Company Introduction

Henan Zhongzheng Precision Bearing Co., Ltd., located in Zhengzhou National High-tech Industrial Development Area, is currently invested 150 million yuan, covers an area of 32,000 square meters, construction area of 52,000 square meters. Company setting research, design, production, sales and service as a whole, is a professional engaged in P4, P2-speed ultra-precision bearings of high-tech enterprises.

The company has more than 400 sets of advanced manufacturing equipment and more than 500 sets of high-precision testing equipments; more than two hundred professional and technical personnels . Products assembly and test in thousand-grade clean room;Production of P4, P2 bearing ranges from 8 mm inner diameter to 400 mm outer diameter, a total of more than 1,000 specifications. Our products are widely used in machine tools, aerospace, aviation, textiles, metallurgy, printing, chemicals, electronics and other industries and fields.

Our company pays greatly attention to product quality, focusing on product development and technological innovation, bringing together the talents of a group of professional and technical staff, formation of highly qualified research team. Relying on advanced technology, advanced crafts, modern management model,strict quality control operation system, we ensure to provide customers with high-quality, high-reliability products, while providing non-standard, small-batch, high-precision, long-life customization special bearing product requirements. The company has passed ISO9001 quality system certification, owning 12 national patents and export qualification.

"Based on innovation, focusing on quality, integrity service, sincere cooperation and common development" is the consistent pursuit of Zhongzheng people, "Crafts ensure quality,details make perfect" is Zhongzheng's eternal development policy. We will continue to go beyond ourselves,consistent innovate;With high-quality products and services, we sincerely welcome new and old customers at home and abroad to visit!

The structure type and characteristics of ZZC precision bearing

Angular contact ball bearing

ZZC precision angular contact ball bearing has four size series of 718, 719, 70 and 72. For the bearing with the same inner diameter, the outer diameter and width increase in turn.

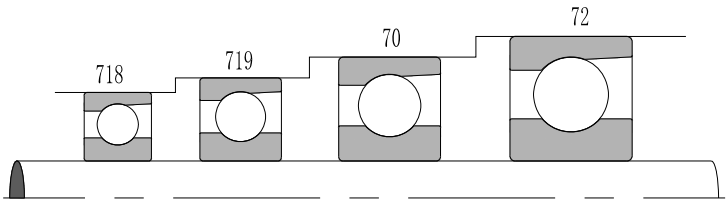


Figure 1

The contact angles of ZZC precision angular contact ball bearing have two types of 15° (with code name C) and 25° (with code name AC). For angular contact ball bearing, the larger the contact angle is, the stronger the axial loading capacities will be, but the lower the limit speed of the bearings will be. Therefore, spindle bearing with high rotate speed and small axial load is suitable for contact angle of 15°, on the contrary, the angular contact ball bearing with contact angle of 25° can be used.

ZZC precision angular contact ball bearing is divided into three series, including high speed angular contact bearing (standard series), ultra high speed angular contact ball bearing and high speed sealing angular contact ball bearing.

The inner and outer ring, rolling element of the rolling bearing under general operating condition are made by high carbon chromium bearing steel, but in some applications, such as places which require ultra high rotate speed, abrasion resistance, low temperature increase, long life and high reliability, the performance of the steel bearing cannot meet the requirements of working condition. At this time, the bearing material with more excellent performance should be used. Among them, the silicon nitride ceramic is considered to be the optimal rolling bearing material in place of bearing steel.

ZZC also provides widely-used hybrid ceramic angular contact ball bearings for high speed precision machine tool spindle and other high-speed precision machine spindle, of which the inner and outer ring of the bearing is made by high quality bearing steel material while the rolling element is made by silicon nitride ceramics.

Compared with standard steel angular contact ball bearing of the same structure and size, hybrid ceramic angular contact ball bearings have such advantages as good high-speed performance, high rigidity, low friction heat and long operating life.

ZZC precision hybrid ceramic ball bearing (with code name HQ1) can significantly improve the rotate speed, rigidity, reliability and production efficiency of the machine tool, and greatly reduce the frictional heating of the spindle as well as extend the service life of the host machine.

Ball screw bearing

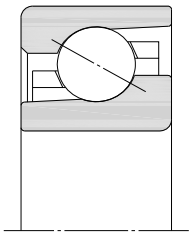


Figure 2

The ZZC precision ball screw bearing is single direction thrust angular contact ball bearing with contact angle of 60°, which has the characteristics of high precision, high rotation speed, high axial rigidity, low friction, long life and good instantaneous high and low speed conversion performance. It is especially suitable for the bearing of ball screw pair of high speed precision numerical control machine tool and its similar driving element.

There are four production series of ZZC precision ball screw bearing, 7602, 7603, BS, BBS. Among them, the standard metric system 7602 and 7603 dimension series conform to the standard JB/T8564, and their inside dimensions are from 12m to 130mm; BS is non-standard metric series; BSS is Inch series.

Selection principle of precision bearing

ZZC produces high-speed precision bearing with a variety of types and structure. In order to let the mechanical device play the expected performance, it is crucial to select the most appropriate bearings. Different bearing types and structures should be selected and used according to specific working conditions.

Bearing accuracy

The precisions of high-speed precision bearing, angular contact ball bearing and ball screw ball bearings produced by ZZC are ISO4 grade and ISO2 grade (equivalent to Grade 7 and Grade 9 of ABEC).

Table 1 Class P4 tolerances—inner ring

μm

d mm		Δd_{mp}		Δd_s (1)		V_{dsp} (2) diameter series		V_{dmp}	K_{ia}	S_d	S_{ia}	ΔB_s			V_{Bs}
						9	0、2					all	normal	correction(3)	
over	Incl.	high	low	high	low	max						high	low		max
10	18	0	-4	0	-4	4	3	2	2.5	3	3	0	-80	-250	2.5
18	30	0	-5	0	-5	5	4	2.5	3	4	4	0	-120	-250	2.5
30	50	0	-6	0	-6	6	5	3	4	4	4	0	-120	-250	3
50	80	0	-7	0	-7	7	5	3.5	4	5	5	0	-150	-250	4
80	120	0	-8	0	-8	8	6	4	5	5	5	0	-200	-380	4
120	180	0	-10	0	-10	10	8	5	6	6	7	0	-250	-380	5
180	250	0	-12	0	-12	12	9	6	8	7	8	0	-300	-500	6

Note:

(1) Only apply to diameter series 0, 1, 2, 3, 4.

(2) Diameter series 8 has no specified value.

(3) Shall mean the variation of the width of the inner ring of a single bearing for paired or assembled mounting.

Table 2 Class P4 tolerances—outer ring

μm

D mm		ΔD_{mp}		ΔD_s (1)(2)(3)		V_{dsp} (2)(3) diameter series		V_{Dmp}	K_{ea}	S_D	S_{ea}	ΔC_s			V_{Cs}
						9	0、2					all	normal	correction(3)	
over	incl.	high	low	high	low	max						high	low		max
18	30	0	-5	0	-5	5	4	2.5	4	4	5				2.5
30	50	0	-6	0	-6	6	5	3	5	4	5				2.5
50	80	0	-7	0	-7	7	5	3.5	5	4	5				3
80	120	0	-8	0	-8	8	6	4	6	5	6				4
120	150	0	-9	0	-9	9	7	5	7	5	7	Values are identical to those for the inner ring of the same bearing(ΔB_s)			5
150	180	0	-10	0	-10	10	8	5	8	5	8				5
180	250	0	-11	0	-11	11	8	6	10	7	10				7
250	315	0	-13	0	-13	13	10	7	11	8	10				7
315	400	0	-15	0	-15	15	11	8	13	10	13				8

Note:

(1) Only apply to diameter series 0, 1, 2, 3, 4.

(2) Diameter series 8 has no specified value.

(3) Capped bearing has no standard.

Table 3 Class P4A tolerances—inner ring

μm

d mm		Δd_{mp}		Δd_s (1)		V_{dsp} (2)	V_{dmp}	K_{ia}	S_d	S_{ia}	ΔB_s			V_{Bs}
											all	normal	correction (3)	
over	incl.	high	low	high	low	max					high	low		max
10	18	0	-4	0	-4	2.5	1.5	1.5	1.5	1.5	0	-80	-250	1.5
18	30	0	-5	0	-5	2.5	1.5	2.5	1.5	2.5	0	-120	-250	1.5
30	50	0	-6	0	-6	2.5	1.5	2.5	1.5	2.5	0	-120	-250	1.5
50	80	0	-7	0	-7	4	2	2.5	1.5	2.5	0	-150	-250	1.5
80	120	0	-8	0	-8	5	2.5	2.5	2.5	2.5	0	-200	-380	2.5
120	150	0	-10	0	-10	7	3.5	2.5	2.5	2.5	0	-250	-380	2.5
150	180	0	-10	0	-10	7	3.5	5	4	5	0	-250	-380	4
180	250	0	-12	0	-12	8	4	5	5	5	0	-300	-500	5

Note:

(1) Only apply to diameter series 0, 1, 2, 3, 4.

(2) Diameter series 8 has no specified value.

(3) Shall mean the variation of the width of the inner ring of a single bearing for paired or assembled mounting.

Table 4 Class P4A tolerances—outer ring

μm

D mm		ΔD_{mp}		ΔD_s (1)(2)(3)		V_{Dsp}	V_{Dmp}	K_{ea}	S_D	S_{ea}	ΔC_s		V_{Cs}
over	incl.	high	low	high	low	max					high	low	max
18	30	0	-5	0	-5	4	2	2.5	1.5	2.5			1.5
30	50	0	-6	0	-6	4	2	2.5	1.5	2.5			1.5
50	80	0	-7	0	-7	4	2	4	1.5	4			1.5
80	120	0	-8	0	-8	5	2.5	5	2.5	5	Values are identical to those for the inner ring of the same bearing(ΔB_s)		2.5
120	150	0	-9	0	-9	5	2.5	5	2.5	5			2.5
150	180	0	-10	0	-10	7	3.5	5	2.5	5			2.5
180	250	0	-11	0	-11	8	4	7	4	7			4
250	315	0	-13	0	-13	8	4	7	5	7			5
315	400	0	-15	0	-15	10	5	8	7	8			7

Note:

(1) Only apply to diameter series 0, 1, 2, 3, 4.

(2) Diameter series 8 has no specified value.

(3) Capped bearing has no standard.

Table 5 Class P2 tolerances—inner ring

μm

d mm		Δd_{mp}		Δd_s		V_{dsp} (1)	V_{dmp}	K_{ia}	S_d	S_{ia}	ΔB_s			V_{Bs}
											all	normal	correction(2)	
over	incl.	high	low	high	low	max					high	low		max
10	18	0	-2.5	0	-2.5	2.5	1.5	1.5	1.5	1.5	0	-80	-250	1.5
18	30	0	-2.5	0	-2.5	2.5	1.5	2.5	1.5	2.5	0	-120	-250	1.5
30	50	0	-2.5	0	-2.5	2.5	1.5	2.5	1.5	2.5	0	-120	-250	1.5
50	80	0	-4	0	-4	4	2	2.5	1.5	2.5	0	-150	-250	1.5
80	120	0	-5	0	-5	5	2.5	2.5	2.5	2.5	0	-200	-380	2.5
120	150	0	-7	0	-7	7	3.5	2.5	2.5	2.5	0	-250	-380	2.5
150	180	0	-7	0	-7	7	3.5	5	5	5	0	-250	-380	4
180	250	0	-8	0	-8	8	4	5	5	5	0	-300	-500	6

Note:

(1) Diameter series 8, 9 have no specified value.

(2) Shall mean the variation of the width of the inner ring of a single bearing for paired or assembled mounting.

