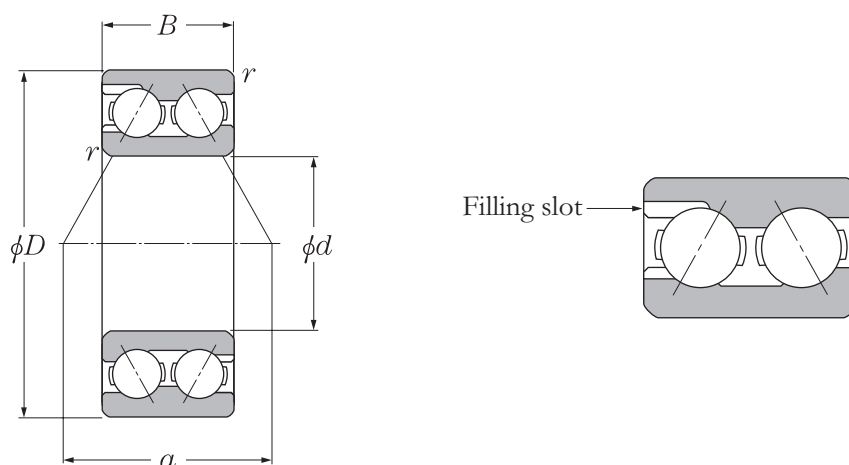


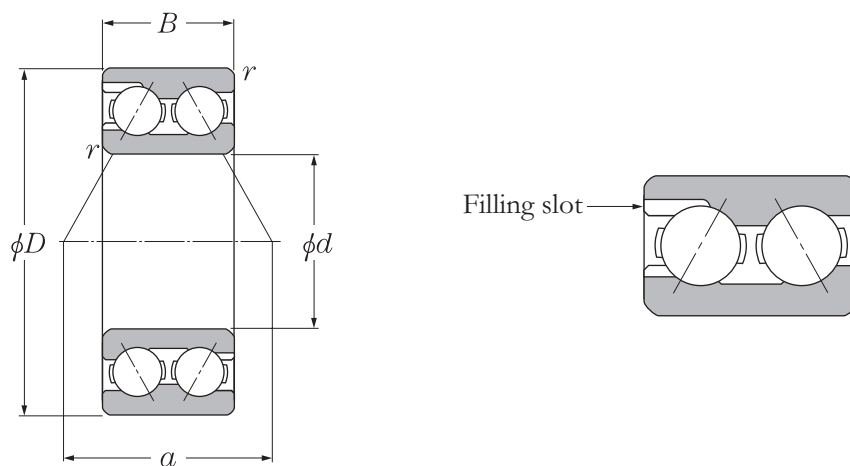
Double Row Angular Contact Ball Bearings

KYK



d 10~60mm

Boundary dimensions				Basic load ratings				Limiting speeds		Bearing numbers	Mass kg (approx.)
d	mm			dynamic	static	dynamic	static	min ⁻¹			
	D	B	r _{s min}	C _r	C _{or}	C _r	C _{or}	grease	oil		
10	30	14.3	0.6	8.00	5.79	810.00	590.00	16000	19000	3200	0.052
	12	32	15.9	0.6	9.65	7.13	985.00	725.00	14000		
15	35	15.9	0.6	9.05	7.43	920.00	758.00	13000	16000	3202 3302	0.072 0.132
	42	19.0	1.0	15.20	11.80	1550.00	1200.00	10600	12600		
17	40	17.5	0.6	12.60	10.60	1285.00	1080.00	11000	13000	3203 3303	0.100 0.192
	47	22.2	1.0	20.70	16.40	2110.00	1674.00	9400	11000		
20	47	20.6	1.0	17.30	14.90	1765.00	1520.00	9400	11000	3204 3304	0.170 0.230
	52	22.2	1.1	20.80	18.30	2120.00	1868.00	8400	10000		
25	52	20.6	1.0	19.00	18.20	1938.00	1858.00	8400	10000	3205 3305	0.190 0.369
	62	25.4	1.1	28.90	26.40	2950.00	2695.00	7100	8400		
30	62	23.8	1.0	27.20	26.90	2777.00	2745.00	7100	8400	3206 3306	0.320 0.585
	72	30.2	1.1	38.20	35.90	3900.00	3665.00	6000	7100		
35	72	27	1.1	36.80	37.50	3755.00	3828.00	6000	7100	3207 3307	0.480 0.816
	80	34.9	1.5	48.60	46.80	4960.00	4778.00	5300	6300		
40	80	30.2	1.1	42.00	43.90	4288.00	4480.00	5300	6300	3208 3308	0.650 1.070
	90	36.5	1.5	54.10	53.80	5520.00	5490.00	4700	5600		
45	85	30.2	1.1	45.40	51.30	4635.00	5235.00	5000	6000	3209 3309	0.710 1.420
	100	39.7	1.5	66.10	67.30	6748.00	6870.00	4200	5000		
50	90	30.2	1.1	45.10	52.10	4604.00	5319.00	4500	5300	3210 3310	0.760 1.950
	110	44.4	2.0	86.10	88.60	8790.00	9045.00	3800	4500		
55	100	33.3	1.5	50.90	60.20	5195.00	6145.00	4200	5000	3211 3311	1.050 2.530
	120	49.2	2.0	94.80	107.00	9679.00	10924.00	3300	4000		
60	110	36.5	1.5	64.00	76.80	6534.00	7840.00	3800	4500	3212 3312	1.400 3.240
	130	54.0	2.1	111.00	127.00	11333.00	12965.00	3200	3800		

