Complete Freewheels FGRN … R A5A6

for keyway connection on the outer ring with rollers

Application as

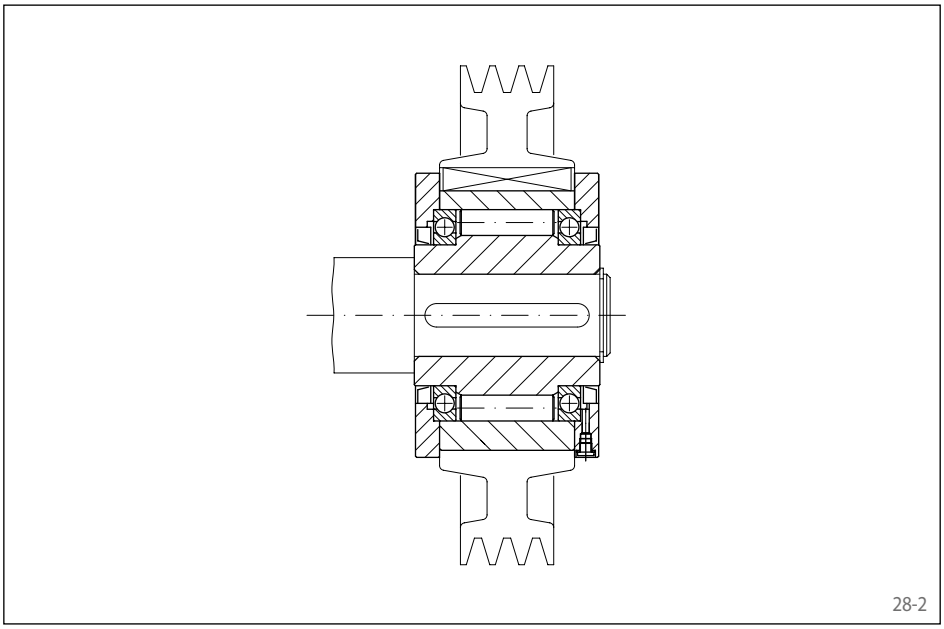
- Backstop
- Overrunning Clutch
- Indexing Freewheel

Features

Complete Freewheels FGRN … R A5A6 are sealed roller freewheels with ball bearings. They are oil lubricated.

Nominal torques up to 6800 Nm.

Bores up to 80 mm.



Application example

Complete Freewheel FGRN 45 R as an overrunning clutch on the shaft end of a mobile fan. In normal operation, the fan is driven by a diesel motor via the V-belt drive. By doing so, the freewheel works in driving operation. When the motor is turned off, the freewheel automatically disengages the rotating flywheel mass of the fan from the drive. In this operating state, the inner ring overruns the stationary outer ring; the freewheel works in freewheeling operation.

Complete Freewheels FGRN … R A5A6

RINGSPANN®

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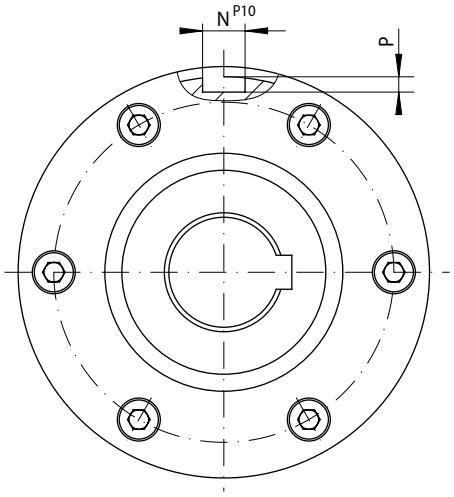