Table 6 Class P2 tolerances—outer ring

μm

D mm		ΔD_{mp}		ΔD_s		V_{Dsp}	V_{Dmp}	K_{ea}	S_D	S_{ea}	ΔC_s			V_{Cs}
											all	normal	correction	
over	incl.	high	low	high	low	max					high	low		max
18	30	0	-4	0	-4	4	2	2.5	1.5	2.5				1.5
30	50	0	-4	0	-4	4	2	2.5	1.5	2.5				1.5
50	80	0	-4	0	-4	4	2	4	1.5	4				1.5
80	120	0	-5	0	-5	5	2.5	5	2.5	5	Values are identical to those for the inner ring of the same bearing(ΔB_s)			2.5
120	150	0	-5	0	-5	5	2.5	5	2.5	5				2.5
150	180	0	-7	0	-7	7	3.5	5	2.5	5				2.5
180	250	0	-8	0	-8	8	4	7	4	7				4
250	315	0	-8	0	-8	8	4	7	5	7				5
315	400	0	-10	0	-10	10	5	8	7	8				7

Axial preload of single, universally matchable bearings and matched bearing pairs prior to mounting, arranged back-toback or face-to-face – 70000C series

N

d mm	718C			719C			70C			72C		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	10	30	60	20	40	80	30	60	120	34	68	136
12	11	33	66	20	45	90	30	60	120	44	88	176
15	12	36	72	30	60	120	40	80	160	60	120	240
17	12	37	75	30	60	120	50	100	200	70	140	280
20	20	60	120	50	100	200	70	140	280	90	180	360
25	22	66	132	50	100	200	70	140	280	100	200	400
30	22	66	130	50	100	200	100	200	400	180	360	720
35	25	75	150	70	140	280	120	240	480	240	480	960
40	26	78	155	90	180	360	120	240	480	250	500	1000
45	27	80	160	100	200	400	220	440	880	320	640	1280
50	40	120	240	100	200	400	220	440	880	340	680	1360
55	55	165	330	140	280	560	300	600	1200	420	840	1680
60	70	210	420	140	280	560	300	600	1200	430	860	1720
65	71	215	430	160	320	640	320	640	1280	500	1000	2000
70	73	220	440	260	520	1040	400	800	1600	520	1040	2080
75	76	225	450	260	520	1040	400	800	1600	540	1080	2160
80	78	235	470	280	560	1120	480	960	1920	640	1280	2560
85	115	345	690	340	680	1360	500	1000	2000	740	1480	2960
90	116	350	700	360	720	1440	600	1200	2400	960	1920	3840
95	117	355	710	380	760	1520	620	1240	2480	1040	2080	4160
100	120	360	720	460	920	1840	620	1240	2480	1180	2360	4720
105	130	390	780	460	920	1840	720	1440	2880	1300	2600	5200
110	160	500	1000	460	920	1840	840	1680	3360	1340	2680	5360
120	180	550	1100	580	1160	2320	860	1720	3440	1500	3000	6000
130	210	620	1240	700	1400	2800	1120	2240	4480	1620	324	6480
140	240	720	1440	720	1440	2880	1140	2280	4560	1700	3400	6800
150	270	820	1630	940	1880	3760	1300	2600	5200	1900	3800	7600
160	280	850	1700	980	1960	3920	1460	2920	5840	2000	4000	8000
170	350	1000	2000	1000	2000	4000	1600	3200	6400	2400	4800	9600
180				1260	2520	5040	1800	3600	7200	2450	4900	9800
190				1280	2560	5120	1900	3800	7600	2550	5100	10200
200				1600	3200	6400	2200	4400	8800	2650	5300	10600
220				1700	3400	6800	2500	5000	10000	3250	6500	13000
240				1720	3440	6880	2600	5200	10400			
260				2100	4200	8400						
280				2180	4360	8720						

Axial preload of single, universally matchable bearings and matched bearing pairs prior to mounting, arranged back-toback or face-to-face – 70000AC series

N

d mm	718AC			719AC			70AC			72AC		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	16	48	100	30	60	120	50	100	200	54	108	216
12	17	53	105	30	60	120	50	100	200	70	140	280
15	19	58	115	50	100	200	60	120	240	90	180	360
17	20	60	120	50	100	200	80	160	320	120	240	480
20	32	100	200	70	140	280	100	200	400	140	280	560
25	35	105	210	80	160	320	120	240	480	160	320	640
30	37	110	220	80	160	320	180	360	720	300	600	1200
35	39	115	230	120	240	480	180	360	720	380	760	1520
40	40	120	240	140	280	560	200	400	800	400	800	1600
45	41	125	250	160	320	640	340	680	1360	520	1040	2080
50	60	180	360	160	320	640	360	720	1440	530	1060	2120
55	87	260	520	240	480	960	460	920	1840	660	1320	2640
60	114	340	680	240	480	960	480	960	1920	700	1400	2800
65	115	345	690	240	480	960	480	960	1920	800	1600	3200
70	117	350	700	400	800	1600	600	1200	2400	840	1680	3360
75	120	360	720	420	840	1680	620	1240	2480	860	1720	3440
80	123	370	740	440	880	1760	780	1560	3120	1040	2080	4160
85	183	550	1100	540	1080	2160	800	1600	3200	1200	2400	4800
90	184	555	1110	560	1120	2240	920	1840	3680	1500	3000	6000
95	186	560	1120	580	1160	2320	960	1920	3840	1700	3400	6800
100	190	570	1140	720	1440	2880	1000	2000	4000	1900	3800	7600
105	200	600	1200	720	1440	2880	1120	2240	4480	2000	4000	8000
110	260	800	1600	740	1480	2960	1300	2600	5200	2100	4200	8400
120	280	850	1700	900	1800	3600	1380	2760	5520	2400	4800	9600
130	325	980	1960	1080	2160	4320	1800	3600	7200	2600	5200	10400
140	380	1140	2280	1120	2240	4480	1800	3600	7200	2700	5400	10800
150	430	1300	2590	1480	2960	5920	2000	4000	8000	3050	6100	12200
160	450	1350	2690	1600	3200	6400	2300	4600	9200	3150	6300	12600
170	550	1650	3300	1600	3200	6400	2500	5000	10000	3750	7500	15000
180				2000	4000	8000	2900	5800	11600	3950	7900	15800
190				2000	4000	8000	2900	5800	11600	4050	8100	16200
200				2500	5000	10000	3500	7000	14000	4200	8400	16800
220				2600	5200	10400	4000	8000	16000	5000	10000	20000
240				2860	5720	11440	4100	8200	16400			
260				3460	6920	13840						
280				3640	7280	14560						

Axial preload of single, universally matchable bearings and matched bearing pairs prior to mounting, arranged back-toback or face-to-face – H70000(HQ1) series

N

d mm	H719C H719C/HQ1			H70C H70C/HQ1			H719AC H719AC/HQ1			H70AC H70AC/HQ1		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	11	32	65	15	48	95	17	50	100	26	80	160
12	11	34	68	17	53	110	18	55	110	28	85	170
15	17	51	102	25	70	140	28	84	170	38	115	230
17	18	54	108	30	90	185	29	87	175	50	150	300
20	26	79	157	40	120	235	42	120	250	64	193	390
25	28	85	170	45	130	260	45	140	270	70	210	430
30	30	90	180	50	150	300	48	145	290	80	240	480
35	41	125	250	60	180	370	66	200	400	100	300	590
40	52	157	315	65	200	390	84	250	505	105	310	630
45	55	166	331	70	210	410	88	265	529	110	330	660
50	69	210	410	85	250	500	110	330	660	130	400	800
55	83	250	500	90	270	540	133	400	800	140	430	860
60	87	262	523	92	275	550	139	418	836	150	440	870
65	89	266	532	110	330	650	142	425	850	170	520	1040
70	120	360	710	130	380	760	190	570	1130	200	610	1220
75	120	361	722	140	420	840	192	577	1150	220	670	1340
80	123	370	740	180	550	1090	195	590	1170	280	850	1700
85	160	479	957	185	560	1110	255	765	1529	290	890	1780
90	163	488	977	190	580	1150	260	780	1560	300	920	1840
95	166	500	995	230	700	1400	265	795	1590	380	1130	2270
100	208	624	1250	240	720	1440	332	996	1990	390	1150	2310
105	210	630	1260	245	730	1460	335	1010	2030	395	1165	2330
110	220	650	1300	250	760	1520	340	1030	2070	400	1210	2420
120	250	760	1530	310	930	1850	410	1220	2440	490	1480	2950
130	260	780	1470	320	960	1900	420	1250	2500	500	1500	3000
140	270	810	1630	330	990	2000	430	1290	2580	520	1560	3120
150	300	900	1800	400	1200	2400	480	1440	2880	630	1890	3780
160	300	900	1800	410	1230	2460	480	1440	2880	650	1950	3900
170	310	930	1860	420	1260	2520	500	1500	3000	660	1980	3960
180	360	1100	2200	430	1290	2580	580	1740	3480	680	2040	4080
190	370	1110	2220	510	1530	3060	590	1770	3540	800	2400	4800
200	380	1140	2280	520	1560	3120	610	1830	3660	820	2460	4920
220	440	1320	2640	600	1800	3600	700	2100	4200	940	2820	5640

Static axial stiffness for two bearings arranged back-to-back or face-to-face – 70000C series

N/μm

d mm	718C			719C			70C			72C		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	13	22	32	16	22	32	17	23	33	19	26	37
12	15	25	37	17	23	33	18	25	35	22	30	42
15	17	30	43	21	29	41	23	31	44	26	35	49
17	18	31	45	22	30	43	26	35	50	28	38	53
20	22	38	55	29	40	56	30	42	59	33	45	63
25	26	44	64	32	44	62	33	46	64	38	52	72
30	29	49	72	35	47	67	40	55	77	59	82	118
35	32	56	82	42	58	82	47	64	90	67	94	136
40	36	61	90	48	66	93	51	69	96	71	100	143
45	38	65	95	53	73	103	76	107	155	82	115	166
50	47	81	119	57	78	110	79	111	161	88	124	178
55	53	91	135	65	89	126	91	128	186	98	137	197
60	59	103	152	67	92	130	95	133	193	102	142	205
65	61	105	155	75	104	148	101	143	207	106	148	212
70	65	112	166	104	147	215	111	156	227	112	156	225
75	69	119	177	110	156	228	115	162	235	118	165	237
80	74	128	191	117	167	246	125	175	254	130	181	260
85	79	137	202	122	172	251	132	185	268	139	193	278
90	82	142	210	129	183	268	141	198	287	154	215	313
95	85	147	218	139	198	291	148	208	302	156	217	314
100	90	156	231	147	209	306	153	215	312	165	230	331
105	96	167	250	151	215	316	159	223	324	174	243	349
110	99	173	256	156	221	325	166	232	337	183	254	364
120	112	196	291	174	246	361	179	251	364	188	261	373
130	119	202	296	188	266	391	198	277	400	209	291	416
140	130	226	336	201	286	420	206	289	418	220	305	437
150	136	236	346	211	297	435	221	310	449	258	329	490
160	147	256	379	227	321	471	233	327	472	265	340	503
170	157	278	420	236	334	493	243	339	488	273	351	518
180				250	353	516	251	349	501	281	364	534
190				260	367	538	266	370	532	290	386	549
200				275	387	565	280	389	556	298	408	565
220				306	434	635	300	415	592	316	434	607
240				325	461	678	316	438	627			
260				339	475	688						
280				363	509	741						

Static axial stiffness for two bearings arranged back-to-back or face-to-face – 70000AC series

N/μm

d mm	718AC			719AC			70AC			72AC		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	30	47	65	38	49	65	41	54	71	45	59	78
12	34	54	72	39	52	69	44	57	76	52	68	90
15	40	63	85	51	67	88	53	69	92	60	78	102
17	43	67	90	54	70	93	62	81	107	68	89	118
20	52	83	112	65	85	113	69	90	120	79	102	135
25	60	95	128	78	101	134	83	108	143	92	119	158
30	69	106	144	83	109	145	102	133	176	137	181	244
35	76	119	161	105	137	183	110	144	190	154	204	275
40	83	130	178	115	151	199	124	162	214	165	218	294
45	87	139	189	129	168	225	173	229	309	190	252	341
50	107	168	231	137	180	240	184	244	331	201	266	359
55	124	195	268	161	211	282	207	275	372	224	296	399
60	141	222	306	166	218	292	219	291	393	238	315	424
65	144	227	312	176	232	311	227	302	409	245	324	437
70	152	241	332	235	314	428	249	330	447	261	345	464
75	162	257	355	255	340	464	262	347	471	274	361	487
80	171	274	379	267	358	490	291	386	523	303	401	540
85	189	296	406	281	374	509	304	405	549	325	429	578
90	194	307	420	293	392	536	321	425	575	355	469	632
95	200	316	436	315	420	576	337	448	607	365	482	649
100	211	335	462	336	449	613	355	472	640	388	509	685
105	220	353	488	346	463	633	365	484	655	399	527	708
110	236	377	518	359	482	661	379	503	681	423	557	748
120	262	417	576	396	529	724	416	552	749	440	579	777
130	278	439	603	427	570	780	460	610	826	491	530	869
140	306	489	675	457	614	841	477	633	856	516	679	911
150	323	512	702	485	648	882	506	671	909	556	739	953
160	352	556	764	530	710	970	540	717	968	586	767	988
170	383	602	826	546	731	1002	563	744	1003	608	798	1027
180				581	774	1055	593	782	1052	632	831	1069
190				599	798	1090	613	809	1088	655	864	1110
200				635	845	1148	660	871	1170	678	896	1251
220				699	934	1275	710	935	1254	728	966	1338
240				767	1029	1412	743	979	1315			
260				807	1071	1455						
280				867	1154	1572						

Static axial stiffness for two bearings arranged back-to-back or face-to-face – H70000 series

