

with lever arm  
with rollers



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## Application as

### ▶ Backstop

for applications with low to medium speeds in freewheeling operation.

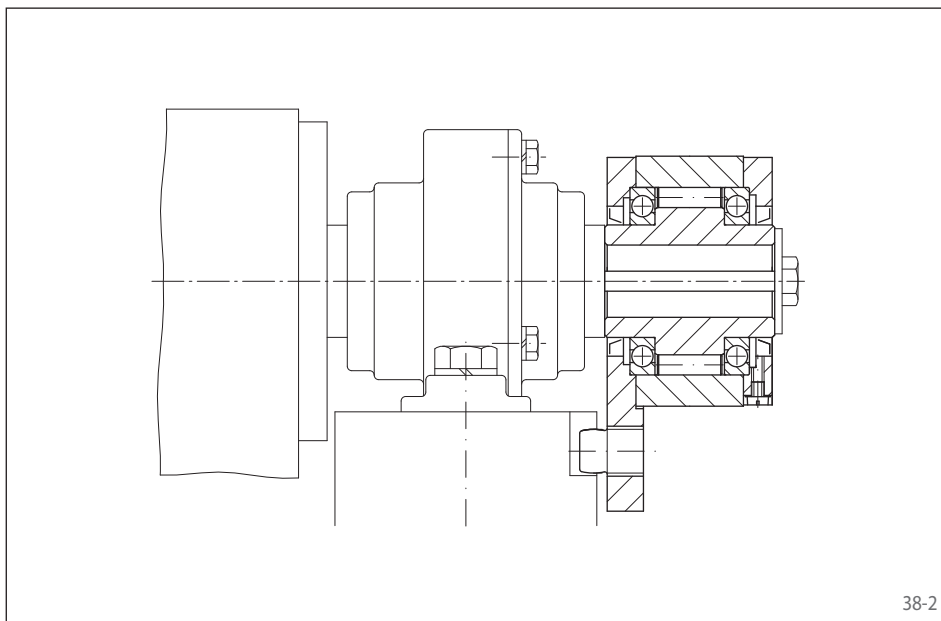
## Features

Complete Freewheel FGR ... R A2A3 with lever arm are sealed roller freewheels with ball bearings. They are oil lubricated.

The freewheels FGR ... R A2A3 are arranged on through shafts or shaft ends.

Nominal torques up to 68 000 Nm.

Bores up to 150 mm.

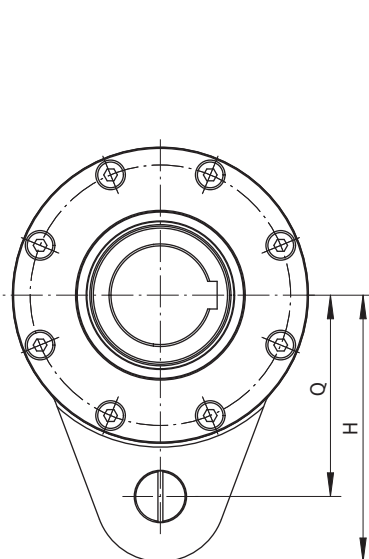


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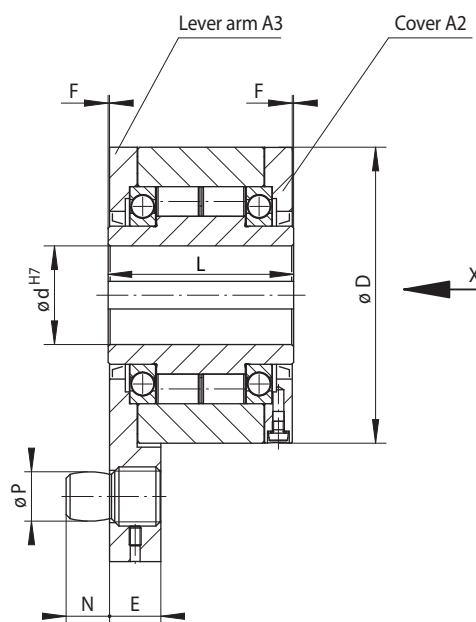
## Application example

Complete Freewheel FGR ... R A2A3 as backstop at the end of an inclined conveyor belt. The backdriving torque is held by lever arm with holding pin on the fundament. When the holding pin is dismantled the conveyor belt can be turned in both directions.

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Backstop	Standard type	Dimensions														
	For universal use															

Freewheel Size	Type	Lever arm and cover combination	Nominal Torque $M_N$ Nm	Max. speed Inner ring freewheels $\text{min}^{-1}$	Bore d mm	D mm	E mm	F mm	H mm	L mm	N mm	O mm	P mm	Q mm	S mm	Weight kg
FGR 12	R	A2A3	55	2 500	12	62	13	1	51	42	10	64	10	44	12	1,4
FGR 15	R	A2A3	130	2 200	15	68	13	1	62	52	10	78	10	47	12	1,8
FGR 20	R	A2A3	180	1 900	20	75	15	1	72	57	11	82	12	54	12	2,3
FGR 25	R	A2A3	290	1 550	25	90	17	1	84	60	14	85	16	62	12	3,4
FGR 30	R	A2A3	500	1 400	30	100	17	1	92	68	14	95	16	68	12	4,5
FGR 35	R	A2A3	730	1 300	35	110	22	1	102	74	18	102	20	76	12	5,6
FGR 40	R	A2A3	1 000	1 150	40	125	22	1	112	86	18	115	20	85	13	8,5
FGR 45	R	A2A3	1 150	1 100	45	130	26	1	120	86	22	115	25	90	14	8,9
FGR 50	R	A2A3	2 100	950	50	150	26	1	135	94	22	123	25	102	15	12,8
FGR 55	R	A2A3	2 600	900	55	160	30	1	142	104	25	138	32	108	18	16,2
FGR 60	R	A2A3	3 500	800	60	170	30	1	145	114	25	147	32	112	18	19,3
FGR 70	R	A2A3	6 000	700	70	190	35	1	175	134	30	168	38	135	17	23,5
FGR 80	R	A2A3	6 800	600	80	210	35	1	185	144	30	178	38	145	17	32,0
FGR 90	R	A2A3	11 000	500	90	230	45	1	205	158	40	192	50	155	17	47,2
FGR 100	R	A2A3	20 000	350	100	270	45	1	230	182	40	217	50	180	17	76,0
FGR 130	R	A2A3	31 000	250	130	310	60	1	268	212	55	250	68	205	18	110,0
FGR 150	R	A2A3	68 000	200	150	400	60	1	325	246	55	286	68	255	20	214,0

■ Freewheels with bore diameters highlighted blue in the table are available with short delivery times.  
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

The backdriving torque is supported by the lever arm with holding pin. The holding pin engages in a slot or bore in the frame of the machine. It must have 0,5 to 2 mm play in the axial and radial directions. If the holding pin is removed, the shaft can be turned in both directions.  
The tolerance of the shaft must be ISO h6 or j6.

## Example for ordering

Basic Freewheel, lever arm, cover, seals and screws are supplied loose provided nothing else is stated in the order.  
Freewheel size FGR 25, standard type with cover A2 and lever arm A3:

- FGR 25 R A2A3

If assembled, oil-filled, Complete Freewheels FGR ... R A2A3 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:

- counterclockwise free or
- clockwise free