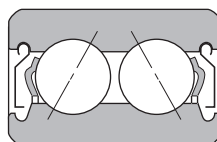
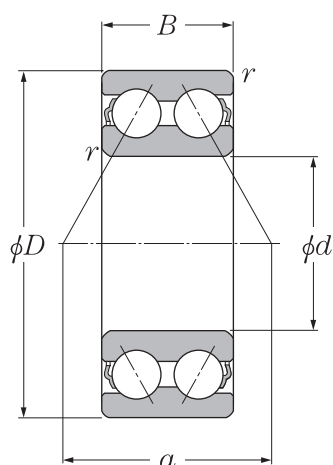


d 65~75mm

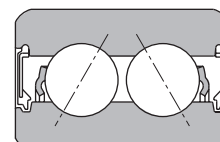
d	Boundary dimensions			Basic load ratings				Limiting speeds		Bearing numbers	Mass kg (approx.)
	D	B	$r_{s\ min}$	dynamic	static	dynamic	static	min ⁻¹			
	mm			kN				grease	oil		
65	120	38.1	1.5	76.40	97.40	7800.00	9944.00	3500	4200	3213	1.750
	140	58.7	2.1	129.00	148.00	13170.00	15110.00	3000	3500	3313	4.080
70	125	39.7	1.5	75.80	98.30	7739.00	10035.00	3200	3800	3214	1.920
	150	63.5	2.1	149.00	165.00	15210.00	16845.00	2700	3600	3314	5.040
75	130	41.3	1.5	83.60	109.00	8535.00	11128.00	3200	3800	3215	2.100
	160	68.3	2.1	169.00	189.00	17254.90	19296.90	2500	3300	3315	6.160

Double Row Angular Contact Ball Bearings

KYK



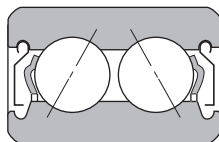
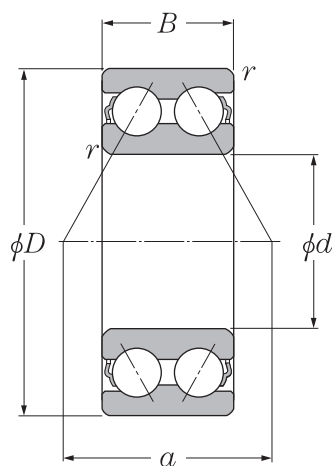
**Shielded type
(ZZ)**



