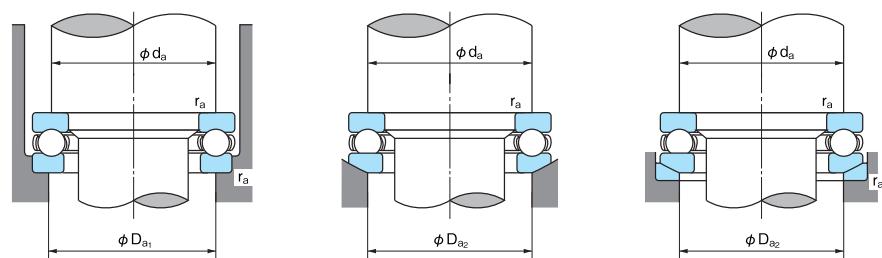
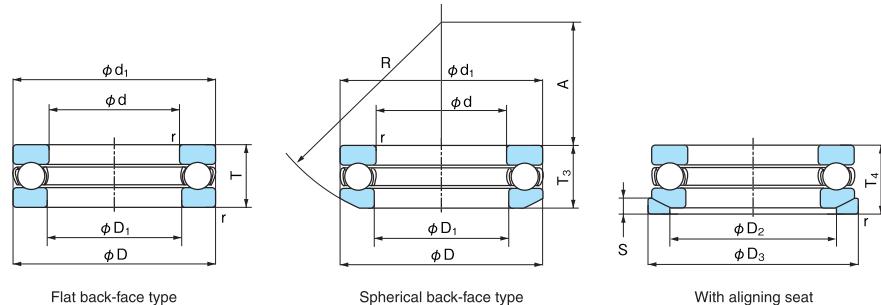


■ Single-direction Thrust Ball Bearings

Bore Diameter: 200~360mm

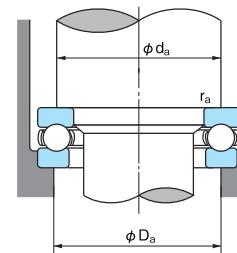
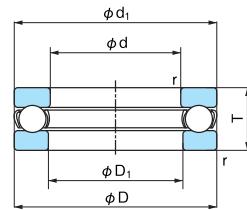


