

Types CKK & CSK Sprag Clutches



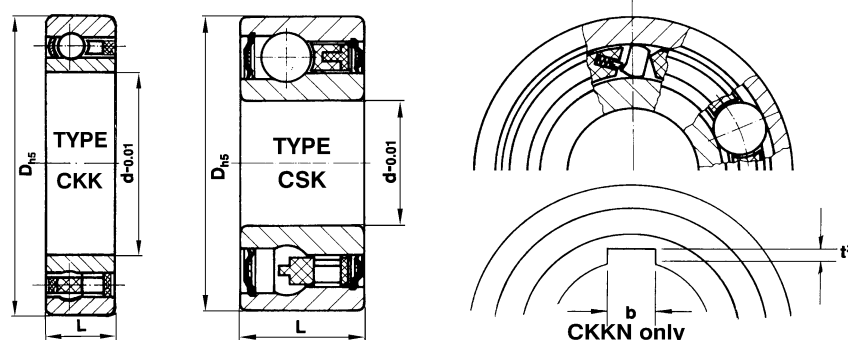
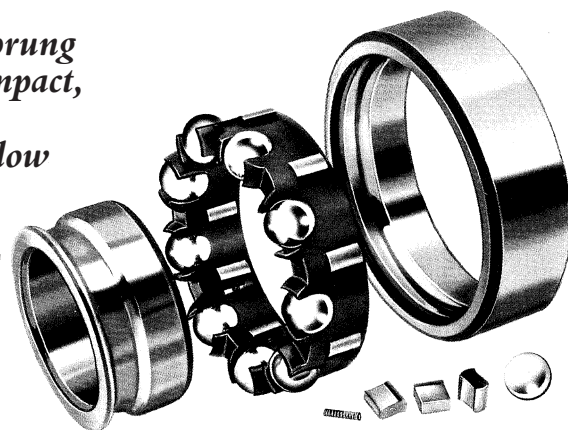
Clutch types CKK and CSK combine individually sprung sprags with a deep groove ball bearing to provide a compact, low cost high torque freewheel. Used for backstop and overrun applications, these clutches provide the ideal, low cost, solution where space is restricted.

Type CKK clutches are manufactured to the same specification as 62 Series ball bearings (except CKK 8) enabling direct interchange.

Type CKKN clutches have inner race keyseated to DIN 6885 sht. 3 (except CKKN 40) to enable torque transmission by key. Clutches can also be provided to order with keyseat on outer race (Type CKKNN).

Type CKK-RS and CKKN-RS are fitted with metal shields and 'O' rings to retain lubricant and exclude dust, for applications where relubrication is impractical or units running at higher temperatures.

Type CSK-RS has extended width races to enable fitting full rubber sealing discs, making them ideal for dusty applications. These units can also be supplied to order with inner race keyseated (Type CSKN-RS).



Dimensions

Clutch Size	Torque* Capacity Nm	Drag Torque N cms	Max. Speed Overrun rpm	Dimensions mm					Equivalent Brg. Ref.	Bearing Capacity		Approx. Weight gm
				d	D	L	b	t		Dynamic kN	Static kN	
CKK 8**	2.0	0.5	15,000	8	22	9	-	-	-	3.28	0.86	15
CKK 12	7.4	0.7	10,000	12	32	10	-	-	6201	6.10	2.77	40
CKK 15	13.5	0.9	8,400	15	35	11	-	-	6202	7.40	3.42	60
CKK 17	24.5	1.1	7,350	17	40	12	-	-	6203	7.90	3.80	70
CKK 20	40.0	1.3	6,000	20	47	14	-	-	6204	9.40	4.46	110
CKK 25	68.0	2.0	5,200	25	52	15	-	-	6205	10.70	5.46	140
CKK 30	110.0	4.4	4,200	30	62	16	-	-	6206	11.70	6.45	210
CKK 35	140.0	5.8	3,600	35	72	17	-	-	6207	12.60	7.28	300
CKK 40	260.0	7.0	3,000	40	80	22	-	-	-	15.54	12.25	500
CKKN 15	13.5	0.9	8,400	15	35	11	5	1.2	6202	7.40	3.42	60
CKKN 17	24.5	1.1	7,350	17	40	12	5	1.2	6203	7.90	3.80	70
CKKN 20	40.0	1.3	6,000	20	47	14	6	1.6	6204	9.40	4.46	110
CKKN 25	68.0	2.0	5,200	25	52	15	8	2.0	6205	10.70	5.46	140
CKKN 30	110.0	4.4	4,200	30	62	16	8	2.0	6206	11.70	6.45	210
CKKN 35	140.0	5.8	3,600	35	72	17	10	2.4	6207	12.60	7.28	300
CKKN 40	260.0	7.0	3,000	40	80	22	12	3.3	-	15.54	12.25	500
CKK 17RS†	27.0	4.5	3,700	17	40	12	-	-	6203	6.55	3.17	70
CKK 20RS	37.0	4.8	3,200	20	47	14	-	-	6204	7.32	3.87	110
CKK 25RS	63.0	5.6	2,800	25	52	15	-	-	6205	7.98	4.57	140
CKK 30RS	88.0	6.2	2,400	30	62	16	-	-	6206	8.45	5.29	210
CKK 35RS	136.0	8.5	1,900	35	72	17	-	-	6207	9.30	6.70	300
CKKN 17RS†	27.0	4.5	3,700	17	40	12	5	1.2	6203	6.55	3.17	70
CKKN 20RS	37.0	4.8	3,200	20	47	14	6	1.6	6204	7.32	3.87	110
CKKN 25RS	63.0	5.6	2,800	25	52	15	8	2.0	6205	7.98	4.57	140
CKKN 30RS	88.0	6.2	2,400	30	62	16	8	2.0	6206	8.45	5.29	210
CKKN 35RS	136.0	8.5	1,900	35	72	17	10	3.3	6207	9.30	6.70	300
CSK 12RS	7.4	3.0	10,000	12	32	14	-	-	-	6.10	2.77	50
CSK 15RS	13.5	4.0	8,400	15	35	16	-	-	-	7.40	3.42	70
CSK 17RS	24.5	5.6	7,350	17	40	17	-	-	-	7.90	3.80	90
CSK 20RS	40.0	6.0	6,000	20	47	19	-	-	-	9.40	4.46	145
CSK 25RS	68.0	6.0	5,200	25	52	20	-	-	-	10.70	5.46	175
CSK 30RS	110.0	7.5	4,200	30	62	21	-	-	-	11.70	6.45	270
CSK 35RS	140.0	8.2	3,600	35	72	22	-	-	-	12.60	7.28	400

*Nominal Torque - Max. torque for short periods = 2.5 x nom. Torque (Max. 250,000 cycles).

**CKK 8 has metal seal, type 'Z', on bearing side only when viewing seal the inner clutch overruns clockwise direction.

†CKK17RS has seal on clutch side only. When viewing seal the inner race overruns counterclockwise direction.

Permissible operating temperature is between -40°C to 130°C with max. 150°C possible for short periods. Above 50°C sealed units, or additional sealing must be used to retain lubrication. Clutches are made with bearing clearance C5 to permit reduced clearance when installed. Torque is transmitted by press fit with recommended housing tolerance N6, and shaft tolerance n6, except keyseated clutches where shaft tolerance k6 recommended.