N/μm

d mm	H719C			H70C			H719AC			H70AC		
	预载荷级别											
	A	B	C	A	B	C	A	B	C	A	B	C
10	10	16	22	12	19	26	25	37	48	31	47	61
12	11	17	23	13	21	30	27	41	53	34	50	66
15	13	21	29	16	25	34	34	51	66	40	59	66
17	14	23	31	18	28	39	35	55	71	46	68	89
20	18	28	39	21	32	44	47	69	88	52	78	102
25	20	32	44	24	37	50	51	77	100	59	89	117
30	23	35	49	28	44	60	55	85	111	71	105	138
35	28	43	59	31	49	67	69	104	136	79	119	154
40	32	49	67	34	54	73	78	117	153	87	129	169
45	34	53	73	38	59	79	85	127	166	94	140	183
50	38	61	83	42	65	88	96	145	190	104	156	204
55	42	67	92	46	72	98	105	160	210	116	174	226
60	47	73	100	48	75	101	115	173	228	122	180	235
65	47	76	105	53	83	112	120	181	238	132	198	259
70	52	83	113	57	88	120	131	197	258	143	215	280
75	54	86	118	65	102	140	137	205	269	161	243	318
80	56	89	123	72	114	157	141	214	281	178	268	352
85	63	99	136	75	118	163	157	237	311	186	281	369
90	65	102	141	79	125	171	164	247	324	196	297	389
95	68	107	147	84	133	184	170	256	338	212	319	420
100	73	116	160	88	138	191	187	280	367	220	330	435
105	77	121	166	90	143	197	193	290	382	228	342	450
110	80	126	174	94	149	204	199	301	397	237	356	466
120	82	129	179	104	164	225	207	312	411	259	391	512
130	84	138	185	113	179	247	217	329	425	281	422	558
140	86	141	191	119	195	268	228	337	440	301	454	604
150	89	144	201	130	210	287	237	348	455	328	489	649
160	92	148	210	136	224	308	247	361	471	344	512	700
170	95	151	216	142	239	325	255	371	485	360	545	744
180	98	154	224	147	256	346	268	387	492	375	577	791
190	110	158	233	157	273	366	276	397	507	402	606	837
200	115	166	241	163	290	388	286	418	526	420	631	882
220	125	180	255	176	308	410	297	436	543	455	661	932

Note：For hybrid bearings, the guideline values for axial stiffness can be obtained in the same way as for bearings with steel balls. However, the calculated value should then be multiplied by a factor of 1,11 (for all arrangements and preload classes).

ZZC Angular contact ball bearings code example

H 70 05 C -2RZ/HQ1 P4 DB A

Bearing type

– High-capacity design
H High-speed design

Bearing series

718 Angular contact ball bearing in accordance with ISO dimension series 18
719 Angular contact ball bearing in accordance with ISO dimension series 19
70 Angular contact ball bearing in accordance with ISO dimension series 10
72 Angular contact ball bearing in accordance with ISO dimension series 02

Bearing size

00 10mm
01 12mm
02 15mm
03 17mm
04 4×5=20mm
05 5×5=25mm

Contact angle

C 15°
AC 25°

Structural style

-2RZ Non-contact seal on both sides, NBR

Single bearing – execution and preload

– Single standalone bearing (no designation suffix)
GA Single, universally matchable, extra light preload
GB Single, universally matchable, light preload
GC Single, universally matchable, moderate preload
G… Special preload, expressed in N e.g. G240

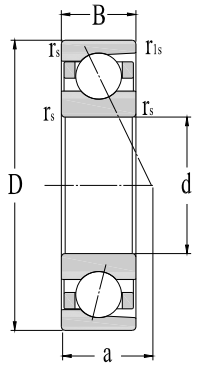
Bearing set arrangement

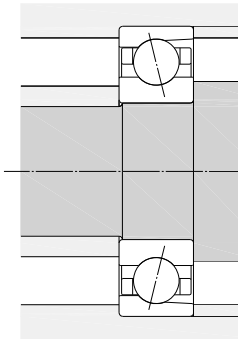
DB Set of two bearings arranged back-to-back
DF Set of two bearings arranged face-to-face
DT Set of two bearings arranged in tandem
TBT Set of three bearings arranged back-to-back and tandem
TFT Set of three bearings arranged face-to-face and tandem
TT Set of three bearings arranged in tandem
QBC Set of four bearings arranged tandem back-to-back
QFC Set of four bearings arranged tandem face-to-face
QBT Set of four bearings arranged tandem face-to-face
QFT Set of four bearings arranged face-to-face and tandem
QT Set of four bearings arranged in tandem

Precision grade

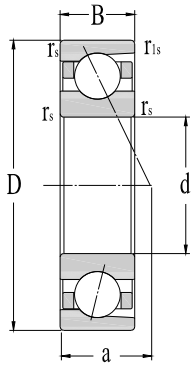
P2 Dimensional and running accuracy in accordance with ISO tolerance class 2
P4A Dimensional accuracy in accordance with ISO tolerance class 4, runningaccuracy better than ISO tolerance class 4
P4 Dimensional and running accuracy in accordance with ISO tolerance class 4

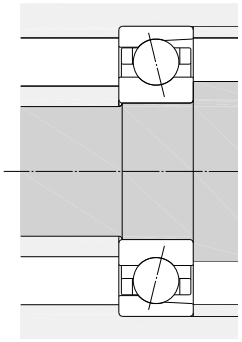
– Carbon chromium steel (no designation suffix)
HQ1 Balls made of bearing grade silicon nitride Si3N4 (hybrid bearing)



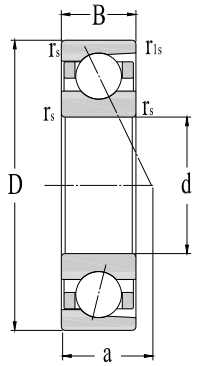


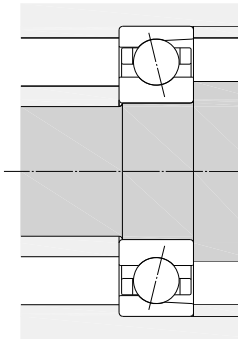
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
71800C	10	19	5	0.30	0.10	4	1.9	0.98	75000	120000	0.005
71800AC	10	19	5	0.30	0.10	6	1.78	0.93	70000	110000	0.005
71801C	12	21	5	0.30	0.10	5	2.08	1.18	70000	110000	0.006
71801AC	12	21	5	0.30	0.10	6	1.95	1.12	63000	95000	0.006
71802C	15	24	5	0.30	0.10	5	2.29	1.5	60000	90000	0.007
71802AC	15	24	5	0.30	0.10	7	2.16	1.4	53000	80000	0.007
71803C	17	26	5	0.30	0.10	5	2.34	1.6	53000	80000	0.008
71803AC	17	26	5	0.30	0.10	7	2.21	1.53	50000	75000	0.008
71804C	20	32	7	0.30	0.10	7	3.9	2.65	45000	67000	0.018
71804AC	20	32	7	0.30	0.10	9	3.64	2.5	40000	60000	0.018
71805C	25	37	7	0.30	0.15	8	4.16	3.2	38000	56000	0.022
71805AC	25	37	7	0.30	0.15	11	3.9	3.05	34000	50000	0.022
71806C	30	42	7	0.30	0.15	8	4.42	3.75	32000	48000	0.025
71806AC	30	42	7	0.30	0.15	12	4.16	3.55	28000	43000	0.025
71807C	35	47	7	0.30	0.15	9	4.62	4.3	26000	40000	0.029
71807AC	35	47	7	0.30	0.15	13	4.36	4.05	24000	38000	0.029
71808C	40	52	7	0.30	0.15	10	4.88	4.9	24000	38000	0.032
71808AC	40	52	7	0.30	0.15	14	4.49	4.55	20000	34000	0.032
71809C	45	58	7	0.30	0.15	10	4.88	5.3	20000	34000	0.04
71809AC	45	58	7	0.30	0.15	14	4.62	5	18000	30000	0.04
71810C	50	65	7	0.30	0.15	11	7.41	7.8	18000	30000	0.052
71810AC	50	65	7	0.30	0.15	17	6.89	7.35	16000	26000	0.052
71811C	55	72	9	0.30	0.15	13	10.1	10.8	16000	26000	0.081
71811AC	55	72	9	0.30	0.15	19	9.56	10.2	15000	24000	0.081
71812C	60	78	10	0.30	0.15	14	13.5	14.3	15000	24000	0.1
71812AC	60	78	10	0.30	0.15	21	12.7	13.4	14000	22000	0.1
71813C	65	85	10	0.60	0.15	15	13.5	14.6	14000	22000	0.125
71813AC	65	85	10	0.60	0.15	22	12.7	14	13000	20000	0.125
71814C	70	90	10	0.60	0.15	16	13.8	16	13000	20000	0.133
71814AC	70	90	10	0.60	0.15	24	13.0	15	12000	19000	0.133



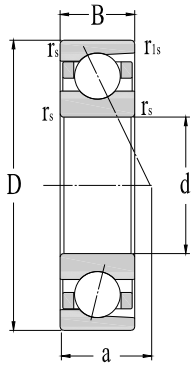


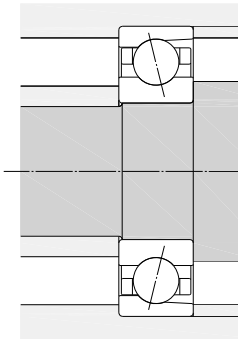
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
71815C	75	95	10	0.60	0.15	16	14.3	17	12000	19000	0.142
71815AC	75	95	10	0.60	0.15	25	13.3	16	11000	18000	0.142
71816C	80	100	10	0.60	0.15	17	14.6	18.3	11000	18000	0.15
71816AC	80	100	10	0.60	0.15	26	13.8	17	9500	16000	0.15
71817C	85	110	13	1.00	0.30	20	21.6	25.5	10000	17000	0.262
71817AC	85	110	13	1.00	0.30	29	20.3	24	9000	15000	0.262
71818C	90	115	13	1.00	0.30	20	21.6	26.5	9500	16000	0.274
71818AC	90	115	13	1.00	0.30	30	20.3	25	8500	14000	0.274
71819C	95	120	13	1.00	0.30	21	22.1	27.5	9000	15000	0.287
71819AC	95	120	13	1.00	0.30	32	20.8	25.5	8500	14000	0.287
71820C	100	125	13	1.00	0.30	22	22.5	29	8500	14000	0.301
71820AC	100	125	13	1.00	0.30	33	21.2	27.5	8000	13000	0.301
71821C	105	130	13	1.00	0.30	22	22.9	30	8500	14000	0.314
71821AC	105	130	13	1.00	0.30	34	21.6	28.5	8000	13000	0.314
71822C	110	140	16	1.00	0.30	25	31.9	40.5	8000	13000	0.496
71822AC	110	140	16	1.00	0.30	37	30.2	38	7500	12000	0.496
71824C	120	150	16	1.00	0.30	26	33.2	45	7000	11000	0.537
71824AC	120	150	16	1.00	0.30	39	31.2	42.5	6700	10000	0.537
71826C	130	165	18	1.10	0.60	29	39	53	6700	10000	0.782
71826AC	130	165	18	1.10	0.60	43	36.4	50	6000	9000	0.782
71828C	140	175	18	1.10	0.60	30	44.9	62	6000	9000	0.813
71828AC	140	175	18	1.10	0.60	46	42.3	58.5	5600	8500	0.813
71830C	150	190	20	1.10	0.60	33	52	72	5600	8500	1.14
71830AC	150	190	20	1.10	0.60	50	48.8	68	5000	7500	1.14
71832C	160	200	20	1.10	0.60	34	54	78	5000	7500	1.21
71832AC	160	200	20	1.10	0.60	52	50.7	75	4800	7000	1.21
71834C	170	215	22	1.10	0.60	37	66.5	123.4	4800	7000	1.61
71834AC	170	215	22	1.10	0.60	56	62.4	116.5	4300	6300	1.61