Boundary dimensions (mm)							Bearing No.		Basic dynamic load rating Ca (N)	Basic static load Coa (N)	Limiting speed (min⁻¹)			Dimensions (mm)						Abutment and fillet dimensions (mm)				Mass (kg) Reference			Bearing No.	
d	D	T	T ₃	T ₄	r (min)	Flat back-face type	Spherical back-face type	With aligning seat			Grease lubrication	Oil lubrication		D ₁ (min)	d ₁ (max)	D ₂	D ₃	S	R	A	d _a (min)	d _a (max)	D _{a2} (max)	r _a (max)	Flat back-face type	Spherical back-face type	With aligning seat	
200	250	37	—	—	1.1	51140	—	—	172000	675000	1000	1500		203	247	—	—	—	—	—	230	220	—	1	4.14	—	—	51140
	280	62	65.3	74	2	51240	53240	53240U	315000	1110000	720	1000		204	277	240	290	23	225	125	248	232	240	2	12.2	12.0	14.8	51240
	340	110	118.4	130	4	51340	53340	53340U	625000	2380000	470	710		205	335	270	350	38	250	92	284	256	270	3	43.0	43.1	51.0	51340
220	270	37	—	—	1.1	51144	—	—	177000	740000	970	1400		223	267	—	—	—	—	—	250	240	—	1	4.51	—	—	51144
	300	63	65.6	75	2	51244	53244	53244U	325000	1210000	690	1000		224	297	260	310	25	225	118	268	252	260	2	13.5	13.0	16.2	51244
240	300	45	—	—	1.5	51148	—	—	228000	935000	830	1200		243	297	—	—	—	—	—	276	264	—	1.5	7.35	—	—	51148
	340	78	81.6	92	2.1	51248	53248	53248U	430000	1730000	570	860		244	335	290	350	30	250	122	300	280	290	2	23.1	22.3	27.4	51248
260	320	45	—	—	1.5	51152	—	—	232000	990000	800	1200		263	317	—	—	—	—	—	296	284	—	1.5	7.94	—	—	51152
	360	79	82.8	93	2.1	51252	53252	53252U	445000	1880000	550	830		264	355	305	370	30	280	152	320	300	305	2	25.0	24.0	29.7	51252
280	350	53	—	—	1.5	51156	—	—	315000	1350000	700	1000		283	347	—	—	—	—	—	322	308	—	1.5	12.0	—	—	51156
	380	80	85	94	2.1	51256	53256	53256U	450000	1950000	530	800		284	375	325	390	31	280	143	340	320	325	2	27.0	26.2	32.3	51256
300	380	62	—	—	2	51160	—	—	370000	1660000	610	920		304	376	—	—	—	—	—	348	332	—	2	17.1	—	—	51160
	420	95	100.5	112	3	51260	53260	53260U	585000	2720000	450	680		304	415	360	430	34	320	164	372	348	360	2.5	42.3	41.7	49.9	51260
320	400	63	—	—	2	51164	—	—	380000	1760000	590	880		324	396	—	—	—	—	—	368	352	—	2	18.5	—	—	51164
	440	95	100.5	112	3	51264	53264	53264U	595000	2830000	440	660		325	435	380	450	36	320	157	392	368	380	2.5	44.7	43.8	52.7	51264
340	420	64	—	—	2	51168	—	—	385000	1860000	570	850		344	416	—	—	—	—	—	388	372	—	2	19.9	—	—	51168
	460	96	100.3	113	3	51268	53268	53268U	600000	2940000	430	640		345	455	400	470	36	360	199	412	388	400	2.5	47.6	46.4	56.2	51268
360	440	65	—	—	2	51172	—	—	395000	1960000	550	820		364	436	—	—	—	—	—	408	392	—	2	20.4	—	—	51172
	500	110	116.7	130	4	51272	53272	53272U	745000	3800000	380	570		365	495	430	510	43	360	172	444	416	430	3	69.0	67.7	81.5	51272

■ Single-direction Thrust Ball Bearings

Series 2900

Bore Diameter: 10~140mm



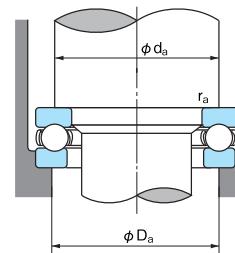
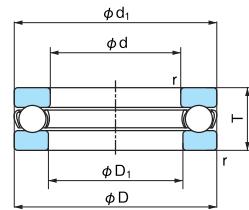
1N=0.102kgf

