	460	319	1,140	500	440	232	.045



NA SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NA020XP0	2.0000	2.5002	2.186	2.314	680	514	1,710	790	770	434	.10
*NA025XP0	2.5000	3.0002	2.686	2.814	830	583	2,090	910	1,150	601	.13
*NA030XP0	3.0000	3.5002	3.186	3.314	990	643	2,470	1,010	1,600	785	.15
*NA035XP0	3.5000	4.0002	3.686	3.814	1,140	701	2,850	1,110	2,130	986	.18
*NA040XP0	3.9998	4.5003	4.186	4.314	1,290	756	3,220	1,210	2,740	1,205	.19
*NA042XP0	4.2498	4.7503	4.436	4.564	1,370	783	3,410	1,260	3,070	1,321	.20
*NA045XP0	4.4998	5.0003	4.686	4.814	1,440	809	3,600	1,310	3,420	1,441	.22
*NA047XP0	4.7498	5.2503	4.936	5.064	1,520	834	3,790	1,350	3,790	1,565	.23
*NA050XP0	4.9998	5.5003	5.186	5.314	1,590	859	3,980	1,400	4,180	1,693	.24
*NA055XP0	5.4998	6.0003	5.686	5.814	1,750	908	4,360	1,480	5,020	1,959	.25
*NA060XP0	5.9998	6.5003	6.186	6.314	1,900	955	4,740	1,570	5,930	2,240	.28
*NA065XP0	6.4998	7.0003	6.686	6.814	2,050	1,001	5,120	1,650	6,910	2,535	.30
*NA070XP0	6.9998	7.5003	7.186	7.314	2,200	1,046	5,500	1,730	7,980	2,844	.31
*NA075XP0	7.4998	8.0003	7.686	7.814	2,350	1,089	5,880	1,810	9,120	3,165	.34
*NA080XP0	7.9998	8.5003	8.186	8.314	2,500	1,131	6,260	1,890	10,330	3,499	.38
*NA090XP0	8.9998	9.5003	9.186	9.314	2,810	1,212	7,020	2,040	12,990	4,204	.44
*NA100XP0	9.9998	10.5003	10.186	10.314	3,110	1,289	7,780	2,180	15,940	4,956	.50
*NA110XP0	10.9998	11.5003	11.186	11.314	3,410	1,362	8,540	2,320	19,210	5,750	.52
*NA120XP0	11.9998	12.5003	12.186	12.314	3,720	1,433	9,300	2,450	22,770	6,587	.56

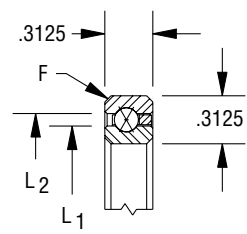


① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
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 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
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Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type X Four-Point Contact

NB SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NB020XP0	2.0000	2.6252	2.231	2.393	930	758	2,340	1,130	1,080	658	.16
*NB025XP0	2.5000	3.1252	2.731	2.893	1,140	848	2,840	1,290	1,600	895	.19
*NB030XP0	3.0000	3.6252	3.231	3.393	1,340	933	3,350	1,440	2,220	1,159	.24
*NB035XP0	3.5000	4.1252	3.731	3.893	1,540	1,014	3,860	1,590	2,940	1,450	.27
*NB040XP0	3.9998	4.6253	4.231	4.393	1,750	1,091	4,370	1,720	3,770	1,764	.30
*NB042XP0	4.2498	4.8753	4.481	4.643	1,830	1,120	4,570	1,780	4,170	1,917	.31
*NB045XP0	4.4998	5.1253	4.731	4.893	1,950	1,165	4,880	1,850	4,690	2,103	.33
*NB047XP0	4.7498	5.3753	4.981	5.143	2,030	1,193	5,080	1,900	5,140	2,265	.34
*NB050XP0	4.9998	5.6253	5.231	5.393	2,150	1,236	5,380	1,980	5,720	2,463	.38
*NB055XP0	5.4998	6.1253	5.731	5.893	2,360	1,304	5,890	2,100	6,850	2,844	.41
*NB060XP0	5.9998	6.6253	6.231	6.393	2,560	1,371	6,400	2,220	8,080	3,247	.44
*NB065XP0	6.4998	7.1253	6.731	6.893	2,760	1,435	6,910	2,340	9,410	3,668	.47
*NB070XP0	6.9998	7.6253	7.231	7.393	2,970	1,498	7,420	2,450	10,850	4,109	.50
*NB075XP0	7.4998	8.1253	7.731	7.893	3,170	1,559	7,920	2,560	12,380	4,568	.53
*NB080XP0	7.9998	8.6253	8.231	8.393	3,370	1,618	8,430	2,670	14,020	5,045	.57
*NB090XP0	8.9998	9.6253	9.231	9.393	3,780	1,732	9,450	2,880	17,600	6,050	.66
*NB100XP0	9.9998	10.6253	10.231	10.393	4,190	1,841	10,460	3,080	21,580	7,121	.73
*NB110XP0	10.9998	11.6253	11.231	11.393	4,590	1,945	11,480	3,280	25,970	8,254	.75
*NB120XP0	11.9998	12.6253	12.231	12.393	5,000	2,045	12,500	3,470	30,770	9,446	.83
*NB140XP0	13.9998	14.6253	14.231	14.393	5,810	2,234	14,530	3,840	41,580	11,994	1.05
*NB160XP0	15.9998	16.6253	16.231	16.393	6,620	2,410	16,560	4,190	54,020	14,750	1.20
*NB180XP0	17.9998	18.6253	18.231	18.393	7,440	2,576	18,590	4,520	68,090	17,694	1.35
*NB200XP0	19.9998	20.6253	20.231	20.393	8,250	2,731	20,620	4,850	83,780	20,813	1.50