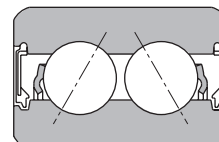
**Contact sealed type
(LLU)**

d 10~60mm

d	Boundary dimensions			Basic load ratings				Limiting speeds		Bearing numbers			Load center mm a	Mass kg (approx.)
	D	B	r _{s min}	dynamic	static	dynamic	static	grease	oil	open type	shielded type	sealed type		
	mm			kN				min ⁻¹						
				C _r	C _{or}	C _r	C _{or}							
10	30	14.3	0.6	7.15	3.90	730	400	17 000	22 000	5200	ZZ	LLU	14.5	0.05
12	32	15.9	0.6	10.5	5.80	1 070	590	15 000	20 000	5201	ZZ	LLU	16.7	0.06
15	35	15.9	0.6	11.7	7.05	1 190	715	13 000	17 000	5202	ZZ	LLU	18.3	0.07
	42	19.0	1.0	17.6	10.2	1 800	1 040	11 000	15 000	5302	ZZ	LLU	22.0	0.11
17	40	17.5	0.6	14.6	9.05	1 490	920	11 000	15 000	5203	ZZ	LLU	20.8	0.09
	47	22.2	1.0	21.0	12.6	2 140	1 280	10 000	13 000	5303	ZZ	LLU	25.0	0.14
20	47	20.6	1.0	19.6	12.4	2 000	1 270	10 000	13 000	5204	ZZ	LLU	24.3	0.12
	52	22.2	1.1	24.6	15.0	2 510	1 530	9 000	12 000	5304	ZZ	LLU	26.7	0.23
25	52	20.6	1	21.3	14.7	2 170	1 500	8 500	11 000	5205	ZZ	LLU	26.8	0.19
	62	25.4	1.1	32.5	20.7	3 350	2 110	7 500	10 000	5305	ZZ	LLU	31.8	0.34
30	62	23.8	1.0	29.6	21.1	3 000	2 150	7 100	9 500	5206	ZZ	LLU	31.6	0.29
	72	30.2	1.1	40.5	28.1	4 150	2 870	6 300	8 500	5306	ZZ	LLU	36.5	0.51
35	72	27.0	1.1	39.0	28.7	4 000	2 920	6 300	8 000	5207	ZZ	LLU	36.6	0.43
	80	34.9	1.5	51.0	36.0	5 200	3 700	5 600	7 500	5307	ZZ	LLU	41.6	0.79
40	80	30.2	1.1	44.0	33.5	4 500	3 400	5 600	7 100	5208	ZZ	LLU	41.5	0.57
	90	36.5	1.5	56.5	41.0	5 800	4 200	5 300	6 700	5308	ZZ	LLU	45.5	1.05
45	85	30.2	1.1	49.5	38.0	5 050	3 900	5 000	6 700	5209	ZZ	LLU	43.4	0.62
	100	39.7	1.5	68.5	51.0	7 000	5 200	4 500	6 000	5309	ZZ	LLU	50.6	1.40
50	90	30.2	1.1	53.0	43.5	5 400	4 400	4 800	6 000	5210	ZZ	LLU	45.9	0.67
	110	44.4	2	81.5	61.5	8 300	6 250	4 300	5 600	5310	ZZ	LLU	55.6	1.95
55	100	33.3	1.5	56.0	49.0	5 700	5 000	4 300	5 600	5211	ZZ	LLU	50.1	0.96
	120	49.2	2	95.0	73.0	9 700	7 450	3 800	5 000	5311	ZZ	LLU	60.6	2.30
60	110	36.5	1.5	69.0	62.0	7 150	6 300	3 800	5 000	5212	ZZ	LLU	56.5	1.35
	130	54.0	2.1	125.0	98.5	12 800	10 000	3 400	4 500	5312	ZZ	LLU	69.2	3.15



Shielded type
(ZZ)



Contact sealed type
(LLU)

d 65~75mm

d	Boundary dimensions			Basic load ratings				Limiting speeds		Bearing numbers			Load center mm a	Mass kg (approx.)
	mm			dynamic	static	dynamic	static	grease	oil	open type	shielded type	sealed type		
	D	B	r _{s min}	C _r	C _{or}	C _r	C _{or}							
65	120	38.1	1.5	76.5	69.0	7 800	7 050	3 600	4 500	5213	ZZ	LLU	59.7	1.65
	140	58.7	2.1	142.0	113.0	14 500	11 500	3 200	4 300	5313	ZZ	LLU	72.8	3.85
70	125	39.7	1.5	94.0	82.0	9 600	8 400	3 400	4 500	5214	ZZ	LLU	63.8	1.80
	150	63.5	2.1	159.0	128.0	16 200	13 100	3 000	3 800	5314	ZZ	LLU	78.3	4.90
75	130	41.3	1.5	93.5	83.0	9 550	8 500	3 200	4 300	5215	ZZ	LLU	66.1	1.90