Boundary dimensions (mm)				Bearing No.	Basic dynamic rating Ca (N)	Basic static load rating C _a (N)	Limiting speed (min ⁻¹)	Grease lubrication	Oil lubrication	Dimensions (mm)		Abutment and fillet dimensions (mm)			Mass (kg) Reference	Bearing No.
d	D	T	r (min)							D ₁ (min)	d ₁ (max)	d _a (min)	d _a (max)	r _a (max)		
10	26	12	0.6	2900	12700	17100	5600	8400		10.2	26	19.6	16.4	0.6	0.035	2900
12	28	12	0.6	2901	13200	19000	5400	8100		12.2	28	21.6	18.4	0.6	0.037	2901
15	31	12	0.6	2902	14300	22800	5100	7700		15.2	31	25	21	0.6	0.041	2902
18	35	12	0.6	2903	14400	24700	4800	7300		18.2	35	28	25	0.6	0.045	2903
20	37	12	0.6	2904	14800	26600	4700	7100		20.2	37	30	27	0.6	0.055	2904
22	42	14	0.6	2904½	18900	34500	4100	6100		22.2	42	34	30	0.6	0.085	2904½
25	45	14	0.6	2905	19300	37000	3900	5900		25.2	45	37	33	0.6	0.093	2905
30	50	14	0.6	2906	20200	42000	3700	5600		30.2	50	42	38	0.6	0.107	2906
35	55	16	0.6	2907	29900	62000	3300	5000		35.2	55	47	43	0.6	0.137	2907
40	60	16	0.6	2908	31000	70000	3200	4800		40.2	60	52	48	0.6	0.150	2908
45	68	16	0.6	2909	32500	77500	3000	4500		45.2	68	59	54	0.6	0.199	2909
50	74	18	0.6	2910	38500	94000	2700	4100		50.2	74	64	60	0.6	0.255	2910
55	78	18	0.6	2911	40000	103000	2600	4000		55.2	78	69	64	0.6	0.270	2911
60	82	18	0.6	2912	40500	108000	2600	3900		60.2	82	73	69	0.6	0.275	2912
65	90	20	0.6	2913	47500	129000	2300	3500		65.2	90	80	75	0.6	0.374	2913
70	95	20	0.6	2914	49000	140000	2200	3400		70.2	95	85	80	0.6	0.400	2914
75	100	20	0.6	2915	51000	151000	2200	3300		75.2	100	90	85	0.6	0.425	2915
80	110	22	0.6	2916	57000	171000	2000	3000		80.2	110	98	92	0.6	0.600	2916
85	115	22	0.6	2917	59000	184000	1900	2900		85.2	115	103	97	0.6	0.640	2917
90	120	22	0.6	2918	59500	190000	1900	2900		90.2	120	108	102	0.6	0.670	2918
95	130	25	0.6	2919	75500	236000	1700	2600		95.2	130	116	109	0.6	0.795	2919
100	135	25	0.6	2920	78000	253000	1700	2500		100.2	135	121	114	0.6	0.930	2920
105	140	25	0.6	2921	78500	262000	1600	2500		105.2	140	126	119	0.6	1.02	2921
110	145	25	0.6	2922	78000	262000	1600	2400		110.2	145	131	124	0.6	1.15	2922
115	150	25	0.6	2923	73500	245000	1600	2400		115.2	150	136	129	0.6	1.25	2923
120	160	27	0.6	2924	94000	314000	1500	2200		120.2	160	144	136	0.6	1.35	2924