Snapover separator
5/32" balls



③ F = .040
Bearing corners are normally chamfered

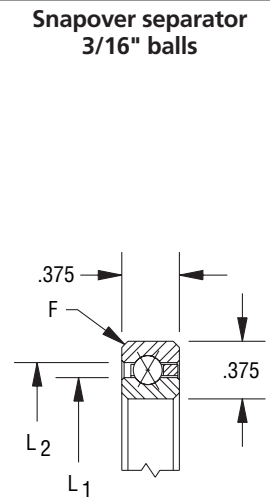
① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
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 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.

CONTACT KAYDON AT—
 KAYDON Corporation • Muskegon, Michigan 49443
 Telephone: 231/755-3741 • Fax: 231/759-4102

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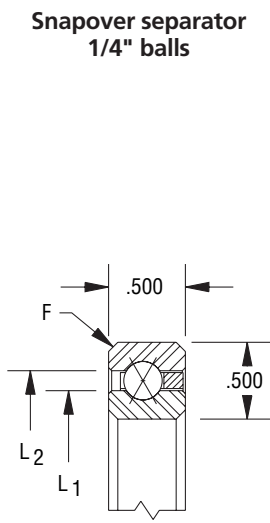
Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type X Four-Point Contact

NC SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NC040XP0	3.9998	4.7503	4.277	4.473	2,100	1,417	5,260	2,210	4,600	2,326	.45
*NC042XP0	4.2498	5.0003	4.527	4.723	2,220	1,464	5,560	2,290	5,140	2,541	.47
*NC045XP0	4.4998	5.2503	4.777	4.973	2,340	1,510	5,860	2,380	5,710	2,762	.48
*NC047XP0	4.7498	5.5003	5.027	5.223	2,460	1,556	6,160	2,460	6,320	2,991	.50
*NC050XP0	4.9998	5.7503	5.277	5.473	2,590	1,600	6,460	2,540	6,950	3,226	.58
*NC055XP0	5.4998	6.2503	5.777	5.973	2,830	1,687	7,060	2,690	8,300	3,717	.59
*NC060XP0	5.9998	6.7503	6.277	6.473	3,070	1,770	7,660	2,840	9,770	4,234	.63
*NC065XP0	6.4998	7.2503	6.777	6.973	3,310	1,851	8,270	2,990	11,370	4,775	.68
*NC070XP0	6.9998	7.7503	7.277	7.473	3,550	1,931	8,870	3,130	13,080	5,341	.73
*NC075XP0	7.4998	8.2503	7.777	7.973	3,790	2,007	9,470	3,270	14,910	5,930	.78
*NC080XP0	7.9998	8.7503	8.277	8.473	4,030	2,082	10,070	3,410	16,870	6,542	.84
*NC090XP0	8.9998	9.7503	9.277	9.473	4,510	2,226	11,270	3,670	21,130	7,830	.94
*NC100XP0	9.9998	10.7503	10.277	10.473	4,990	2,364	12,470	3,930	25,880	9,201	1.06
*NC110XP0	10.9998	11.7503	11.277	11.473	5,470	2,496	13,680	4,180	31,110	10,651	1.16
*NC120XP0	11.9998	12.7503	12.277	12.473	5,950	2,622	14,880	4,420	36,830	12,174	1.25
*NC140XP0	13.9998	14.7503	14.277	14.473	6,910	2,862	17,280	4,890	49,690	15,434	1.52
*NC160XP0	15.9998	16.7503	16.277	16.473	7,880	3,086	19,690	5,330	64,480	18,955	1.73
*NC180XP0	17.9998	18.7503	18.277	18.473	8,840	3,295	22,090	5,760	81,190	22,712	1.94
*NC200XP0	19.9998	20.7503	20.277	20.473	9,800	3,492	24,500	6,170	99,830	26,695	2.16
*NC250XP0	24.9998	25.7503	25.277	25.473	12,200	3,941	30,510	7,140	154,800	37,518	2.69
*NC300XP0	29.9998	30.7503	30.277	30.473	14,610	4,338	36,520	8,050	221,900	49,436	3.21