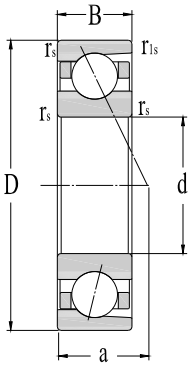


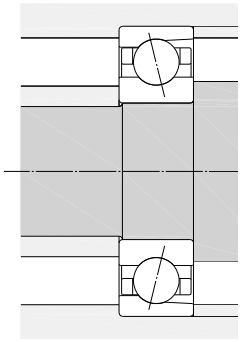
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
71900C	10	22	6	0.30	0.10	5	2.51	1.1	70000	110000	0.01
71900AC	10	22	6	0.30	0.10	7	2.42	1.06	67000	100000	0.01
71901C	12	24	6	0.30	0.10	5	2.65	1.25	63000	90000	0.01
71901AC	12	24	6	0.30	0.10	7	2.55	1.18	56000	85000	0.01
71902C	15	28	7	0.30	0.10	6	3.97	1.9	53000	80000	0.02
71902AC	15	28	7	0.30	0.10	9	3.77	1.8	50000	75000	0.02
71903C	17	30	7	0.30	0.10	7	4.16	2.08	50000	75000	0.02
71903AC	17	30	7	0.30	0.10	9	3.97	2	45000	67000	0.02
71904C	20	37	9	0.30	0.15	8	6.05	3.2	40000	60000	0.04
71904AC	20	37	9	0.30	0.15	11	5.72	3.05	38000	56000	0.04
71905C	25	42	9	0.30	0.15	9	6.76	4	34000	50000	0.04
71905AC	25	42	9	0.30	0.15	12	6.37	3.8	30000	45000	0.04
71906C	30	47	9	0.30	0.15	10	7.15	4.55	30000	45000	0.05
71906AC	30	47	9	0.30	0.15	13	6.76	4.3	26000	40000	0.05
71907C	35	55	10	0.60	0.15	11	9.75	6.65	26000	40000	0.07
71907AC	35	55	10	0.60	0.15	16	9.23	6.2	20000	34000	0.07
71908C	40	62	12	0.60	0.15	13	12.4	8.5	20000	34000	0.11
71908AC	40	62	12	0.60	0.15	18	11.7	8	18000	30000	0.11
71909C	45	68	12	0.60	0.15	14	13	9.5	18000	30000	0.13
71909AC	45	68	12	0.60	0.15	19	12.4	9	17000	28000	0.13
71910C	50	72	12	0.60	0.15	14	13.5	10.4	17000	28000	0.13
71910AC	50	72	12	0.60	0.15	20	12.7	9.8	15000	24000	0.13
71911C	55	80	13	1.00	0.30	16	19.5	14.6	15000	24000	0.18
71911AC	55	80	13	1.00	0.30	22	18.2	13.7	14000	22000	0.18
71912C	60	85	13	1.00	0.30	16	19.9	15.3	14000	22000	0.19
71912AC	60	85	13	1.00	0.30	23	18.6	14.6	13000	20000	0.19
71913C	65	90	13	1.00	0.30	17	20.8	17	13000	20000	0.2
71913AC	65	90	13	1.00	0.30	25	19.5	16	12000	19000	0.2
71914C	70	100	16	1.00	0.30	19	34.5	34	12000	19000	0.33
71914AC	70	100	16	1.00	0.30	28	32.5	32	11000	18000	0.33
71915C	75	105	16	1.00	0.30	20	35.8	37.5	11000	18000	0.35
71915AC	75	105	16	1.00	0.30	29	33.8	35.5	9500	16000	0.35
71916C	80	110	16	1.00	0.30	21	36.4	39	10000	17000	0.37
71916AC	80	110	16	1.00	0.30	30	34.5	36.5	9000	15000	0.37
71917C	85	120	18	1.10	0.60	23	46.2	48	9500	16000	0.53
71917AC	85	120	18	1.10	0.60	33	43.6	45.5	8500	14000	0.53



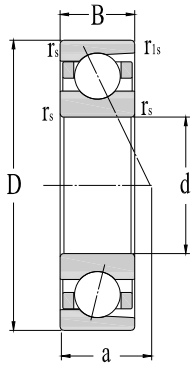


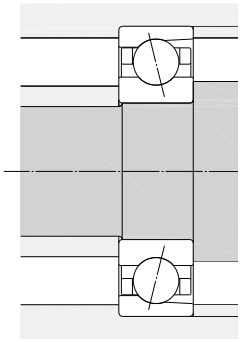
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
71918C	90	125	18	1.10	0.60	23	47.5	51	9000	15000	0.56
71918AC	90	125	18	1.10	0.60	34	44.2	48	8000	13000	0.56
71919C	95	130	18	1.10	0.60	24	49.4	55	9000	15000	0.58
71919AC	95	130	18	1.10	0.60	35	46.2	52	8000	13000	0.58
71920C	100	140	20	1.10	0.60	26	60.5	65.5	8500	14000	0.79
71920AC	100	140	20	1.10	0.60	38	57.2	63	8000	13000	0.79
71921C	105	145	20	1.10	0.60	27	61.8	69.5	8000	13000	0.83
71921AC	105	145	20	1.10	0.60	39	57.2	65.5	7500	12000	0.83
71922C	110	150	20	1.10	0.60	27	62.4	72	7500	12000	0.86
71922AC	110	150	20	1.10	0.60	40	58.5	68	7000	11000	0.86
71924C	120	165	22	1.10	0.60	30	78	91.5	7000	11000	1.17
71924AC	120	165	22	1.10	0.60	44	72.8	76.5	6700	10000	1.17
71926C	130	180	24	1.50	0.60	33	92.3	108	6700	10000	1.58
71926AC	130	180	24	1.50	0.60	48	87.1	102	6000	9000	1.58
71928C	140	190	24	1.50	0.60	34	95.6	116	6000	9000	1.68
71928AC	140	190	24	1.50	0.60	50	90.4	110	5600	8500	1.68
71930C	150	210	28	2.00	1.00	38	125	146	5600	8500	2.48
71930AC	150	210	28	2.00	1.00	56	119	140	5000	7500	2.48
71932C	160	220	28	2.00	1.00	39	130	160	5000	7500	2.64
71932AC	160	220	28	2.00	1.00	58	124	153	4800	7000	2.64
71934C	170	230	28	2.00	1.00	41	133	166	4800	7000	2.77
71934AC	170	230	28	2.00	1.00	61	124	160	4300	6300	2.77
71936C	180	250	33	2.00	1.00	45	168	212	4500	6700	4.1
71936AC	180	250	33	2.00	1.00	67	159	200	4000	6000	4.1
71938C	190	260	33	2.00	1.00	47	172	220	4300	6300	4.29
71938AC	190	260	33	2.00	1.00	69	163	208	3800	5600	4.29
71940C	200	280	38	2.00	1.00	51	208	265	3800	5600	6.02
71940AC	200	280	38	2.00	1.00	75	199	250	3600	5300	6.02
71944C	220	300	38	2.10	1.00	54	221	300	3600	5300	6.52
71944AC	220	300	38	2.10	1.00	80	208	285	3200	4800	6.52
71948C	240	320	38	2.10	1.00	56	229	325	3200	4800	7.07
71948AC	240	320	38	2.10	1.00	84	216	305	3000	4500	7.07
71952C	260	360	46	2.10	1.00	64	281	425	3000	4500	12
71952AC	260	360	46	2.10	1.00	95	265	400	2600	4000	12
71956C	280	380	46	2.10	1.00	67	291	455	2600	4000	12.7
71956AC	280	380	46	2.10	1.00	100	276	430	2200	3600	12.7



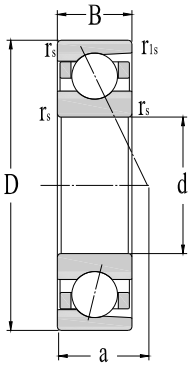


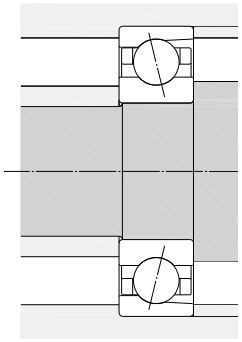
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
7000C	10	26	8	0.30	0.15	6	4.1	1.66	67000	100000	0.02
7000AC	10	26	8	0.30	0.15	8	3.97	1.6	60000	90000	0.02
7001C	12	28	8	0.30	0.15	7	4.49	1.9	60000	90000	0.02
7001AC	12	28	8	0.30	0.15	9	4.36	1.83	56000	85000	0.02
7002C	15	32	9	0.30	0.15	8	5.2	2.45	50000	75000	0.03
7002AC	15	32	9	0.30	0.15	10	4.94	2.32	45000	67000	0.03
7003C	17	35	10	0.30	0.15	8	6.76	3.25	45000	67000	0.04
7003AC	17	35	10	0.30	0.15	11	6.5	3.1	40000	60000	0.04
7004C	20	42	12	0.60	0.15	10	8.71	4.3	38000	56000	0.06
7004AC	20	42	12	0.60	0.15	13	8.32	4.15	34000	50000	0.06
7005C	25	47	12	0.60	0.15	11	9.56	5.2	34000	50000	0.07
7005AC	25	47	12	0.60	0.15	14	9.23	5	30000	45000	0.07
7006C	30	55	13	1.00	0.30	12	14.3	8	28000	43000	0.11
7006AC	30	55	13	1.00	0.30	17	13.8	7.65	24000	38000	0.11
7007C	35	62	14	1.00	0.30	13	15.6	9.5	20000	34000	0.15
7007AC	35	62	14	1.00	0.30	18	14.8	9	19000	32000	0.15
7008C	40	68	15	1.00	0.30	15	16.8	11	19000	32000	0.19
7008AC	40	68	15	1.00	0.30	20	15.9	10.4	17000	28000	0.19
7009C	45	75	16	1.00	0.30	16	28.6	22.4	17000	28000	0.23
7009AC	45	75	16	1.00	0.30	22	27.6	21.6	16000	26000	0.23
7010C	50	80	16	1.00	0.30	17	29.6	24	16000	26000	0.25
7010AC	50	80	16	1.00	0.30	23	28.1	23.2	15000	24000	0.25
7011C	55	90	18	1.10	0.60	19	39.7	32.5	14000	22000	0.37
7011AC	55	90	18	1.10	0.60	26	37.1	31	13000	20000	0.37
7012C	60	95	18	1.10	0.60	19	40.3	34.5	14000	22000	0.39
7012AC	60	95	18	1.10	0.60	27	39	33.5	12000	19000	0.39
7013C	65	100	18	1.10	0.60	20	41.6	37.5	13000	20000	0.42
7013AC	65	100	18	1.10	0.60	28	39	35.5	11000	18000	0.42
7014C	70	110	20	1.10	0.60	22	52	45.5	12000	19000	0.59
7014AC	70	110	20	1.10	0.60	31	48.8	44	10000	17000	0.59
7015C	75	115	20	1.10	0.60	23	52.7	49	11000	18000	0.62
7015AC	75	115	20	1.10	0.60	32	49.4	46.5	9500	16000	0.62
7016C	80	125	22	1.10	0.60	25	65	61	10000	17000	0.83
7016AC	80	125	22	1.10	0.60	35	62.4	58.5	9000	15000	0.83



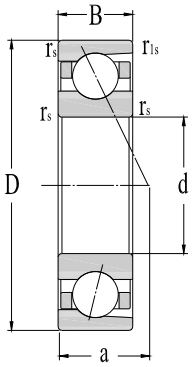


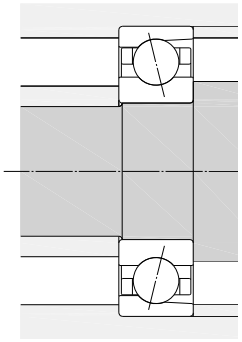
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
7017C	85	130	22	1.10	0.60	25	67.6	65.5	9500	16000	0.87
7017AC	85	130	22	1.10	0.60	36	63.7	62	8500	14000	0.87
7018C	90	140	24	1.50	0.60	27	79.3	76.5	9000	15000	1.18
7018AC	90	140	24	1.50	0.60	39	74.1	72	8000	13000	1.18
7019C	95	145	24	1.50	0.60	28	81.9	80	8500	14000	1.2
7019AC	95	145	24	1.50	0.60	40	76.1	76.5	7500	12000	1.2
7020C	100	150	24	1.50	0.60	29	83.2	85	8000	13000	1.25
7020AC	100	150	24	1.50	0.60	41	79.3	80	7000	11000	1.25
7021C	105	160	26	2.00	1.00	31	95.6	96.5	7500	12000	1.58
7021AC	105	160	26	2.00	1.00	44	90.4	93	7000	11000	1.58
7022C	110	170	28	2.00	1.00	33	111	108	7000	11000	1.97
7022AC	110	170	28	2.00	1.00	47	104	104	6700	10000	1.97
7024C	120	180	28	2.00	1.00	34	114	122	7000	11000	2.11
7024AC	120	180	28	2.00	1.00	49	111	116	6700	10000	2.11
7026C	130	200	33	2.00	1.00	39	148	156	6700	10000	3.18
7026AC	130	200	33	2.00	1.00	55	140	150	6000	9000	3.18
7028C	140	210	33	2.00	1.00	40	153	166	6000	9000	3.37
7028AC	140	210	33	2.00	1.00	57	146	156	5600	8500	3.37
7030C	150	225	35	2.10	1.10	43	172	190	5600	8500	4.1
7030AC	150	225	35	2.10	1.10	61	163	180	5000	7500	4.1
7032C	160	240	38	2.10	1.10	46	195	216	5000	7500	5.07
7032AC	160	240	38	2.10	1.10	66	182	204	4800	7000	5.07
7034C	170	260	42	2.10	1.10	50	212	245	4800	7000	6.9
7034AC	170	260	42	2.10	1.10	71	199	232	4300	6300	6.9
7036C	180	280	46	2.10	1.10	54	242	290	4500	6700	9.21
7036AC	180	280	46	2.10	1.10	77	229	275	4000	6000	9.21
7038C	190	290	46	2.10	1.10	55	247	305	4300	6300	9.61
7038AC	190	290	46	2.10	1.10	79	234	290	3800	5600	9.61
7040C	200	310	51	2.10	1.10	60	296	390	3800	5600	12.1
7040AC	200	310	51	2.10	1.10	85	281	365	3600	5300	12.1
7044C	220	340	56	3.00	1.10	66	338	455	3600	5300	15.9
7044AC	220	340	56	3.00	1.10	93	319	440	3200	4800	15.9
7048C	240	360	56	3.00	1.10	68	345	490	3200	4800	17
7048AC	240	360	56	3.00	1.10	98	325	465	3000	4500	17