125	165	27	0.6	2925	85500	298000	1400	2200		125.3	165	149	141	0.6	1.48	2925
140	185	31	0.6	2928	106000	375000	1300	1900		140.3	185	167	158	0.6	2.33	2928

■ Single-direction Thrust Ball Bearings

Series 3900

Bore Diameter: 25~120mm



1N=0.102kgf

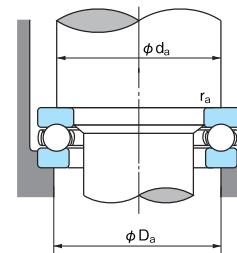
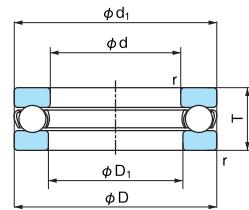
Boundary dimensions (mm)				Bearing No.	Basic dynamic rating Ca (N)	Basic static load rating Coa (N)	Limiting speed (min⁻¹)			Dimensions (mm)		Abutment and fillet dimensions (mm)			Mass (kg) Reference	Bearing No.
d	D	T	r (min)					Grease lubrication	Oil lubrication	D ₁ (min)	d ₁ (max)	d _a (min)	D _a (max)	r _a (max)		
25	52	16	1	3905	27100	50500	3400	5200		25.2	52	42	36	1.0	0.147	3905
30	60	19	1	3906	38000	72500	2900	4400		30.2	60	49	43	1.0	0.237	3906
35	68	22	1	3907	50500	99000	2500	3800		35.2	68	56.5	48.5	1.0	0.346	3907
40	76	25	1	3908	61000	119000	2200	3400		40.2	76	63	55	1.0	0.486	3908
45	85	28	1	3909	79500	163000	2000	3000		45.2	85	71	61	1.0	0.684	3909
50	92	31	1	3910	97000	202000	1800	2800		50.2	92	77	67	1.0	0.889	3910
55	100	33	1	3911	110000	240000	1700	2600		55.2	100	83.5	73.5	1.0	1.114	3911
60	106	35	1.5	3912	119000	263000	1600	2400		60.2	106	89	79	1.5	1.293	3912
65	112	36	1.5	3913	128000	287000	1500	2300		65.2	112	95.5	83.5	1.5	1.443	3913
70	120	38	1.5	3914	143000	335000	1400	2200		70.2	120	102	90	1.5	1.767	3914
75	128	41	1.5	3915	159000	365000	1300	2000		75.2	128	108.5	96.5	1.5	2.132	3915
80	136	44	1.5	3916	183000	425000	1200	1900		80.2	136	115	101	1.5	2.606	3916
85	145	47	1.5	3917	207000	490000	1100	1700		85.2	145	122	108	1.5	3.157	3917
90	155	50	1.5	3918	232000	555000	1100	1600		90.2	155	131	115	1.5	3.907	3918
95	165	54	1.5	3919	253000	630000	1000	1500		95.2	165	139	123	1.5	4.810	3919
100	172	57	1.5	3920	250000	630000	980	1400		100.2	172	144	128	1.5	5.454	3920
105	180	60	2.5	3921	257000	670000	930	1400		105.2	180	153	137	2.5	6.354	3921
110	190	63	2.5	3922	293000	785000	880	1300		110.2	190	159	141	2.5	7.333	3922
115	200	66	2.5	3923	315000	870000	840	1200		115.2	200	167.5	147.5	2.5	8.526	3923
120	210	69	2.5	3924	325000	930000	800	1200		120.2	210	178	158	2.5	10.195	3924

