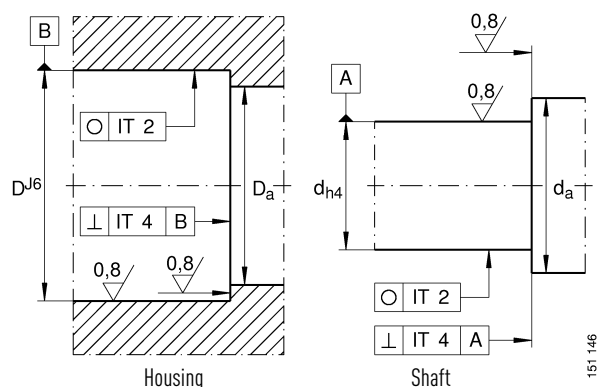


Ball screws Accessories

7.6 Angular contact ball bearing ZKLF

- Double-row angular contact ball bearing in 0 arrangement with 60° contact angle
- Outer ring suitable for flange mounting
- Split inner ring with defined gap for matching of preload
- Lubricated for life for most applications
- Circumferential extraction slot at the outside surface of the outer ring
- Radial and axial lubrication hole M6 each



Housing and shaft tolerances ZKLF...

Dimensions and connecting dimensions for angular ball bearing unit ZKLF

Shaft diameter [mm]	Code	Weight [kg]	Dimensions [mm]														Mating dim. [mm]	
			d	D	B	D ₁	B ₁	J	d ₂	l	m	n	A	d ₁	d	D _a ¹⁾	d _a ¹⁾	
			-0.005		-0.25													
12	ZKLF1255.2Z	0.37	12	55	25	–	–	42	6.5	17	–	–	–	25	33.5	33	16	
	ZKLF1255.2RS	0.37	12	55	25	–	–	42	6.5	17	–	–	–	25	33.5	33	16	
15	ZKLF1560.2Z	0.43	15	60	25	–	–	46	6.5	17	–	–	–	28	36	35	20	
	ZKLF1560.2RS	0.43	15	60	25	–	–	46	6.5	17	–	–	–	28	36	35	20	
17	ZKLF1762.2Z	0.45	17	62	25	–	–	48	6.5	17	–	–	–	30	38	37	23	
	ZKLF1762.2RS	0.45	17	62	25	–	–	48	6.5	17	–	–	–	30	38	37	23	
20	ZKLF2068.2Z	0.61	20	68	28	–	–	53	6.5	19	–	–	–	34.5	44	43	25	
	ZKLF2068.2RS	0.61	20	68	28	–	–	53	6.5	19	–	–	–	34.5	44	43	25	
25	ZKLF2575.2Z	0.72	25	75	28	–	–	58	6.5	19	–	–	–	40.5	49	48	32	
	ZKLF2575.2RS	0.72	25	75	28	–	–	58	6.5	19	–	–	–	40.5	49	48	32	
30	ZKLF3080.2Z	0.78	30	80	28	–	–	63	6.5	19	–	–	–	45.5	54	53	40	
	ZKLF3080.2RS	0.78	30	80	28	–	–	63	6.5	19	–	–	–	45.5	54	53	40	
30	ZKLF30100.2Z	1.63	30	100	38	–	–	80	8.5	30	–	–	–	51	65	64	47	
	ZKLF30100.2RS	1.63	30	100	38	–	–	80	8.5	30	–	–	–	51	65	64	47	
35	ZKLF3590.2Z	1.13	35	90	34	–	–	75	8.5	25	–	–	–	52	63	62	45	
	ZKLF3590.2RS	1.13	35	90	34	–	–	75	8.5	25	–	–	–	52	63	62	45	
40	ZKLF40100.2Z	1.46	40	100	34	–	–	80	8.5	25	–	–	–	58	68	67	50	
	ZKLF40100.2RS	1.46	40	100	34	–	–	80	8.5	25	–	–	–	58	68	67	50	
40	ZKLF40115.2Z	2.20	40	115	46	–	–	94	8.5	36	–	–	–	65	80	80	56	
	ZKLF40115.2RS	2.20	40	115	46	–	–	94	8.5	36	–	–	–	65	80	80	56	
50	ZKLF50115.2Z	1.86	50	115	34	–	–	94	8.5	25	–	–	–	72	82	82	63	
	ZKLF50115.2RS	1.86	50	115	34	–	–	94	8.5	25	–	–	–	72	82	82	63	
50	ZKLF50140.2Z	4.70	50	140	54	–	–	113	10.5	45	–	–	–	80	98	98	63	
	ZKLF50140.2RS	4.70	50	140	54	–	–	113	10.5	45	–	–	–	80	98	98	63	
60	ZKLF60145.2Z	4.30	60	145	45	–	–	120	8.5	35	–	–	–	85	100	100	82	
70	ZKLF70155.2Z	4.90	70	155	45	–	–	130	8.5	35	–	–	–	95	110	110	92	
80	ZKLF80165.2Z	5.30	80	165	45	–	–	140	8.5	35	–	–	–	105	120	120	102	
90	ZKLF90190.2Z	8.70	90	190	55	–	–	165	10.5	45	–	–	–	120	138	138	116	
100	ZKLF100200.2Z	9.30	100	200	55	–	–	175	10.5	45	–	–	–	132	150	150	128	

