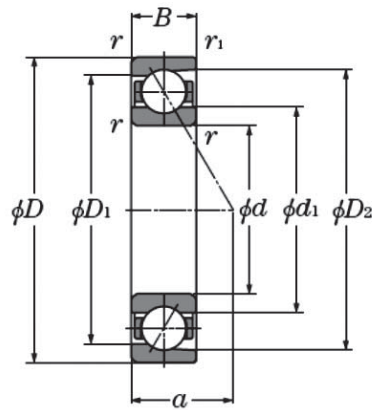


斜角滾珠軸承 Angular Contact Ball Bearings

70C系列



等效徑向動負荷
 $P_r = XFr + YFa$

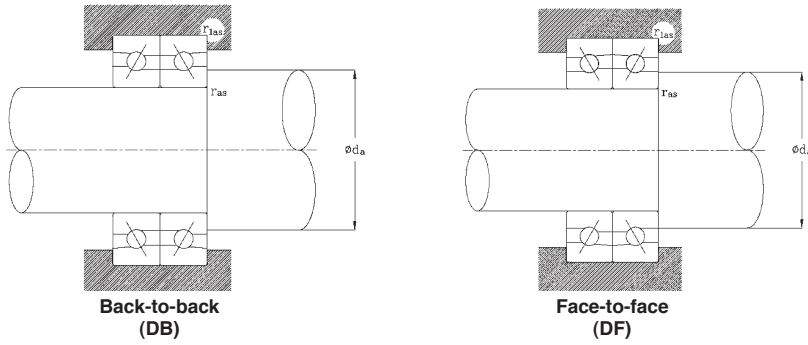
Normal Contact Angle	$i f_0 F_a^* / C_{or}$	e	Single, DT				DB or DF				
			$F_a / Fr \leq e$		$F_a / Fr > e$		$F_a / Fr \leq e$		$F_a / Fr > e$		
			X	Y	X	Y	X	Y	X	Y	
15	0.178	0.38				1.47			1.65		2.39
	0.357	0.4				1.4			1.57		2.28
	0.714	0.43				1.3			1.46		2.11
	1.07	0.46			0.44	1.23		1	1.38		2
	1.43	0.47				1.19			1.34		1.93
	2.14	0.5				1.12			1.26		1.82
	3.57	0.55				1.02			1.14		1.66
	5.35	0.56				1			1.12		1.63
18		0.57	1	0	0.43	1	1	1.09	0.7	1.63	
25		0.68	1	0	0.41	0.87	1	0.92	1.67	1.41	
30		0.8	1	0	0.39	0.76	1	0.78	1.63	1.24	
40		1.14	1	0	0.35	0.57	1	0.55	0.57	0.93	
50		1.49			0.73	1	1.37	0.57	0.73		
55		1.79			0.81	1	1.6	0.56	0.81		
60		2.17			0.92	1	1.9	0.55	0.92		

i值在DT組配為1，在DB與DF組配為2

d 10~100mm

主要尺寸 (mm)					基本額定負荷				靜態容許軸向負荷		軸承規格類別
Boundary Dimensions (mm)					Basic Load Ratings				Static Axial Load Capacity		Bearing Numbers Type
內徑	外徑	寬度	倒角		動額定		靜額定		(KN)	(Kgf)	
d	D	B	$r_{s \min}$	$r_{Is \min}$	C_r (KN)	C_r (Kgf)	C_{or} (KN)	C_{or} (Kgf)			
10	26	8	0.3	0.15	5.30	540	2.45	250	4.50	450	7000C
12	28	8	0.3	0.15	5.40	555	2.63	269	5.25	540	7001C
15	32	9	0.3	0.15	6.20	635	3.35	345	6.35	650	7002C
17	35	10	0.3	0.15	6.55	670	3.80	390	5.90	605	7003C
20	42	12	0.6	0.3	11.1	1130	6.55	670	10.2	1040	7004C
25	47	12	0.6	0.3	11.7	1190	7.40	755	11.2	1140	7005C
30	55	13	1.0	0.6	15.1	1540	10.3	1050	15.7	1600	7006C
35	62	14	1.0	0.6	19.1	1950	13.7	1400	20.6	2100	7007C
40	68	15	1.0	0.6	20.6	2100	15.9	1620	22.5	2300	7008C
45	75	16	1.0	0.6	24.4	2490	19.3	1970	27.9	2850	7009C
50	80	16	1.0	0.6	26.0	2650	21.9	2230	31.0	3200	7010C
55	90	18	1.1	0.6	34.0	3500	28.6	2900	40.5	4150	7011C
60	95	18	1.1	0.6	35.0	3600	30.0	3100	43.0	4400	7012C
65	100	18	1.1	0.6	37.0	3800	34.0	3500	47.5	4850	7013C
70	110	20	1.1	0.6	47.0	4800	43.0	4400	65.0	6640	7014C
75	115	20	1.1	0.6	48.0	4900	45.5	4650	65.5	6700	7015C
80	125	22	1.1	0.6	58.5	6000	55.5	5650	79.0	8100	7016C
85	130	22	1.1	0.6	60.0	6150	58.5	6000	83.0	8500	7017C
90	140	24	1.5	1.1	71.5	7300	69.0	7000	101	10300	7018C
95	145	24	1.5	1.1	73.5	7500	73.0	7450	103	10500	7019C
100	150	24	1.5	1.1	75.5	7700	77.0	7900	118	11400	7020C