■ Single-direction Thrust Ball Bearings

Inch Series

Series O

Bore Diameter: 9.525~152.400mm



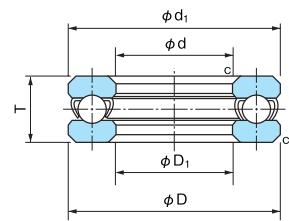
1N=0.102kgf

Boundary dimensions (mm)				Bearing No.	Basic dynamic rating Ca (N)	Basic static load rating Coa (N)	Limiting speed (min⁻¹)	Grease lubrication	Oil lubrication	Dimensions (mm)		Abutment and fillet dimensions (mm)			Mass (kg) Reference	Bearing No.
d	D	T	r (min)							D ₁ (min)	d ₁ (max)	d _a (min)	d _a (max)	r _a (max)		
9.525	25.400	13.494	0.8	O - 3	11800	15200	5400	8100		9.925	24.606	19.1	15.9	0.8	0.036	O - 3
12.700	32.544	15.875	0.8	O - 4	18600	25100	4300	6500		13.097	31.750	24.6	20.6	0.8	0.077	O - 4
15.875	35.719	15.875	0.8	O - 5	19400	28300	4100	6200		16.272	34.925	27.8	23.8	0.8	0.086	O - 5
19.050	38.894	15.875	0.8	O - 6	21400	34500	4000	6000		19.447	38.100	29	26	0.8	0.095	O - 6
22.225	42.069	15.875	0.8	O - 7	21900	37500	3800	5800		22.622	41.275	34	30	0.8	0.100	O - 7
25.400	45.244	15.875	1.6	O - 8	22500	41000	3700	5500		25.797	44.450	37	33	0.8	0.110	O - 8
28.575	48.419	15.875	1.6	O - 9	24100	47000	3600	5400		28.972	47.625	40	37	0.8	0.128	O - 9
31.750	53.181	18.256	1.6	O - 10	27900	54500	3200	4800		32.147	52.388	45	40	0.8	0.164	O - 10
34.925	56.356	18.256	1.6	O - 11	28600	58000	3100	4600		35.322	55.562	48	43	0.8	0.186	O - 11
38.100	59.531	18.256	1.6	O - 12	30500	66000	3000	4500		38.497	58.738	51	47	1	0.200	O - 12
41.275	62.706	18.256	1.6	O - 13	26700	63000	2900	4400		41.672	61.912	54	50	1	0.210	O - 13
44.450	68.262	19.050	1.6	O - 14	32500	77500	2700	4100		44.847	67.469	59	54	1	0.260	O - 14
47.625	71.438	19.050	1.6	O - 15	37500	89000	2700	4000		48.021	70.644	62	57	1	0.285	O - 15
50.800	75.406	19.050	2.4	O - 16	38000	94000	2600	3900		51.594	74.613	66	61	1	0.300	O - 16
53.975	81.756	22.225	2.4	O - 17	49500	118000	2300	3500		54.769	80.962	71	65	1.6	0.405	O - 17
57.150	84.931	22.225	2.4	O - 18	50500	125000	2300	3400		57.944	84.138	74	68	1.6	0.450	O - 18
60.325	91.281	25.400	2.4	O - 19	58000	145000	2000	3100		61.119	90.488	79	73	1.6	0.590	O - 19
63.500	94.456	25.400	2.4	O - 20	59500	152000	2000	3000		64.294	93.662	82	76	1.6	0.610	O - 20
66.675	97.631	25.400	2.4	O - 21	60500	160000	2000	3000		67.469	96.838	85	79	1.6	0.660	O - 21
69.850	102.394	25.400	2.4	O - 22	71500	179000	1900	2900		70.644	101.600	89	83	1.6	0.700	O - 22
73.025	105.569	25.400	2.4	O - 23	75500	199000	1900	2800		73.819	104.775	93	86	1.6	0.730	O - 23
76.200	111.125	28.575	3.2	O - 24	77000	209000	1700	2600		77.788	109.538	97	90	2	0.900	O - 24
82.550	122.238	31.750	3.2	O - 26	97500	252000	1600	2400		84.138	120.650	106	98	2	1.30	O - 26
88.900	128.588	31.750	3.2	O - 28	99000	266000	1500	2300		90.488	127.000	113	105	2	1.32	O - 28
95.250	134.938	31.750	3.2	O - 30	98500	289000	1500	2200		96.838	133.350	119	111	2	1.36	O - 30
101.600	147.638	34.925	3.2	O - 32	113000	310000	1300	2000		103.188	146.050	129	120	2	1.88	O - 32
114.300	166.688	44.450	4.8	O - 36	157000	435000	1100	1700		115.888	165.100	146	135	3	3.18	O - 36
127.000	185.738	50.800	4.8	O - 40	193000	545000	1000	1500		128.588	184.150	162	150	3	4.54	O - 40
139.700	204.788	55.562	4.8	O - 44	248000	715000	910	1300		141.288	203.200	179	166	3	5.90	O - 44
152.400	220.662	60.325	4.8	O - 48	269000	805000	830	1200		153.988	219.075	193	180	3	7.25	O - 48