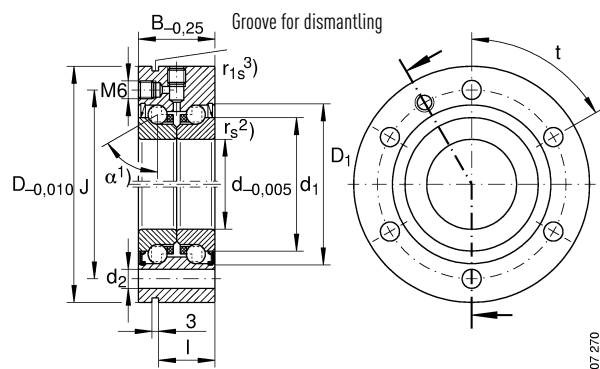
The ball cages are made from plastic, permissible operating temperature 120 °C (continuous operation)

1) Minimum diameter required of installation surface. If these diameters are not reached, D₁ and d₁ should be noted.

.2Z = Gap seal

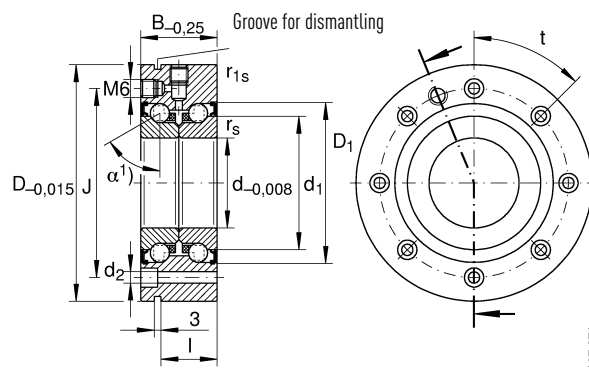
.2RS = Contact seal

Ball screws Accessories



ZKLF... (d ≤ 50)

- 1) Contact angle $\alpha = 60^\circ$
- 2) min. $r_s = 0.3$ mm
- 3) min. $r_{1s} = 0.6$ mm; min. $r_{1s} = 0.3$ mm



ZKLF...2Z (60 ≤ d ≤ 100)