① 倒角尺寸r或r1的最小允許尺寸



等效徑向靜負荷

$$P_{or} = X_o Fr + Y_o Fa$$

接觸角	Single DT		DB or DF	
	Xo	Yo	Xo	Yo
15	0.5	0.46	1	0.92
18	0.5	0.42	1	0.84
25	0.5	0.38	1	0.76
30	0.5	0.33	1	0.66
40	0.5	0.26	1	0.52

在Single或DT組列時，若 $P_{or} < Fr$

令 $P_{or} = Fr$

作用點	容許迴轉速 (min ⁻¹)		參考尺寸 (mm)				安裝相關尺寸 (mm)					空間容積 (cm ³)	重量 (kg)
Load Center (mm)	Limiting Speeds n_L (min ⁻¹)		Reference Dimensions (mm)				Abutment and Dimensions (mm)					Space Capacity (cm ³)	Weight (kg)
a	滑脂 Grease	潤滑油 Oil	d_1	d_2	D_1	D_2	d_a min	D_a max	D_b max	r_{as} max	r_{1as} max	Open (Approx)	Open (Approx)
6.0	63900	97300	15.4	—	20.6	22.9	12.5	23.5	24.8	0.3	0.15	0.9	0.019
6.5	57500	87500	18.1	—	22.6	25.4	14.5	25.5	26.8	0.3	0.15	1	0.021
7.5	49000	74500	21.1	—	26.1	28.5	17.5	29.5	30.8	0.3	0.15	1.3	0.030
8.5	44300	67400	23.4	—	28.6	31.0	19.5	32.5	33.8	0.3	0.15	1.8	0.037
10.0	37100	56500	27.5	—	34.5	37.7	24.5	37.5	39.5	0.6	0.3	2.9	0.067
11.0	32000	48700	32.5	—	39.5	42.7	29.5	42.5	44.5	0.6	0.3	3.3	0.079
12.0	27100	41200	38.6	—	46.4	50.0	35.5	49.5	50.5	1.0	0.6	4.8	0.11
13.5	23800	36100	44.2	—	52.8	56.9	40.5	56.5	57.5	1.0	0.6	6.3	0.15
15.0	21300	32500	49.6	—	58.3	62.4	45.5	62.5	63.5	1.0	0.6	7.4	0.19
16.0	19200	29200	55.2	—	64.8	69.2	50.5	69.5	70.5	1.0	0.6	9.4	0.24
16.0	17700	27000	60.2	—	69.8	74.2	55.5	74.5	75.5	1.0	0.6	11	0.26
19.0	15900	24200	66.8	—	78.1	83.4	62	83	85.5	1.0	0.6	16	0.38
19.5	14900	22600	71.8	—	83.1	88.4	67	88	90.5	1.0	0.6	17	0.41
20.0	14000	21300	76.8	—	88.1	93.4	72	93	95.5	1.0	0.6	18	0.44
22.0	12800	19500	83.6	—	96.4	102.5	77	103	105.5	1.0	0.6	24	0.61
23.0	12200	18500	88.5	—	101.5	107.5	82	108	110.5	1.0	0.6	26	0.64
25.0	11300	17100	95.1	—	109.9	116.7	87	118	120.5	1.0	0.6	34	0.86
25.0	10700	16300	100.1	—	114.9	121.7	92	123	125.5	1.0	0.6	36	0.90
27.0	10000	15300	106.8	—	123.2	130.8	98.5	131.5	134.5	1.5	1.0	47	1.17
28.0	9600	14600	111.7	—	128.2	135.8	103.5	136.5	139.5	1.5	1.0	49	1.22
29.0	9200	14000	116.8	—	133.2	140.8	108.5	141.5	144.5	1.5	1.0	51	1.27