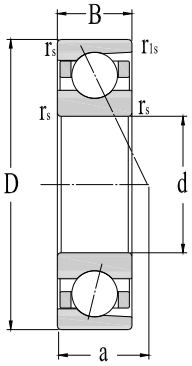


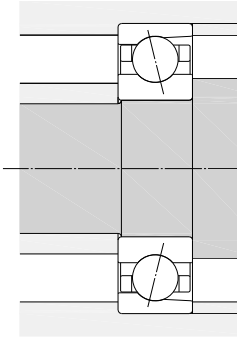
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
7200C	10	30	9	0.60	0.15	7	4.49	1.93	56000	85000	0.03
7200AC	10	30	9	0.60	0.15	9	4.36	1.86	53000	80000	0.03
7201C	12	32	10	0.60	0.15	8	5.85	2.55	53000	80000	0.04
7201AC	12	32	10	0.60	0.15	10	5.72	2.45	48000	70000	0.04
7202C	15	35	11	0.60	0.15	9	7.41	3.35	48000	70000	0.05
7202AC	15	35	11	0.60	0.15	11	7.15	3.2	43000	63000	0.05
7203C	17	40	12	0.60	0.30	10	9.23	4.15	40000	60000	0.07
7203AC	17	40	12	0.60	0.30	13	8.84	4	38000	56000	0.07
7204C	20	47	14	1.00	0.30	12	11.9	5.85	34000	50000	0.11
7204AC	20	47	14	1.00	0.30	15	11.4	5.6	30000	45000	0.11
7205C	25	52	15	1.00	0.30	13	13.5	7.2	30000	45000	0.14
7205AC	25	52	15	1.00	0.30	16	13	6.95	26000	40000	0.14
7206C	30	62	16	1.00	0.30	14	24.2	16	24000	38000	0.21
7206AC	30	62	16	1.00	0.30	19	23.4	15.3	20000	34000	0.21
7207C	35	72	17	1.10	0.60	16	31.9	21.6	18000	30000	0.31
7207AC	35	72	17	1.10	0.60	21	30.7	20.8	17000	28000	0.31
7208C	40	80	18	1.10	0.60	17	33.8	24	17000	28000	0.4
7208AC	40	80	18	1.10	0.60	23	31.9	22.8	15000	24000	0.4
7209C	45	85	19	1.10	0.60	18	42.3	31	16000	26000	0.45
7209AC	45	85	19	1.10	0.60	25	41	30	14000	22000	0.45
7210C	50	90	20	1.10	0.60	19	44.9	34	15000	24000	0.49
7210AC	50	90	20	1.10	0.60	26	42.3	32.5	14000	22000	0.49
7211C	55	100	21	1.50	0.60	21	55.3	43	14000	22000	0.65
7211AC	55	100	21	1.50	0.60	29	52.7	40.5	13000	20000	0.65
7212C	60	110	22	1.50	0.60	22	57.2	46.5	12000	19000	0.86
7212AC	60	110	22	1.50	0.60	31	55.3	45	11000	18000	0.86
7213C	65	120	23	1.50	0.60	24	66.3	53	11000	18000	1.08
7213AC	65	120	23	1.50	0.60	33	63.7	51	9500	16000	1.08
7214C	70	125	24	1.50	0.60	25	68.9	58.5	10000	17000	1.19
7214AC	70	125	24	1.50	0.60	35	66.3	55	9000	15000	1.19
7215C	75	130	25	1.50	0.60	26	71.5	62	9500	16000	1.29
7215AC	75	130	25	1.50	0.60	36	68.9	58.5	8500	14000	1.29
7216C	80	140	26	2.00	1.00	28	85.2	75	9000	15000	1.58
7216AC	80	140	26	2.00	1.00	39	81.9	72	8000	13000	1.58



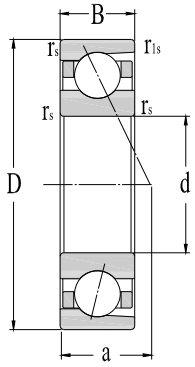


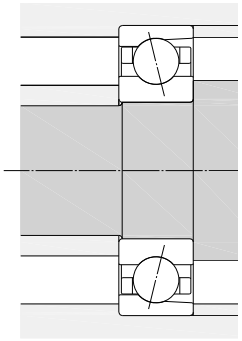
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
7217C	85	150	28	2.0	1.0	30	99.5	88	8500	14000	1.96
7217AC	85	150	28	2.0	1.0	42	95.6	85	7500	12000	1.96
7218C	90	160	30	2.0	1.0	32	127	112	8000	13000	2.44
7218AC	90	160	30	2.0	1.0	44	121	106	7000	11000	2.44
7219C	95	170	32	2.1	1.1	34	138	120	7500	12000	2.93
7219AC	95	170	32	2.1	1.1	47	133	114	6700	10000	2.93
7220C	100	180	34	2.1	1.1	36	156	137	7000	11000	3.51
7220AC	100	180	34	2.1	1.1	50	148	129	6700	10000	3.51
7221C	105	190	36	2.1	1.1	38	172	153	7000	11000	4.17
7221AC	105	190	36	2.1	1.1	52	163	146	6300	9500	4.17
7222C	110	200	38	2.1	1.1	40	178	166	6700	10000	4.95
7222AC	110	200	38	2.1	1.1	55	168	160	6000	9000	4.95
7224C	120	215	40	2.1	1.1	42	199	193	6000	9000	6.01
7224AC	120	215	40	2.1	1.1	59	190	183	5300	8000	6.01
7226C	130	230	40	3.0	1.1	44	216	224	5600	8500	6.41
7226AC	130	230	40	3.0	1.1	62	203	212	5000	7500	6.41
7228C	140	250	42	3.0	1.1	47	221	240	5000	7500	8.17
7228AC	140	250	42	3.0	1.1	66	212	228	4500	6700	8.17
7230C	150	270	45	3.0	1.1	51	240.9	341.5	4500	6700	10.38
7230AC	150	270	45	3.0	1.1	71	228.7	325.5	4000	6000	10.38
7232C	160	290	48	3.0	1.1	54	248.6	365.8	4300	6300	13.1
7232AC	160	290	48	3.0	1.1	76	236.1	348.6	3800	5600	13.1
7234C	170	310	52	4.0	1.5	58	300.2	459.2	3800	5600	15.93
7234AC	170	310	52	4.0	1.5	82	285.0	437.6	3600	5300	15.93
7236C	180	320	52	4.0	1.5	59	311.2	490.8	3800	5600	16.61
7236AC	180	320	52	4.0	1.5	84	295.5	467.7	3400	5000	16.61
7238C	190	340	55	4.0	1.5	63	321.3	524.8	3400	5000	20.29
7238AC	190	340	55	4.0	1.5	89	305.1	500.1	3200	4800	20.29
7240C	200	360	58	4.0	1.5	67	330.9	558.6	3200	4800	24.49
7240AC	200	360	58	4.0	1.5	94	314.2	532.3	3000	4500	24.49
7244C	220	400	65	4.0	1.5	74	405.9	730.5	2800	4300	33.93
7244AC	220	400	65	4.0	1.5	105	385.4	696.2	2600	4000	33.93



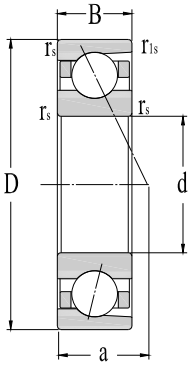


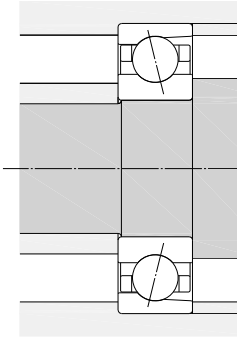
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H71900C	10	22	6	0.30	0.10	5	2.03	0.815	100000	154000	0.01
H71900AC	10	22	6	0.30	0.10	7	1.95	0.78	90000	138000	0.01
H71901C	12	24	6	0.30	0.10	5	2.12	0.915	90000	136000	0.01
H71901AC	12	24	6	0.30	0.10	7	2.03	0.865	80000	123000	0.01
H71902C	15	28	7	0.30	0.10	6	3.19	1.4	74000	114000	0.01
H71902AC	15	28	7	0.30	0.10	9	3.02	1.34	67000	103000	0.01
H71903C	17	30	7	0.30	0.10	7	3.32	1.56	68000	104000	0.02
H71903AC	17	30	7	0.30	0.10	9	3.19	1.46	61000	94000	0.02
H71904C	20	37	9	0.30	0.15	8	4.88	2.4	56000	86000	0.04
H71904AC	20	37	9	0.30	0.15	11	4.68	2.28	50500	77000	0.04
H71905C	25	42	9	0.30	0.15	9	5.27	2.85	48000	73000	0.04
H71905AC	25	42	9	0.30	0.15	12	4.94	2.7	43000	66000	0.04
H71906C	30	47	9	0.30	0.15	10	5.59	3.25	41500	64000	0.05
H71906AC	30	47	9	0.30	0.15	13	5.27	3.1	37500	57500	0.05
H71907C	35	55	10	0.60	0.15	11	7.61	4.75	35500	54000	0.07
H71907AC	35	55	10	0.60	0.15	16	7.28	4.5	32000	49000	0.07
H71908C	40	62	12	0.60	0.15	13	9.75	6.1	31000	48000	0.12
H71908AC	40	62	12	0.60	0.15	18	9.23	5.85	28000	43500	0.12
H71909C	45	68	12	0.60	0.15	14	10.1	6.95	28000	43500	0.14
H71909AC	45	68	12	0.60	0.15	19	9.75	6.55	25500	39000	0.14
H71910C	50	72	12	0.60	0.15	14	12.7	8.65	26000	40000	0.14
H71910AC	50	72	12	0.60	0.15	20	12.1	8.15	23500	36000	0.14
H71911C	55	80	13	1.00	0.30	16	15.3	10.6	23500	36000	0.18
H71911AC	55	80	13	1.00	0.30	22	14.6	10.2	21000	32500	0.18
H71912C	60	85	13	1.00	0.30	16	16.3	11.8	22000	34000	0.2
H71912AC	60	85	13	1.00	0.30	23	15.3	11.2	20000	30500	0.2
H71913C	65	90	13	1.00	0.30	17	16.5	12.5	20500	31500	0.21
H71913AC	65	90	13	1.00	0.30	25	15.6	11.8	18500	28500	0.21
H71914C	70	100	16	1.00	0.30	19	22.1	16.3	18500	28500	0.35
H71914AC	70	100	16	1.00	0.30	28	20.8	15.3	16500	26000	0.35
H71915C	75	105	16	1.00	0.30	20	22.5	17	17500	27000	0.37
H71915AC	75	105	16	1.00	0.30	29	21.2	16.3	16000	24000	0.37
H71916C	80	110	16	1.00	0.30	21	22.5	18	16500	25500	0.39
H71916AC	80	110	16	1.00	0.30	30	21.2	17	14800	23000	0.39