Technical data of angular ball bearing unit ZKLF

Shaft diameter [mm]	Code	Mounting bolts DIN 912 10.9 ¹⁾	Axial load rating		Limit speed	Bearing friction torque ²⁾	Axial rigidity	Resistance to tilting	Recommended lock nut ¹⁾	Tightening torque ¹⁾
		Number n x t	C _{dyn} [kN]	C _o [kN]	Grease [min ⁻¹]	M _{RL} [Nm]	C _{AL} [N/μm]	C _{KL} [Nm/mrad]	Article number	M _A [Nm]
12	ZKLF1255.2Z	M6 3 × 120°	17.0	24.7	7600	0.08	375	50	HIR-12	8
	ZKLF1255.2RS	M6 3 × 120°	17.0	24.7	3800	0.08	375	50	HIR-12	8
15	ZKLF1560.2Z	M6 3 × 120°	17.9	28.0	7000	0.10	400	65	HIR-15	10
	ZKLF1560.2RS	M6 3 × 120°	17.9	28.0	3500	0.10	400	65	HIR-15	10
17	ZKLF1762.2Z	M6 6 × 60°	18.8	31.0	6600	0.12	450	80	HIR-17/HIA-17	15
	ZKLF1762.2RS	M6 6 × 60°	18.8	31.0	3300	0.12	450	80	HIR-17/HIA-17	15
20	ZKLF2068.2Z	M6 8 × 45°	26.0	47.0	5400	0.15	650	140	HIR-20/HIA-20	18
	ZKLF2068.2RS	M6 8 × 45°	26.0	47.0	3000	0.15	650	140	HIR-20/HIA-20	18
25	ZKLF2575.2Z	M6 8 × 45°	27.5	55.0	4700	0.20	750	200	HIR-25/HIA-25	25
	ZKLF2575.2RS	M6 8 × 45°	27.5	55.0	2600	0.20	750	200	HIR-25/HIA-25	25
30	ZKLF3080.2Z	M6 12 × 30°	29.0	64.0	4300	0.25	850	300	HIR-30/HIA-30	32
	ZKLF3080.2RS	M6 12 × 30°	29.0	64.0	2200	0.25	850	300	HIR-30/HIA-30	32
30	ZKLF30100.2Z	M8 8 × 45°	59.0	108.0	4000	0.40	950	400	HIA-30	65
	ZKLF30100.2RS	M8 8 × 45°	59.0	108.0	2100	0.40	950	400	HIA-30	65
35	ZKLF3590.2Z	M8 8 × 45°	41.0	89.0	3800	0.30	900	400	HIR-35/HIA-35	40
	ZKLF3590.2RS	M8 8 × 45°	41.0	89.0	2000	0.30	900	400	HIR-35/HIA-35	40
40	ZKLF40100.2Z	M8 8 × 45°	43.0	101.0	3300	0.35	1000	555	HIR-40/HIA-40	55
	ZKLF40100.2RS	M8 8 × 45°	43.0	101.0	1800	0.35	1000	555	HIR-40/HIA-40	55
40	ZKLF40115.2Z	M8 12 × 30°	72.0	149.0	3100	0.65	1200	750	HIA-40	110
	ZKLF40115.2RS	M8 12 × 30°	72.0	149.0	1600	0.65	1200	750	HIA-40	110
50	ZKLF50115.2Z	M8 12 × 30°	46.5	126.0	3000	0.45	1250	1000	HIR-50/HIA-50	85
	ZKLF50115.2RS	M8 12 × 30°	46.5	126.0	1500	0.45	1250	1000	HIR-50/HIA-50	85
50	ZKLF50140.2Z	M10 12 × 30°	113.0	250.0	2500	1.30	1400	1500	HIA-50	150
	ZKLF50140.2RS	M10 12 × 30°	113.0	250.0	1200	1.30	1400	1500	HIA-50	150
60	ZKLF60145.2Z	M8 8 × 45°	84.0	214.0	2400	1.00	1300	1650	HIR-60/HIA-60	100
70	ZKLF70155.2Z	M8 8 × 45°	88.0	241.0	2200	1.20	1450	2250	HIR-70/HIA-70	130
80	ZKLF80165.2Z	M8 8 × 45°	91.0	265.0	2100	1.40	1575	3000	HIR-80/HIA-80	160
90	ZKLF90190.2Z	M10 8 × 45°	135.0	395.0	1800	2.30	1700	4400	HIA-90	200
100	ZKLF100200.2Z	M10 8 × 45°	140.0	435.0	1700	2.60	1900	5800	HIA-100	250

The ball cages are made from plastic, permissible operating temperature 120 °C (continuous operation).

1) Tightening torque of mounting bolts according to details from manufacturer.

Screws according to DIN 912 are not supplied.

2) Bearing friction torque with gap seal (.2Z). With contact seal (.2RS) $\approx 2 \times M_{RL}$.