■ Extra Small and Miniature Thrust Ball Bearings

TAM Type

Bore Diameter: 3~8mm



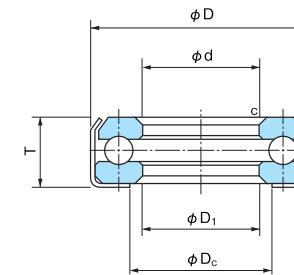
1N=0.102kgf

Boundary dimensions (mm)						Bearing No.	Basic dynamic load rating Ca (N)	Basic static load rating Coa (N)	Mass (kg) Reference
d	D	T	c	D ₁	d ₁				
3	8	3.5	0.2	3.2	8	3TAM8	1790	1720	0.6
4	9	4	0.2	4.1	9	4TAM9	1860	1970	0.8
5	10	4	0.3	5.1	10	5TAM10	1930	2220	0.9
6	12	4.5	0.3	6.2	12	6TAM12	1820	2220	1.7
7	14	4.5	0.3	7.2	14	7TAM14	2480	3140	2.3
8	16	5	0.3	8.2	16	8TAM16	3920	4990	3.4

■ Extra Small and Miniature Thrust Ball Bearings

TG Type (Banded)

Bore Diameter: 5~8mm

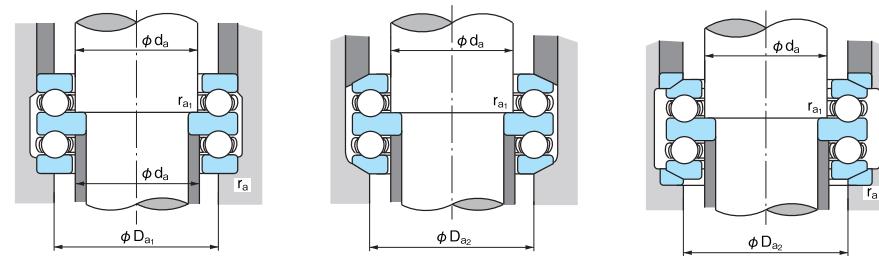
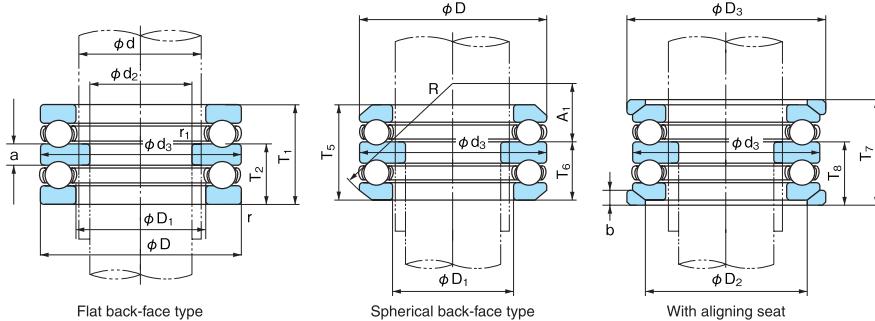


1N=0.102kgf

Boundary dimensions (mm)						Bearing No.	Basic dynamic load rating Ca (N)	Basic static load rating Coa (N)	Mass (kg) Reference
d	D	T	c	D ₁	D _c				
5	10	4.2	0.3	5.1	5.8	5TG-10	2200	2710	1.3
6	12	4.7	0.5	6.2	7.2	6TG-12	2450	3450	2.2
7	14	4.7	0.5	7.2	8.2	7TG-14	3320	4890	3.0
8	16	5.2	0.5	8.2	9.2	8TG-16	4750	6650	4.0

■ Double-direction Thrust Ball Bearings

Bore Diameter: 180~220mm



1N=0.102kgf

Boundary dimensions (mm)								Bearing No.			Basic dynamic load rating Ca (N)	Basic static load rating Coa (N)	Limiting speed (min⁻¹)		Dimensions (mm)								Abutment and fillet dimensions (mm)				Mass (kg) Reference			Bearing No.				
d	d₂	D	T₁	T₅	T₇	r (min)	r₁ (min)	Flat back-face type	Spherical back-face type	With aligning seat					d₃ (max)	D₁ (min)	D₂	D₃	T₂	T₆	T₈	a	b	A₁	R	d₄ (min)	D₁ (max)	D₂ (max)	r₄ (max)	r₁ (max)				
150	250	98	102.4	118	1.5	2	52236	54236	54236U	266000	875000	810	1200	249	183	210	260	59.5	61.7	69.5	21	21.5	108.5	200	180	208	210	1.5	2	16.0	15.2	19.9	52236	
180	150	300	165	—	3	2	52336	—	—	485000	1700000	550	820	299	184	—	—	101	—	—	37	—	—	180	228	—	2.5	2	50.9	—	—	52336		
	140	360	245	—	5	3	52436	—	—	785000	2980000	400	600	359	184	—	—	148.5	—	—	52	—	—	180	252	—	4	2.5	126	—	—	52436		
190	160	270	109	116.4	131	2	2	52238	54238	54238U	310000	1060000	740	1100	269	194	230	280	66.5	70.2	77.5	24	23	93.5	200	190	222	230	2	2	21.6	21.2	26.5	52238
	160	320	183	—	—	4	2	52338	—	—	570000	2100000	500	750	319	195	—	—	111.5	—	—	40	—	—	190	242	—	3	2	64.9	—	—	52338	
200	170	280	109	115.6	133	2	2	52240	54240	54240U	315000	1110000	720	1000	279	204	240	290	66.5	69.8	78.5	24	23	120.5	225	200	232	240	2	2	22.7	22.3	28.0	52240
	170	340	192	—	—	4	2	52340	—	—	625000	2380000	470	710	339	205	—	—	117	—	—	42	—	—	200	256	—	3	2	77.8	—	—	52340	
220	190	300	110	115.2	134	2	2	52244	54244	54244U	325000	1210000	690	1000	299	224	260	310	67	69.6	79	24	25	114	225	220	252	260	2	2	23.9	22.9	29.6	52244