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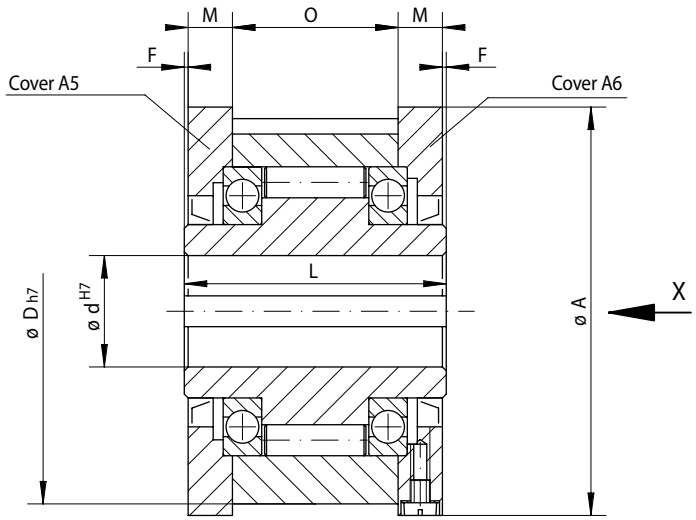

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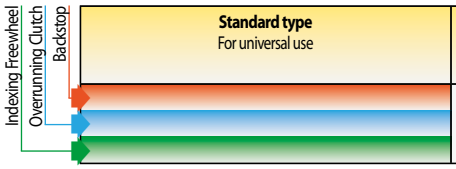

Standard type
For universal use

Dimensions

Freewheel Size	Type	Cover combination	Nominal torque M_N Nm	Max. speed Inner ring freewheels/ overruns min^{-1}	Max. speed Outer ring freewheels/ overruns min^{-1}	Bore d mm	A mm	D mm	F mm	L mm	M mm	N mm	P mm	O mm	Weight kg
FGRN 12	R	A5A6	55	2500	5400	12	70	62	1	42	10,0	4	2,5	20	1,2
FGRN 15	R	A5A6	130	2200	4800	15	76	68	1	52	11,0	5	3,0	28	1,6
FGRN 20	R	A5A6	180	1900	4100	20	84	75	1	57	10,5	6	3,5	34	1,9
FGRN 25	R	A5A6	290	1550	3350	25	99	90	1	60	11,5	8	4,0	35	2,9
FGRN 30	R	A5A6	500	1400	3050	30	109	100	1	68	11,5	8	4,0	43	3,9
FGRN 35	R	A5A6	730	1300	2850	35	119	110	1	74	13,5	10	5,0	45	4,9
FGRN 40	R	A5A6	1000	1150	2500	40	135	125	1	86	15,5	12	5,0	53	7,5
FGRN 45	R	A5A6	1150	1100	2400	45	140	130	1	86	15,5	14	5,5	53	7,8
FGRN 50	R	A5A6	2100	950	2050	50	160	150	1	94	14,0	14	5,5	64	10,8
FGRN 55	R	A5A6	2600	900	1900	55	170	160	1	104	18,0	16	6,0	66	14,0
FGRN 60	R	A5A6	3500	800	1800	60	182	170	1	114	17,0	18	7,0	78	16,8
FGRN 70	R	A5A6	6000	700	1600	70	202	190	1	134	18,5	20	7,5	95	20,8
FGRN 80	R	A5A6	6800	600	1400	80	222	210	1	144	21,0	22	9,0	100	27,0

The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.
Keyway according to DIN 6885, page 1 • Tolerance of keyway width JS10.

Mounting

Basic Freewheel, covers, seals and screws are supplied loose. These must be assembled by the customer with regard to the required free-wheeling direction into the Complete Freewheel. Prior to commissioning, the free-wheel must be filled with oil of the specified quality. Upon request, assembled Complete Freewheels already oil-filled can be supplied.

The customer attachment part is connected via a keyway connection with the outer ring. The customer must provide the key required for assembling the attachment part.

The tolerance of the shaft must be ISO h6 or j6 and the tolerance of the pilot diameter D of the attachment part must be ISO H7 or J7.

Example for ordering

Freewheel size FGRN 60, standard type with flange A5 and cover A6:

- FGRN 60 R A5A6

Basic Freewheel, covers, seals and screws are supplied loose provided nothing else is stated in the order.

If assembled, oil-filled, Complete Freewheels are to be supplied, this must be specified in the order. When ordering, please also specify the freewheeling direction of the inner ring when viewed in direction X:

- counter-clockwise free or
- clockwise free