③ F = .040
Bearing corners are normally chamfered

ND SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*ND040XP0	3.9998	5.0003	4.370	4.630	3,080	2,311	7,700	3,520	6,930	3,901	.78
*ND042XP0	4.2498	5.2503	4.620	4.880	3,190	2,355	7,980	3,600	7,580	4,196	.83
*ND045XP0	4.4998	5.5003	4.870	5.130	3,420	2,454	8,550	3,770	8,550	4,602	.88
*ND047XP0	4.7498	5.7503	5.120	5.380	3,530	2,496	8,840	3,860	9,280	4,916	.94
*ND050XP0	4.9998	6.0003	5.370	5.630	3,760	2,592	9,410	4,020	10,350	5,348	1.00
*ND055XP0	5.4998	6.5003	5.870	6.130	4,100	2,725	10,260	4,260	12,310	6,134	1.06
*ND060XP0	5.9998	7.0003	6.370	6.630	4,450	2,855	11,120	4,490	14,450	6,961	1.16
*ND065XP0	6.4998	7.5003	6.870	7.130	4,790	2,980	11,970	4,720	16,760	7,826	1.22
*ND070XP0	6.9998	8.0003	7.370	7.630	5,130	3,103	12,830	4,940	19,240	8,730	1.31
*ND075XP0	7.4998	8.5003	7.870	8.130	5,470	3,222	13,680	5,160	21,890	9,669	1.41
*ND080XP0	7.9998	9.0003	8.370	8.630	5,810	3,338	14,540	5,370	24,710	10,643	1.53
*ND090XP0	8.9998	10.0003	9.370	9.630	6,500	3,561	16,250	5,790	30,870	12,693	1.72
*ND100XP0	9.9998	11.0003	10.370	10.630	7,180	3,776	17,960	6,190	37,710	14,872	1.88
*ND110XP0	10.9998	12.0003	11.370	11.630	7,870	3,981	19,670	6,570	45,230	17,173	2.06
*ND120XP0	11.9998	13.0003	12.370	12.630	8,550	4,178	21,380	6,950	53,440	19,590	2.25
*ND140XP0	13.9998	15.0003	14.370	14.630	9,920	4,551	24,800	7,670	71,910	24,755	2.73
*ND160XP0	15.9998	17.0003	16.370	16.630	11,290	4,899	28,220	8,360	93,110	30,325	3.10
*ND180XP0	17.9998	19.0003	18.370	18.630	12,650	5,226	31,640	9,030	117,000	36,268	3.48
*ND200XP0	19.9998	21.0003	20.370	20.630	14,020	5,534	35,060	9,670	143,700	42,561	3.85
*ND210XP0	20.9998	22.0003	21.370	21.630	14,710	5,682	36,770	9,980	158,100	45,826	4.04
*ND250XP0	24.9998	26.0003	25.370	25.630	17,440	6,235	43,610	11,180	222,400	59,649	4.79
*ND300XP0	29.9998	31.0003	30.370	30.630	20,860	6,856	52,160	12,600	318,100	78,447	5.73

