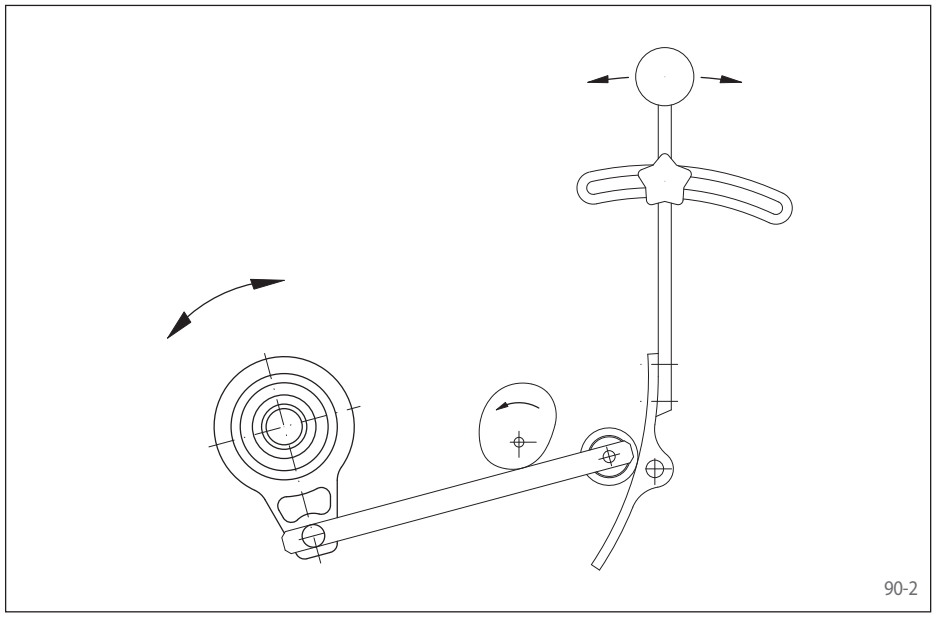
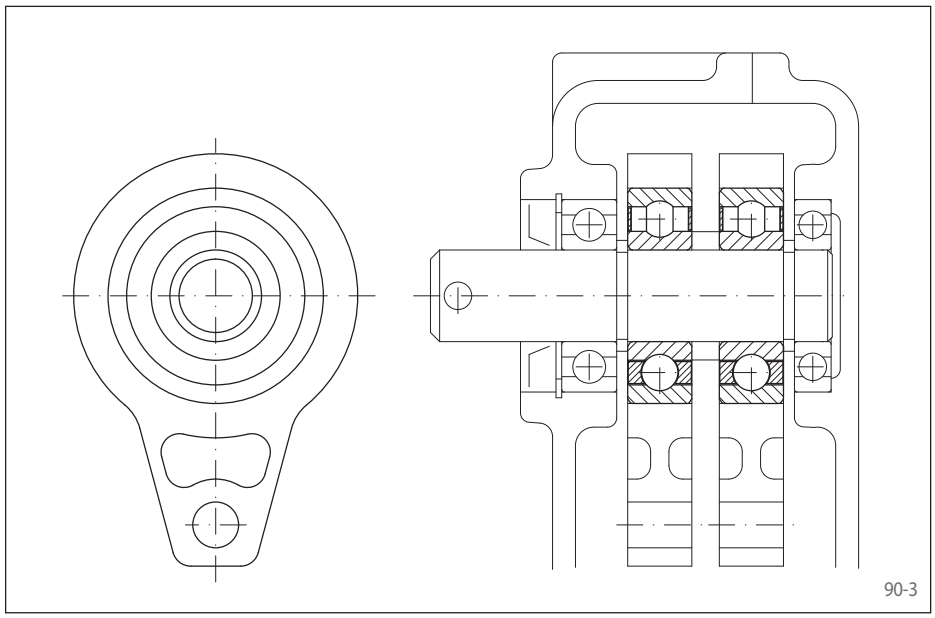
Internal Freewheels ZZ ...

with ball bearing properties





Features

Internal Freewheels ZZ ... are sprag freewheels with bearing support and ball bearing properties. The freewheels are supplied grease-filled for normal operating conditions.

The freewheel is built into the customer housing. This makes compact, space-saving fitting solutions possible.

The freewheels ZZ … are used as:

- Backstops
- Overrunning Clutches
- Indexing Freewheels

Nominal torques up to 325 Nm. The torque is transmitted on the inner ring and/or on the outer ring by press fit or keyway connection.

