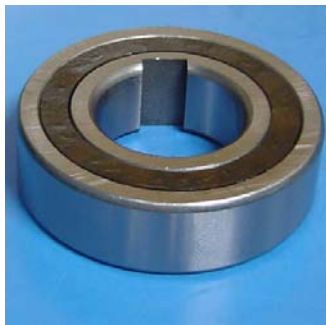


TBP has been producing overrunning clutches since 2002 in People's Republic of CHINA.

All types are developed by Stieber Clutch Germany and Tsubaki Emerson Japan & GMN Germany. Up to 80% of our products are exported to USA & European countries. Up to June 2004, we are still the sole manufacturer of CSK8 in China.

Now, we are developing all types backstops, clutches and clutch couplings utilizing either the principle of cylindrical rollers on inclined cam planes for low speed applications or sprag technology for high speed requirements.

We have also developed Stainless Steel CSK-Type Sprag Bearings, such as SS CSK8 for our USA Customer.



CSK Series (One-Way Bearing)

The CSK model freewheel is a sprag type clutch integrated into a 6200 series ball bearing (except sizes 8 and 40). It provides you with a one way clutch, and eliminates the need for a ball bearing. It gives a high degree of freewheeling accuracy while utilizing a minimum of space.

The CSK model freewheels can be used in backstop, overrunning or indexing applications.

The CSK model freewheels are available with bores to 40mm (1.57") and torque ratings to 384 lb. ft. They are supplied filled with grease and are maintenance free.

The torque is transmitted on the inner and outer race by an interference fit into a rigid housing and onto a shaft. The tolerance for the housing fit is N6 and the tolerance for the shaft is n6.

Operating temperature range: -40° F (-40° C) to 212° F (+100° C).



CSK Freewheel

Model	Bore dH7 in./mm	Width L in./mm	O. D. Dh5 in./mm	Torque lb. ft.	Max. Overrunning Speed RPM	Bearing Loads		Single Weight kg
						Dynamic lb.	Static lb.	
CSK 8	.31 / 8	.35 / 9	.87 / 22	3	15,000	738	193.5	0.015
CSK 12	.47 / 12	.39 / 10	1.26 / 32	11	10,000	1372.5	623.25	0.050
CSK 15	.59 / 15	.43 / 11	1.38 / 35	20	8,400	1665	769.5	0.060
CSK 17	.67 / 17	.47 / 12	1.57 / 40	36	7,350	1777.5	855	0.070
CSK 20	.79 / 20	.55 / 14	1.85 / 47	59	6,000	2115	1003.5	0.110
CSK 25	.98 / 25	.59 / 15	2.05 / 52	100	5,200	2407.5	1228.5	0.140
CSK 30	1.18 / 30	.63 / 16	2.44 / 62	162	4,200	2632.5	1451.25	0.220
CSK 35	1.38 / 35	.67 / 17	2.83 / 72	207	3,600	2835	1638	0.330
CSK 40	1.57 / 40	.87 / 22	3.15 / 80	384	3,000	3496.5	2756	0.500

One Way Bearing Cross Reference Number

Type	TBP	TBP	TBP	FAG	GMN		Tsubaki	China
	CSK 8	CSK 8P	CSK 8PP					
ZZA	CSK 12	CSK 12P	CSK 12PP	ZZ6201				OW6201
ZZB	CSK 15	CSK 15P	CSK 15PP	ZZ6202				OW6202
ZZC123	CSK 17	CSK 17P	CSK 17PP	ZZ6203	KK17	FK17	BB17	OW6203
	CSK 20	CSK 20P	CSK 20PP	ZZ6204	KK20	FK20	BB20	OW6204
	CSK 25	CSK 25P	CSK 25PP	ZZ6205	KK25	FK25	BB25	OW6205
	CSK 30	CSK 30P	CSK 30PP	ZZ6206	KK30	FK30	BB30	OW6206
	CSK 35	CSK 35P	CSK 35PP	ZZ6207	KK35	FK35	BB35	OW6207
	CSK 40	CSK 40P	CSK 40PP					

(P --one keyway in inner ring)

(PP -- two keyways both on inner and outer ring)

A CSK series one way (direction) bearing consists of a standard ball bearing, in-built special snap block and cage.

These bearings are widely used in hydraulic machinery, printing machines, textile machinery and others.