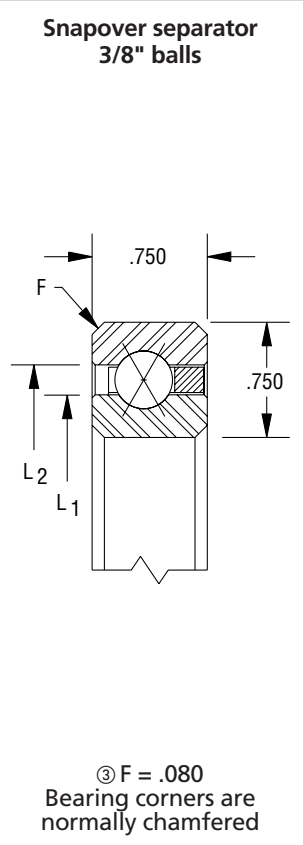


③ F = .060
Bearing corners are normally chamfered

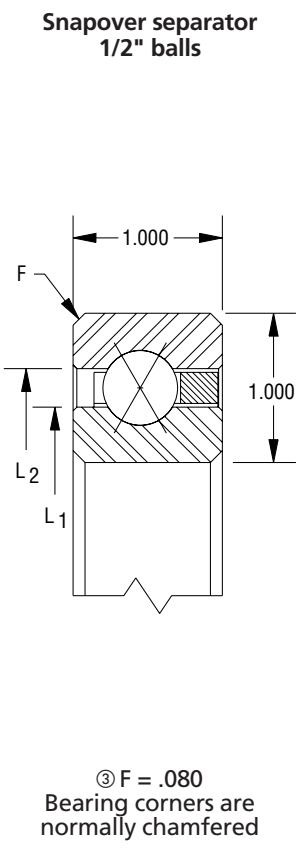
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Open ENDURAKOTE®-PLATED ENDURA-SLIM® Bearings Type X Four-Point Contact

NF SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NF040XP0	3.9998	5.5003	4.555	4.945	5,360	4,665	13,400	6,830	12,730	8,312	1.9
*NF042XP0	4.2498	5.7503	4.805	5.195	5,640	4,795	14,110	7,070	14,110	8,993	2.0
*NF045XP0	4.4998	6.0003	5.055	5.445	5,930	4,923	14,810	7,300	15,550	9,695	2.1
*NF047XP0	4.7498	6.2503	5.305	5.695	6,210	5,048	15,520	7,530	17,070	10,416	2.2
*NF050XP0	4.9998	6.5003	5.555	5.945	6,490	5,172	16,220	7,760	18,660	11,157	2.3
*NF055XP0	5.4998	7.0003	6.055	6.445	7,050	5,415	17,630	8,200	22,040	12,696	2.5
*NF060XP0	5.9998	7.5003	6.555	6.945	7,620	5,651	19,050	8,630	25,710	14,311	2.7
*NF065XP0	6.4998	8.0003	7.055	7.445	8,180	5,880	20,460	9,050	29,660	15,993	2.9
*NF070XP0	6.9998	8.5003	7.555	7.945	8,750	6,103	21,870	9,460	33,890	17,744	3.2
*NF075XP0	7.4998	9.0003	8.055	8.445	9,310	6,323	23,280	9,870	38,410	19,568	3.4
*NF080XP0	7.9998	9.5003	8.555	8.945	9,880	6,535	24,690	10,260	43,200	21,453	3.5
*NF090XP0	8.9998	10.5003	9.555	9.945	11,000	6,947	27,510	11,030	53,640	25,410	3.9
*NF100XP0	9.9998	11.5003	10.555	10.945	12,130	7,342	30,330	11,770	65,210	29,608	4.3
*NF110XP0	10.9998	12.5003	11.555	11.945	13,260	7,721	33,150	12,490	77,910	34,032	4.8
*NF120XP0	11.9998	13.5003	12.555	12.945	14,390	8,084	35,970	13,190	91,730	38,666	5.2
*NF140XP0	13.9998	15.5003	14.555	14.945	16,650	8,775	41,620	14,530	122,800	48,556	6.0
*NF160XP0	15.9998	17.5003	16.555	16.945	18,900	9,421	47,260	15,820	158,300	59,200	7.1
*NF180XP0	17.9998	19.5003	18.555	18.945	21,160	10,028	52,900	17,060	198,400	70,537	7.9
*NF200XP0	19.9998	21.5003	20.555	20.945	23,420	10,602	58,550	18,250	243,000	82,528	8.9
*NF250XP0	24.9998	26.5003	25.555	25.945	29,060	11,909	72,650	21,070	374,200	115,037	10.9
*NF300XP0	29.9998	31.5003	30.555	30.945	34,700	13,065	86,760	23,720	533,600	150,708	13.0
*NF350XP0	34.9998	36.5003	35.555	35.945	40,350	14,100	100,900	26,220	721,200	189,106	15.1
*NF400XP0	39.9998	41.5003	40.555	40.945	45,990	15,034	115,000	28,620	937,100	229,832	17.2