Bores up to 40 mm.

The following series are available:

Series	Torque transmission on Outer ring by keyway	Outer ring by press fit	Inner ring by keyway	Inner ring by press fit	2RS-seals	Page
ZZ		●		●		91
ZZ ... 2RS		●		●	●	92
ZZ ... P2RS		●	●		●	93
ZZ ... P		●	●			94
ZZ ... PP	●		●			95

The Internal Freewheels ZZ of the sizes ZZ 6201 to ZZ 6207 have the same dimensions as the respective ball bearings of series 62.

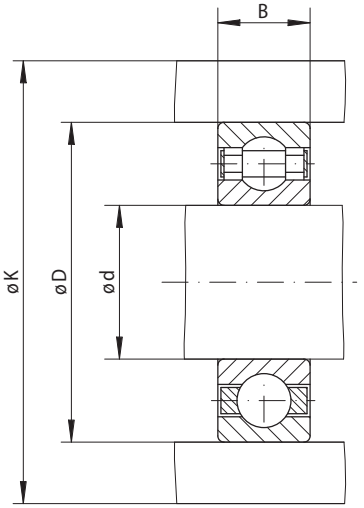
The series ZZ .... 2RS and ZZ ... P2RS have 2RS seals.

Application example

Two Internal Freewheels ZZ 6206 as indexing freewheels in the drive of the metering roller of a seed spreader. The freewheels are built in an infinitely variable oil bath gearbox. Two cam disks that are set off by 180° are arranged on the gearbox shaft. By means of lever arms, these drive the outer rings of the two adjacent Internal Freewheels, which then gradually turn the metering shaft. The infinite speed settings of the gearbox's drive shaft are executed by means of the respective pivoting of the roller support plate, so that the lever arms can execute lifts of differing amounts.

Internal Freewheels ZZ

for press fit on the outer ring with sprags and bearing support



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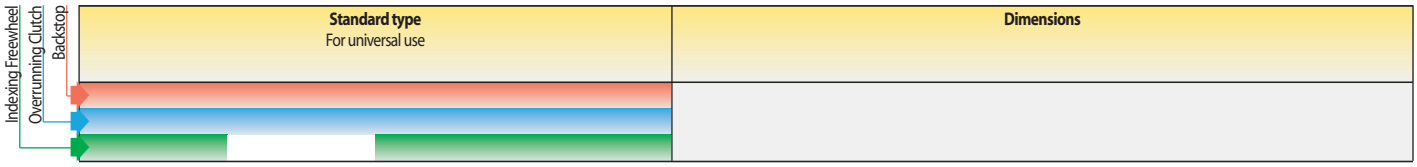

Freewheel Size	Nominal torque Nm	Maximum speed min^{-1}	Load rating of bearing support dynamic C N	Load rating of bearing support static C_0 N	Bore d mm	B mm	D mm	K mm	Weight kg
ZZ 8	2,5	15000	3200	860	8	9	22	27	0,02
ZZ 6201	9,3	10000	6100	2700	12	10	32	39	0,04
ZZ 6202	26,0	9400	6000	3700	15	11	35	42	0,06
ZZ 6203	34,0	8200	7350	4550	17	12	40	51	0,08
ZZ 6204	65,0	6800	10000	6300	20	14	47	58	0,12
ZZ 6205	80,0	5600	11000	7000	25	15	52	63	0,15
ZZ 6206	170,0	4000	15000	10000	30	16	62	73	0,25
ZZ 6207	175,0	3600	12500	7200	35	17	72	85	0,30
ZZ 40	325,0	3000	15500	12250	40	22	80	94	0,50

The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.

Mounting

The torque is transmitted on the inner and outer ring by press fit. In order to transmit the torques specified in the table, the outer ring must be accommodated in a housing with an external diameter K. The housing is made of steel or grey cast iron in minimum quality GG-20. When using other housing materials or smaller external diameters, we urge you to contact us regarding the transmissible torque.

The tolerance of the housing bore D must be ISO N6 and the tolerance of the shaft must be ISO n6.

The permissible operating temperature of the freewheel is -40°C to 80°C.

Lubrication

The freewheels are supplied grease-filled for normal operating conditions.

However, the freewheels can also be connected to the customer´s oil lubrication system; this is particularly recommended in the case of higher speeds.

Example for ordering

Freewheel size ZZ 6202, standard type:

- ZZ 6202