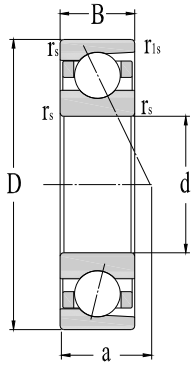


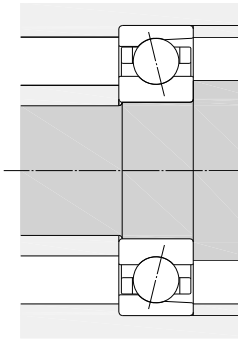
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H71917C	85	120	18	1.10	0.60	23	29.6	23.2	15500	24000	0.56
H71917AC	85	120	18	1.10	0.60	23	28.1	22	14000	21500	0.56
H71918C	90	125	18	1.10	0.60	23	30.2	24.5	14000	21500	0.59
H71918AC	90	125	18	1.10	0.60	34	28.6	23.2	12500	19500	0.59
H71919C	95	130	18	1.10	0.60	24	30.7	25.5	13300	20500	0.62
H71919AC	95	130	18	1.10	0.60	35	29.1	24	12000	18500	0.62
H71920C	100	140	20	1.10	0.60	26	39	31.5	12500	19000	0.82
H71920AC	100	140	20	1.10	0.60	38	36.4	30	11300	17200	0.82
H71921C	105	145	20	1.10	0.60	27	40.7	39.1	12000	18500	0.85
H71921AC	105	145	20	1.10	0.60	39	38.4	36.9	10800	16600	0.85
H71922C	110	150	20	1.10	0.60	27	39.7	34.5	11500	17700	0.89
H71922AC	110	150	20	1.10	0.60	40	37.7	32.5	10400	16000	0.89
H71924C	120	165	22	1.10	0.60	30	47.5	40.5	10000	15500	1.25
H71924AC	120	165	22	1.10	0.60	44	44.9	38	9000	14000	1.25
H71926C	130	180	24	1.50	0.60	33	53.1	56.6	9400	14500	1.58
H71926AC	130	180	24	1.50	0.60	48	50.1	53.4	8500	13000	1.58
H71928C	140	190	24	1.50	0.60	34	53.7	59.1	8800	13500	1.67
H71928AC	140	190	24	1.50	0.60	50	50.7	55.8	7900	12200	1.67
H71930C	150	210	28	2.00	1.00	38	65.2	72.8	7500	12000	2.64
H71930AC	150	210	28	2.00	1.00	56	61.5	68.7	7000	10500	2.64
H71932C	160	220	28	2.00	1.00	39	66.0	75.8	7400	11400	2.78
H71932AC	160	220	28	2.00	1.00	58	62.3	71.6	6700	10300	2.78
H71934C	170	230	28	2.00	1.00	41	66.7	78.7	7000	10800	2.92
H71934AC	170	230	28	2.00	1.00	61	63.0	74.3	6300	9700	2.92
H71936C	180	250	33	2.00	1.00	45	79.6	95.0	6300	9700	4.42
H71936AC	180	250	33	2.00	1.00	67	75.2	89.7	5700	8800	4.42
H71938C	190	260	33	2.00	1.00	47	80.6	98.6	6000	9200	4.62
H71938AC	190	260	33	2.00	1.00	69	76.1	93.1	5400	8300	4.61
H71940C	200	280	38	2.00	1.00	51	82.8	105.4	5400	8300	6.74
H71940AC	200	280	38	2.00	1.00	75	78.2	99.5	4900	7500	6.74
H71944C	220	300	38	2.00	1.00	54	96.9	125.4	5000	7700	7.12
H71944AC	220	300	38	2.00	1.00	80	91.5	118.4	4500	6900	7.12



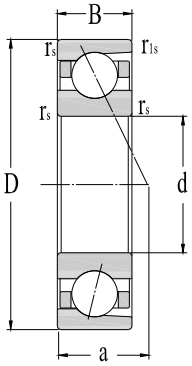


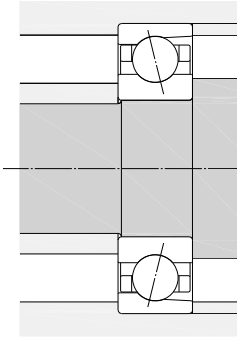
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H7000C	10	26	8	0.30	0.15	6	3.02	1.18	88900	136800	0.02
H7000AC	10	26	8	0.30	0.15	8	2.86	1.14	80000	123100	0.02
H7001C	12	28	8	0.30	0.15	7	3.19	1.34	80000	123100	0.02
H7001AC	12	28	8	0.30	0.15	9	3.07	1.27	72000	110800	0.02
H7002C	15	32	9	0.30	0.15	8	4.42	1.93	68100	104800	0.03
H7002AC	15	32	9	0.30	0.15	10	4.23	1.83	61300	94300	0.03
H7003C	17	35	10	0.30	0.15	8	5.85	2.55	61500	94600	0.04
H7003AC	17	35	10	0.30	0.15	11	5.59	2.45	55400	85200	0.04
H7004C	20	42	12	0.60	0.15	10	7.41	3.35	51600	79400	0.07
H7004AC	20	42	12	0.60	0.15	13	7.15	3.25	46400	71400	0.07
H7005C	25	47	12	0.60	0.15	11	8.32	4.15	45800	70500	0.08
H7005AC	25	47	12	0.60	0.15	14	7.93	3.9	41200	63400	0.08
H7006C	30	55	13	1.00	0.30	12	9.36	5.2	38800	59700	0.11
H7006AC	30	55	13	1.00	0.30	17	8.84	5	35000	53700	0.11
H7007C	35	62	14	1.00	0.30	13	11.4	6.55	34000	52300	0.15
H7007AC	35	62	14	1.00	0.30	18	11.1	6.3	30600	47100	0.15
H7008C	40	68	15	1.00	0.30	15	12.4	7.65	30600	47100	0.19
H7008AC	40	68	15	1.00	0.30	20	11.7	7.2	27500	42300	0.19
H7009C	45	75	16	1.00	0.30	16	13	8.5	27500	42300	0.24
H7009AC	45	75	16	1.00	0.30	22	12.1	8.15	24800	38200	0.24
H7010C	50	80	16	1.00	0.30	17	15.6	10.6	24600	37800	0.26
H7010AC	50	80	16	1.00	0.30	23	14.8	10	22100	34000	0.26
H7011C	55	90	18	1.10	0.60	19	16.8	12.2	22100	34000	0.41
H7011AC	55	90	18	1.10	0.60	26	15.9	11.6	19900	30600	0.41
H7012C	60	95	18	1.10	0.60	19	17.2	12.9	20600	31700	0.44
H7012AC	60	95	18	1.10	0.60	27	16.3	12.2	18500	28500	0.44
H7013C	65	100	18	1.10	0.60	20	20.3	15.6	19400	29800	0.45
H7013AC	65	100	18	1.10	0.60	28	19.5	14.6	17500	26900	0.45
H7014C	70	110	20	1.10	0.60	22	23.8	18.3	17200	26500	0.64
H7014AC	70	110	20	1.10	0.60	31	22.5	17.3	15500	23800	0.64
H7015C	75	115	20	1.10	0.60	23	26	21.6	15800	24300	0.68
H7015AC	75	115	20	1.10	0.60	32	24.7	20.4	14200	21800	0.68
H7016C	80	125	22	1.10	0.60	25	33.8	28	14600	20200	0.9
H7016AC	80	125	22	1.10	0.60	35	32.5	26.5	13100	18000	0.9



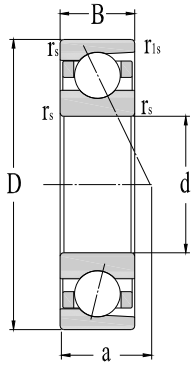


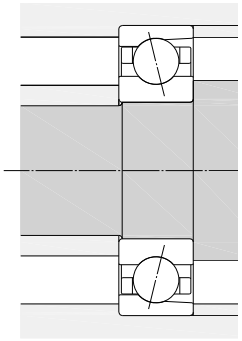
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H7017C	85	130	22	1.10	0.60	25	34.5	29	14000	21500	0.95
H7017AC	85	130	22	1.10	0.60	36	32.5	28	12600	19400	0.95
H7018C	90	140	24	1.50	0.60	27	35.8	32	13000	20000	1.26
H7018AC	90	140	24	1.50	0.60	39	33.8	30	11700	18000	1.26
H7019C	95	145	24	1.50	0.60	28	44.2	38	12100	18600	1.27
H7019AC	95	145	24	1.50	0.60	40	41.6	36	10900	16800	1.27
H7020C	100	150	24	1.50	0.60	29	44.9	40	11600	17800	1.33
H7020AC	100	150	24	1.50	0.60	41	42.3	38	10400	16000	1.33
H7021C	105	160	26	2.00	1.00	31	46.1	49.2	10900	16800	1.72
H7021AC	105	160	26	2.00	1.00	44	43.3	46.6	9800	15100	1.72
H7022C	110	170	28	2.00	1.00	33	47.5	45	10400	16000	2.2
H7022AC	110	170	28	2.00	1.00	47	44.9	42.5	9400	14500	2.2
H7024C	120	180	28	2.00	1.00	34	57.2	55	9700	14900	2.3
H7024AC	120	180	28	2.00	1.00	49	54	52	8700	13400	2.3
H7026C	130	200	33	2.00	1.00	39	58.6	66.8	8500	13100	3.59
H7026AC	130	200	33	2.00	1.00	55	55.1	63.2	7700	11800	3.59
H7028C	140	210	33	2.00	1.00	40	60.7	72.5	8000	12300	3.81
H7028AC	140	210	33	2.00	1.00	57	57.1	68.7	7200	11100	3.81
H7030C	150	225	35	2.10	1.10	43	74.9	88.5	7200	11100	4.61
H7030AC	150	225	35	2.10	1.10	61	70.5	83.8	6500	10000	4.61
H7032C	160	240	38	2.10	1.10	46	76.2	94.5	6800	10500	5.78
H7032AC	160	240	38	2.10	1.10	66	71.6	89.5	6100	9400	5.78
H7034C	170	260	42	2.10	1.10	50	78.1	100.6	6300	9700	7.94
H7034AC	170	260	42	2.10	1.10	71	73.4	95.2	5700	8800	7.94
H7036C	180	280	46	2.10	1.10	54	79.8	106.7	5700	8800	10.57
H7036AC	180	280	46	2.10	1.10	77	75.0	101.0	5100	7800	10.57
H7038C	190	290	46	2.10	1.10	55	95.3	124.6	5400	8300	10.84
H7038AC	190	290	46	2.10	1.10	79	89.7	117.9	4900	7500	10.84
H7040C	200	310	51	2.10	1.10	60	96.5	132.0	4900	7500	14.32
H7040AC	200	310	51	2.10	1.10	85	90.8	124.9	4400	6800	14.32
H7044C	220	340	56	3.00	1.10	66	113.9	156.5	4500	6900	18.82
H7044AC	220	340	56	3.00	1.10	93	107.2	148.1	4100	6300	18.82



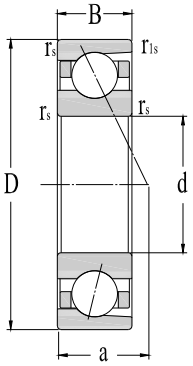


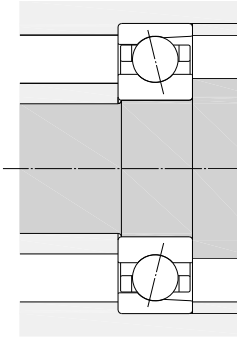
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H71900 C/HQ1	10	22	6	0.30	0.10	5	2.03	0.815	118000	181700	0.01
H71900 AC/HQ1	10	22	6	0.30	0.10	7	1.95	0.78	106200	162800	0.01
H71901 C/HQ1	12	24	6	0.30	0.10	5	2.12	0.915	106200	160500	0.01
H71901 AC/HQ1	12	24	6	0.30	0.10	7	2.03	0.865	94400	145100	0.01
H71902 C/HQ1	15	28	7	0.30	0.10	6	3.19	1.4	87300	134500	0.01
H71902 AC/HQ1	15	28	7	0.30	0.10	9	3.02	1.34	79100	121500	0.01
H71903 C/HQ1	17	30	7	0.30	0.10	7	3.32	1.56	80200	122700	0.01
H71903 AC/HQ1	17	30	7	0.30	0.10	9	3.19	1.46	72000	110900	0.01
H71904 C/HQ1	20	37	9	0.30	0.15	8	4.88	2.4	66100	101500	0.03
H71904 AC/HQ1	20	37	9	0.30	0.15	11	4.68	2.28	59600	90900	0.03
H71905 C/HQ1	25	42	9	0.30	0.15	9	5.27	2.85	56600	86100	0.04
H71905 AC/HQ1	25	42	9	0.30	0.15	12	4.94	2.7	50700	77900	0.04
H71906 C/HQ1	30	47	9	0.30	0.15	10	5.59	3.25	49000	75500	0.04
H71906 AC/HQ1	30	47	9	0.30	0.15	13	5.27	3.1	44300	67900	0.04
H71907 C/HQ1	35	55	10	0.60	0.15	11	7.61	4.75	41900	63700	0.07
H71907 AC/HQ1	35	55	10	0.60	0.15	16	7.28	4.5	37800	57800	0.07
H71908 C/HQ1	40	62	12	0.60	0.15	13	9.75	6.1	36600	56600	0.1
H71908 AC/HQ1	40	62	12	0.60	0.15	18	9.23	5.85	33000	51300	0.1
H71909 C/HQ1	45	68	12	0.60	0.15	14	10.1	6.95	33000	51300	0.12
H71909 AC/HQ1	45	68	12	0.60	0.15	19	9.75	6.55	30100	46000	0.12
H71910 C/HQ1	50	72	12	0.60	0.15	14	12.7	8.65	30700	47200	0.12
H71910 AC/HQ1	50	72	12	0.60	0.15	20	12.1	8.15	27700	42500	0.12
H71911 C/HQ1	55	80	13	1.00	0.30	16	15.3	10.6	27700	42500	0.15
H71911 AC/HQ1	55	80	13	1.00	0.30	22	14.6	10.2	24800	38400	0.15
H71912 C/HQ1	60	85	13	1.00	0.30	16	16.3	11.8	26000	40100	0.16
H71912 AC/HQ1	60	85	13	1.00	0.30	23	15.3	11.2	23600	36000	0.16
H71913 C/HQ1	65	90	13	1.00	0.30	17	16.5	12.5	24200	37200	0.17
H71913 AC/HQ1	65	90	13	1.00	0.30	25	15.6	11.8	21800	33600	0.17
H71914 C/HQ1	70	100	16	1.00	0.30	19	22.1	16.3	21800	33600	0.28
H71914 AC/HQ1	70	100	16	1.00	0.30	28	20.8	15.3	19500	30700	0.28
H71915 C/HQ1	75	105	16	1.00	0.30	20	22.5	17	20700	31900	0.3
H71915 AC/HQ1	75	105	16	1.00	0.30	29	21.2	16.3	18900	28300	0.3
H71916 C/HQ1	80	110	16	1.00	0.30	21	22.5	18	19500	30100	0.31
H71916 AC/HQ1	80	110	16	1.00	0.30	30	21.2	17	17500	27100	0.31