NG SERIES											
KAYDON Bearing Number	Dimensions in Inches				Capacities ^①						Approx. Weight in Pounds
	Bore	Outside Dia.	Land Dia. L ₁	Land Dia. L ₂	Radial (lbs)		Thrust (lbs)		Moment (in-lbs)		
					Static ^②	Dyn.	Static ^②	Dyn.	Static ^②	Dyn.	
*NG040XP0	3.9998	6.0003	4.742	5.258	8,210	7,979	20,520	11,260	20,520	14,966	3.6
*NG042XP0	4.2498	6.2503	4.992	5.508	8,210	7,917	20,520	11,260	21,550	15,592	3.8
*NG045XP0	4.4998	6.5003	5.242	5.758	8,760	8,205	21,890	11,750	24,080	16,930	4.0
*NG047XP0	4.7498	6.7503	5.492	6.008	9,300	8,487	23,260	12,230	26,740	18,306	4.1
*NG050XP0	4.9998	7.0003	5.742	6.258	9,850	8,762	24,620	12,710	29,550	19,721	4.3
*NG055XP0	5.4998	7.5003	6.242	6.758	10,400	8,979	25,990	13,180	33,790	21,896	4.7
*NG060XP0	5.9998	8.0003	6.742	7.258	11,490	9,503	28,730	14,090	40,220	24,956	5.1
*NG065XP0	6.4998	8.5003	7.242	7.758	12,040	9,713	30,100	14,530	45,140	27,327	5.4
*NG070XP0	6.9998	9.0003	7.742	8.258	13,130	10,208	32,830	15,400	52,530	30,636	5.8
*NG075XP0	7.4998	9.5003	8.242	8.758	13,680	10,410	34,200	15,820	58,140	33,196	6.1
*NG080XP0	7.9998	10.0003	8.742	9.258	14,770	10,882	36,940	16,650	66,480	36,743	6.5
*NG090XP0	8.9998	11.0003	9.742	10.258	16,420	11,526	41,040	17,870	82,080	43,240	7.2
*NG100XP0	9.9998	12.0003	10.742	11.258	18,060	12,147	45,140	19,040	99,320	50,124	7.9
*NG110XP0	10.9998	13.0003	11.742	12.258	19,700	12,739	49,250	20,180	118,200	57,347	8.6
*NG120XP0	11.9998	14.0003	12.742	13.258	21,340	13,315	53,350	21,280	138,700	64,935	9.3
*NG140XP0	13.9998	16.0003	14.742	15.258	24,620	14,404	61,560	23,410	184,700	81,056	10.8
*NG160XP0	15.9998	18.0003	16.742	17.258	27,910	15,425	69,770	25,450	237,200	98,373	12.3
*NG180XP0	17.9998	20.0003	18.742	19.258	31,190	16,386	77,980	27,410	296,300	116,793	13.7
*NG200XP0	19.9998	22.0003	20.742	21.258	34,470	17,293	86,180	29,300	362,000	136,238	15.8
*NG220XP0	21.9998	24.0003	22.742	23.258	37,760	18,152	94,390	31,130	434,200	156,625	17.3
*NG250XP0	24.9998	27.0003	25.742	26.258	42,680	19,360	106,700	33,780	554,900	188,838	19.5
*NG300XP0	29.9998	32.0003	30.742	31.258	50,890	21,200	127,200	37,980	788,800	246,541	23.3
*NG350XP0	34.9998	37.0003	35.742	36.258	59,100	22,845	147,700	41,970	1,064,000	308,527	27.1
*NG400XP0	39.9998	42.0003	40.742	41.258	67,310	24,332	168,300	45,770	1,380,000	374,256	30.8



① Capacities listed are not simultaneous. For combined loading see discussion of Bearing Selection and Load Analysis. Dynamic capacities are based upon 1 million revolutions of L10 life. Published capacities do not apply to hybrid series bearings P, X, and Y - contact KAYDON product engineering for values.
 ② Static capacities are non-brinell limits based on rigid support from the shaft and housing.
 ③ "F" is the maximum shaft or housing fillet radius the bearing corners will clear.
 * Contact KAYDON for lead time and minimum purchase requirement.