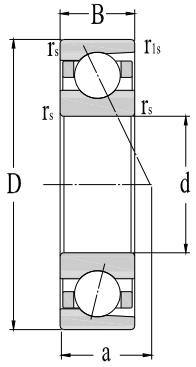


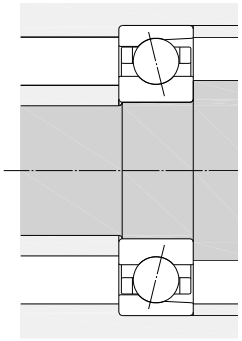
ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H71917 C/HQ1	85	120	18	1.10	0.60	23	29.6	23.2	18300	28300	0.44
H71917 AC/HQ1	85	120	18	1.10	0.60	33	28.1	22	16500	25400	0.44
H71918 C/HQ1	90	125	18	1.10	0.60	23	30.2	24.5	16500	25400	0.46
H71918 AC/HQ1	90	125	18	1.10	0.60	34	28.6	23.2	14800	23000	0.46
H71919 C/HQ1	95	130	18	1.10	0.60	24	30.7	25.5	15700	24200	0.48
H71919 AC/HQ1	95	130	18	1.10	0.60	35	29.1	24	14200	21800	0.48
H71920 C/HQ1	100	140	20	1.10	0.60	26	39	31.5	14800	22400	0.66
H71920 AC/HQ1	100	140	20	1.10	0.60	38	36.4	30	13300	20300	0.66
H71921 C/HQ1	105	145	20	1.10	0.60	27	40.7	39.1	14200	21800	0.69
H71921 AC/HQ1	105	145	20	1.10	0.60	39	38.4	36.9	12700	19600	0.69
H71922 C/HQ1	110	150	20	1.10	0.60	27	39.7	34.5	13600	20900	0.71
H71922 AC/HQ1	110	150	20	1.10	0.60	40	37.7	32.5	12300	18900	0.71
H71924 C/HQ1	120	165	22	1.10	0.60	30	47.5	40.5	11800	18300	0.97
H71924 AC/HQ1	120	165	22	1.10	0.60	44	44.9	38	10600	16500	0.97
H71926 C/HQ1	130	180	24	1.50	0.60	33	53.1	56.6	11100	17100	1.38
H71926 AC/HQ1	130	180	24	1.50	0.60	48	50.1	53.4	10000	15300	1.38
H71928 C/HQ1	140	190	24	1.50	0.60	34	53.7	59.1	10400	15900	1.46
H71928 AC/HQ1	140	190	24	1.50	0.60	50	50.7	55.8	9300	14400	1.46
H71930 C/HQ1	150	210	28	2.00	1.00	38	65.2	72.8	8900	14200	2.35
H71930 AC/HQ1	150	210	28	2.00	1.00	56	61.5	68.7	8300	12400	2.35
H71932 C/HQ1	160	220	28	2.00	1.00	39	66.0	75.8	8700	13500	2.48
H71932 AC/HQ1	160	220	28	2.00	1.00	58	62.3	71.6	7900	12200	2.48
H71934 C/HQ1	170	230	28	2.00	1.00	41	66.7	78.7	8300	12700	2.61
H71934 AC/HQ1	170	230	28	2.00	1.00	61	63.0	74.3	7400	11400	2.61
H71936 C/HQ1	180	250	33	2.00	1.00	45	79.6	95.0	7400	11400	4.01
H71936 AC/HQ1	180	250	33	2.00	1.00	67	75.2	89.7	6700	10400	4.01
H71938 C/HQ1	190	260	33	2.00	1.00	47	80.6	98.6	7100	10900	4.2
H71938 AC/HQ1	190	260	33	2.00	1.00	69	76.1	93.1	6400	9800	4.2
H71940 C/HQ1	200	280	38	2.00	1.00	51	82.8	105.4	6400	9800	6.29
H71940 AC/HQ1	200	280	38	2.00	1.00	75	78.2	99.5	5800	8900	6.29
H71944 C/HQ1	220	300	38	2.00	1.00	54	96.9	125.4	5900	9100	6.54
H71944 AC/HQ1	220	300	38	2.00	1.00	80	91.5	118.4	5300	8100	6.54





ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H7000 C/HQ1	10	26	8	0.30	0.15	6	3.02	1.18	106700	164200	0.02
H7000 AC/HQ1	10	26	8	0.30	0.15	8	2.86	1.14	96000	147700	0.02
H7001 C/HQ1	12	28	8	0.30	0.15	7	3.19	1.34	96000	147700	0.02
H7001 AC/HQ1	12	28	8	0.30	0.15	9	3.07	1.27	86400	133000	0.02
H7002 C/HQ1	15	32	9	0.30	0.15	8	4.42	1.93	81700	125800	0.03
H7002 AC/HQ1	15	32	9	0.30	0.15	10	4.23	1.83	73600	113200	0.03
H7003 C/HQ1	17	35	10	0.30	0.15	8	5.85	2.55	73800	113500	0.04
H7003 AC/HQ1	17	35	10	0.30	0.15	11	5.59	2.45	66500	102200	0.04
H7004 C/HQ1	20	42	12	0.60	0.15	10	7.41	3.35	61900	95300	0.06
H7004 AC/HQ1	20	42	12	0.60	0.15	13	7.15	3.25	55700	85700	0.06
H7005 C/HQ1	25	47	12	0.60	0.15	11	8.32	4.15	55000	84600	0.07
H7005 AC/HQ1	25	47	12	0.60	0.15	14	7.93	3.9	49400	76100	0.07
H7006 C/HQ1	30	55	13	1.00	0.30	12	9.36	5.2	46600	71600	0.11
H7006 AC/HQ1	30	55	13	1.00	0.30	17	8.84	5	42000	64400	0.11
H7007 C/HQ1	35	62	14	1.00	0.30	13	11.4	6.55	40800	62800	0.14
H7007 AC/HQ1	35	62	14	1.00	0.30	18	11.1	6.3	36700	56500	0.14
H7008 C/HQ1	40	68	15	1.00	0.30	15	12.4	7.65	36700	56500	0.18
H7008 AC/HQ1	40	68	15	1.00	0.30	20	11.7	7.2	33000	50800	0.18
H7009 C/HQ1	45	75	16	1.00	0.30	16	13	8.5	33000	50800	0.24
H7009 AC/HQ1	45	75	16	1.00	0.30	22	12.1	8.15	29800	45800	0.24
H7010 C/HQ1	50	80	16	1.00	0.30	17	15.6	10.6	29500	45400	0.24
H7010 AC/HQ1	50	80	16	1.00	0.30	23	14.8	10	26500	40800	0.24
H7011 C/HQ1	55	90	18	1.10	0.60	19	16.8	12.2	26500	40800	0.38
H7011 AC/HQ1	55	90	18	1.10	0.60	26	15.9	11.6	23900	36700	0.38
H7012 C/HQ1	60	95	18	1.10	0.60	19	17.2	12.9	24700	38000	0.41
H7012 AC/HQ1	60	95	18	1.10	0.60	27	16.3	12.2	22200	34200	0.41
H7013 C/HQ1	65	100	18	1.10	0.60	20	20.3	15.6	23300	35800	0.42
H7013 AC/HQ1	65	100	18	1.10	0.60	28	19.5	14.6	21000	32300	0.42
H7014 C/HQ1	70	110	20	1.10	0.60	22	23.8	18.3	20600	31800	0.59
H7014 AC/HQ1	70	110	20	1.10	0.60	31	22.5	17.3	18600	28600	0.59
H7015 C/HQ1	75	115	20	1.10	0.60	23	26	21.6	19000	29200	0.63
H7015 AC/HQ1	75	115	20	1.10	0.60	32	24.7	20.4	17000	26200	0.63
H7016 C/HQ1	80	125	22	1.10	0.60	25	33.8	28	17500	24200	0.82
H7016 AC/HQ1	80	125	22	1.10	0.60	35	32.5	26.5	15700	21600	0.82





ZZC Bearing code	Principal dimensions						Load ratings		Limiting speeds		Mass
	d	D	B	r_{smin}	r_{1smin}	a	C_r	C_{or}	Grease	Oil	Kg
	mm					≈	KN		r/min		≈
H7017 C/HQ1	85	130	22	1.10	0.60	25	29.6	23.2	16800	25800	0.86
H7017 AC/HQ1	85	130	22	1.10	0.60	36	28.1	22	15100	23300	0.86
H7018 C/HQ1	90	140	24	1.50	0.60	27	30.2	24.5	15600	24000	1.17
H7018 AC/HQ1	90	140	24	1.50	0.60	39	28.6	23.2	14000	21600	1.17
H7019 C/HQ1	95	145	24	1.50	0.60	28	30.7	25.5	14500	22300	1.18
H7019 AC/HQ1	95	145	24	1.50	0.60	40	29.1	24	13100	20200	1.18
H7020 C/HQ1	100	150	24	1.50	0.60	29	39	31.5	13900	21400	1.2
H7020 AC/HQ1	100	150	24	1.50	0.60	41	36.4	30	12500	19200	1.2
H7021 C/HQ1	105	160	26	2.00	1.00	31	46.1	49.2	13100	20200	1.58
H7021 AC/HQ1	105	160	26	2.00	1.00	44	43.3	46.6	11800	18100	1.58
H7022 C/HQ1	110	170	28	2.00	1.00	33	39.7	34.5	12500	19200	2.05
H7022 AC/HQ1	110	170	28	2.00	1.00	47	37.7	32.5	11300	17400	2.05
H7024 C/HQ1	120	180	28	2.00	1.00	34	47.5	40.5	11600	17900	2.07
H7024 AC/HQ1	120	180	28	2.00	1.00	49	44.9	38	10400	16100	2.07
H7026 C/HQ1	130	200	33	2.00	1.00	39	58.6	66.8	10200	15700	3.37
H7026 AC/HQ1	130	200	33	2.00	1.00	55	55.1	63.2	9200	14200	3.37
H7028 C/HQ1	140	210	33	2.00	1.00	40	60.7	72.5	9600	14800	3.57
H7028 AC/HQ1	140	210	33	2.00	1.00	57	57.1	68.7	8600	13300	3.57
H7030 C/HQ1	150	225	35	2.10	1.10	43	74.9	88.5	8600	13300	4.3
H7030 AC/HQ1	150	225	35	2.10	1.10	61	70.5	83.8	7800	12000	4.3
H7032 C/HQ1	160	240	38	2.10	1.10	46	76.2	94.5	8200	12600	5.45
H7032 AC/HQ1	160	240	38	2.10	1.10	66	71.6	89.5	7300	11300	5.45
H7034 C/HQ1	170	260	42	2.10	1.10	50	78.1	100.6	7600	11600	7.59
H7034 AC/HQ1	170	260	42	2.10	1.10	71	73.4	95.2	6800	10600	7.59
H7036 C/HQ1	180	280	46	2.10	1.10	54	79.8	106.7	6800	10600	10.2
H7036 AC/HQ1	180	280	46	2.10	1.10	77	75.0	101.0	6100	9400	10.2
H7038 C/HQ1	190	290	46	2.10	1.10	55	95.3	124.6	6500	10000	10.36
H7038 AC/HQ1	190	290	46	2.10	1.10	79	89.7	117.9	5900	9000	10.36
H7040 C/HQ1	200	310	51	2.10	1.10	60	96.5	132.0	5900	9000	13.81
H7040 AC/HQ1	200	310	51	2.10	1.10	85	90.8	124.9	5300	8200	13.81
H7044 C/HQ1	220	340	56	3.00	1.10	66	113.9	156.5	5400	8300	18.16
H7044 AC/HQ1	220	340	56	3.00	1.10	93	107.2	148.1	4900	7600	18.16

ZZC ball screw bearings code example（Standard metric system）

760 2 05 -2RZ TN1 / P4 QFC

Bearing type

Angular Contact Thrust Ball Bearing

Bearing series

2 Single direction bearing in the 02 ISO dimension series
3 Single direction bearing in the 03 ISO dimension series

Bearing size

01 12mm
02 15mm
03 17mm
04 4×5=20mm
05 5×5=25mm

Sealing solutions

-2RZ Non-contact seal on both sides, NBR

Bearing arrangement

DB Set of two bearings arranged back-to-back
DF Set of two bearings arranged face-to-face
DT Set of two bearings arranged in tandem
TBT Set of three bearings arranged back-to-back and tandem
TFT Set of three bearings arranged face-to-face and tandem
TT Set of three bearings arranged in tandem
QBC Set of four bearings arranged tandem back-to-back
QFC Set of four bearings arranged tandem face-to-face
QBT Set of four bearings arranged back-to-back and tandem
QFT Set of four bearings arranged face-to-face and tandem
QT Set of four bearings arranged in tandem

Precision grade

P2 Dimensional and running accuracy in accordance with ISO tolerance class 2
P4 Dimensional and running accuracy in accordance with ISO tolerance class 4

Cage

TN1 polyamide resin

ZZC ball screw bearings code example（Non-standard metric system）

BS 25 62 -2RZ TN1 / P4 QFC

Bearing type

Angular Contact Thrust Ball Bearing

Bore diameter

25 25mm dore diameter

Outside diameter

62 62mm outside diameter

Sealing solutions

-2RZ Non-contact seal on both sides, NBR

Cage

TN1 polyamide resin

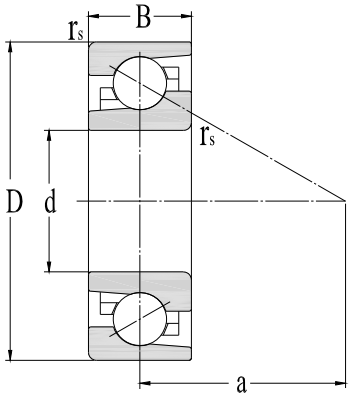
Precision grade

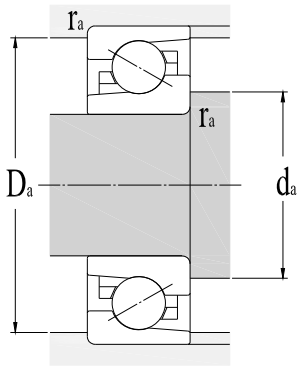
P2 Dimensional and running accuracy in accordance with ISO tolerance class 2

P4 Dimensional and running accuracy in accordance with ISO tolerance class 4

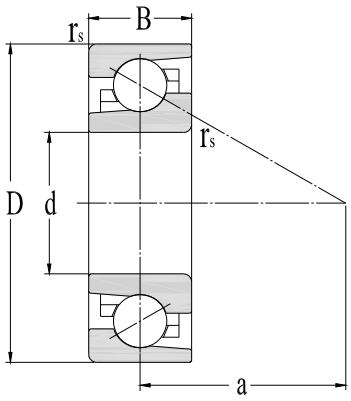
Bearing arrangement

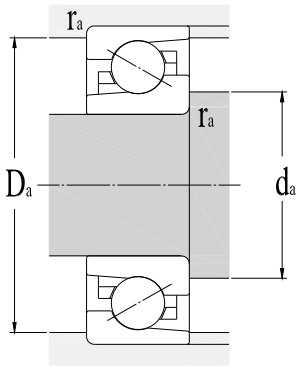
DB Set of two bearings arranged back-to-back
DF Set of two bearings arranged face-to-face
DT Set of two bearings arranged in tandem
TBT Set of three bearings arranged back-to-back and tandem
TFT Set of three bearings arranged face-to-face and tandem
TT Set of three bearings arranged in tandem
QBC Set of four bearings arranged tandem back-to-back
QFC Set of four bearings arranged tandem face-to-face
QBT Set of four bearings arranged back-to-back and tandem
QFT Set of four bearings arranged face-to-face and tandem
QT Set of four bearings arranged in tandem



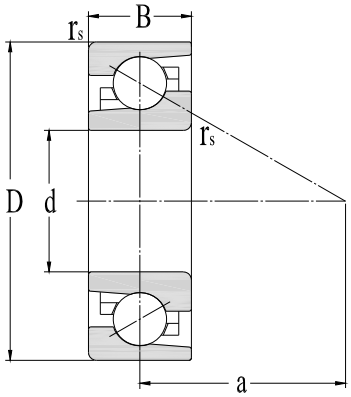


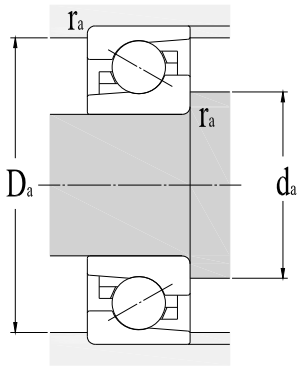
ZZC Bearing code	Principal dimensions					Abutment and fillet dimensions			Load ratings		Limiting speeds		Mass
						d_a	D_a	r_a					
	d	D	B	r_{smin}	a	h12	H12	max	C_a	C_{oa}	Grease	Oil	Kg
	mm				≈	mm			KN		r/min		≈
760201TN1	12	32	10	0.6	24	17	27	0.6	11.8	21.2	17000	24000	0.04
760202TN1	15	35	11	0.6	27	20.5	30.0	0.6	12.7	25.5	15000	20000	0.05
760203TN1	17	40	12	0.6	31	23	34.5	0.6	16.6	34.5	13000	18000	0.07
760204TN1	20	47	14	1.0	36	27.5	39.5	1.0	22	49	12000	17000	0.13
760205TN1	25	52	15	1.0	41	32	45	1	22.4	52	11000	16000	0.16
760206TN1	30	62	16	1.0	48	39.5	52.5	1.0	28.5	71	9000	13000	0.24
760207TN1	35	72	17	1.1	55	46.5	60.5	1.1	36.5	98	8000	11000	0.34
760208TN1	40	80	18	1.1	62	53.5	69.5	1.1	42.5	112	7000	9500	0.44
760209TN1	45	85	19	1.1	66	57	73	1.1	45	134	6700	9000	0.5
760210TN1	50	90	20	1.1	71	63.0	79.0	1.1	46.5	146	6300	8500	0.57
760211TN1	55	100	21	1.5	78	69.5	85.5	1.5	40.5	81.5	6000	8000	0.75
760212TN1	60	110	22	1.5	86	77.0	96.0	1.5	69.5	216	5000	6700	0.96
760213TN1	65	120	23	1.5	92	84	103	1.5	57	122	4800	6300	1.2
760214TN1	70	125	24	1.5	96	87.0	108.0	1.5	65.5	137	4500	6000	1.32
760215TN1	75	130	25	1.5	101	93.5	114.5	1.5	72	245	4300	5600	1.45
760216TN1	80	140	26	2.0	108	100.0	122.0	2.0	76.57	175	4000	5300	1.76
760217TN1	85	150	28	2.0	116	107	131	2	86.5	196	3800	5000	2.19
760218TN1	90	160	30	2.0	123	113.5	138.5	2.0	98	224	3600	4800	2.69
760219TN1	95	170	32	2.1	131	119.5	146.5	2.1	110	255	3400	4500	3.26
760220TN1	100	180	34	2.1	138	125.5	154.5	2.1	122	285	3200	4300	3.91
760222TN1	110	200	38	2.1	152	139	171	2.1	146	355	2800	3800	5.5
760224TN1	120	215	40	2.1	165	150.0	185.0	2.1	176	425	2600	3600	6.5
760226TN1	130	230	40	3.0	176	162.5	197	3	180	455	2400	3400	7.4





ZZC Bearing code	Principal dimensions					Abutment and fillet dimensions			Load ratings		Limiting speeds		Mass
						d_a	D_a	r_a					
	d	D	B	r_{smin}	a	h12	H12	max	C_a	C_{oa}	Grease	Oil	Kg
	mm				≈	mm			KN		r/min		≈
760304TN1	20	52	15	1.10	39	30.5	43.5	1.1	24.5	32	11000	16000	0.17
760305TN1	25	62	17	1.1	46	38.0	52.0	1.1	28.5	41.5	9000	13000	0.28
760306TN1	30	72	19	1.10	53	45	61	1.1	34.5	55	8000	11000	0.41
760307TN1	35	80	21	1.5	60	51.0	67.0	1.5	36.5	61	7000	9500	0.55
760307X3TN1	35	90	23	1.50	68	56.5	75.7	1.5	50	83	6300	8500	0.81
760308TN1	40	90	23	1.5	68	56.5	75.7	1.5	50	83	6300	8500	0.76
760309TN1	45	100	25	1.50	75	64.5	85.5	1.5	58.5	104	5600	7500	1.02
760309X3TN1	45	110	27	2.0	83	72.0	94.0	2.0	69.5	127	5000	6700	1.41
760310TN1	50	110	27	2.00	83	72	94	2	69.5	127	5000	6700	1.33
760311TN1	55	120	29	2.0	90	77.0	101.0	2.0	78	146	4800	6300	1.69
760312TN1	60	130	31	2.10	98	82.5	107.5	2.1	88	166	4500	6000	2.12
760313TN1	65	140	33	2.1	105	91.5	118.5	2.1	100	196	4000	5300	2.6
760314TN1	70	150	35	2.10	113	95.5	124.5	2.1	110	220	3800	5000	3.16
760315TN1	75	160	37	2.1	120	105.5	135.5	2.1	125	255	3600	4800	3.79
760316TN1	80	170	39	2.10	128	111	143	2.1	137	285	3400	4500	4.5
760317TN1	85	180	41	3.0	135	116.0	151.0	3.0	160	325	3200	4300	5.29
760318TN1	90	190	43	3.00	143	122.5	157.5	3	163	345	3000	4000	6.17
760319TN1	95	200	45	3.0	150	130.0	165.0	3.0	163	360	3000	4000	7.15
760320TN1	100	215	47	3.00	160	140	178	3	193	430	2600	3600	8.73
760322TN1	110	240	50	3.0	176	154.5	200.0	3.0	250	560	2400	3400	11.8
760324TN1	120	260	55	3.00	192	165	210	3	265	620	2200	3200	14.6
760326TN1	130	280	58	3.0	206	181.0	229.0	3.0	290	695	2000	3000	18.7





ZZC Bearing code	Principal dimensions					Abutment and fillet dimensions			Load ratings		Limiting speeds		Mass
						d_a	D_a	r_a					
	d	D	B	r_{smin}	a	h12	H12	max	C_a	C_{oa}	Greas	Oil	Kg
	mm				≈	mm			KN		r/min		≈
BS 1547TN1	15	47	15	1.0	35	27.5	39.5	1.0	21.5	27	12000	17000	0.14
BS 1747TN1	17	47	15	1.0	35	27.5	39.5	1.0	21.5	27	12000	17000	0.14
BS 2047TN1	20	47	15	1.0	37	27.5	39.5	1.0	22	49	12000	17000	0.13
BS 2562TN1	25	62	15	1.0	46	38.0	52.0	1.0	28.5	71	9000	13000	0.24
BS 3062TN1	30	62	15	1.0	48	39.5	52.5	1.0	28.5	71	9000	13000	0.23
BS 3072TN1	30	72	15	1.0	52	45.0	61.0	1.1	31	54	8000	11000	0.35
BS 3572TN1	35	72	15	1.0	54	46.5	60.5	1.1	36.5	98	8000	11000	0.3
BS 4072TN1	40	72	15	1.0	56	49.0	62.5	1.1	36.5	98	8000	11000	0.26
BS 4090TN1	40	90	20	1.5	67	56.5	75.5	1.5	64	170	6300	8500	0.65
BS 4575TN1	45	75	15	1.0	60	52.0	68.0	1.0	32.5	98	7500	10000	0.26
BS 45100TN1	45	100	20	1.5	74	64.5	85.5	1.5	65.5	183	5600	7500	0.81
BS 50100TN1	50	100	20	1.5	76	64.5	85.5	1.5	67	193	5600	7500	0.75
BS 5590TN1	55	90	15	1.0	70	65.0	80.0	1.0	32.5	65.5	6300	8500	0.38
BS 55100TN1	55	100	20	1.5	77	69.5	85.5	1.5	67	193	6000	8000	0.775
BS 55120TN1	55	120	20	1.5	86	77.0	97.5	2.0	69.5	228	5000	6700	1.18
BS 60120TN1	60	120	20	1.5	88	79.5	100.5	1.5	69.5	228	4800	6300	1.11
BS 75110TN1	75	110	15	1.5	88	85.0	99.5	1.5	35.5	83	5000	6700	0.75
BS 100150TN1	100	150	22.5	2.0	120	114.5	135.0	2.0	69.5	173	3800	5000	1.37

We have taken all measures to ensure that the information contained in this manual is correct, but we are not liable for any loss or damage arising from the use of such information.

The illustration above the product data sheet is only used for marking purposes, and the actual bearing product may be different from it.