

with lever arm
with rollers



Application as

▶ Backstop

for applications with low to medium speeds in freewheeling operation.

Features

Complete Freewheel FGR ... R A3A4 with lever arm are sealed roller freewheels with ball bearings. They are oil lubricated.

The freewheels FGR ... R A3A4 have an end cover and are fitted to shaft ends.

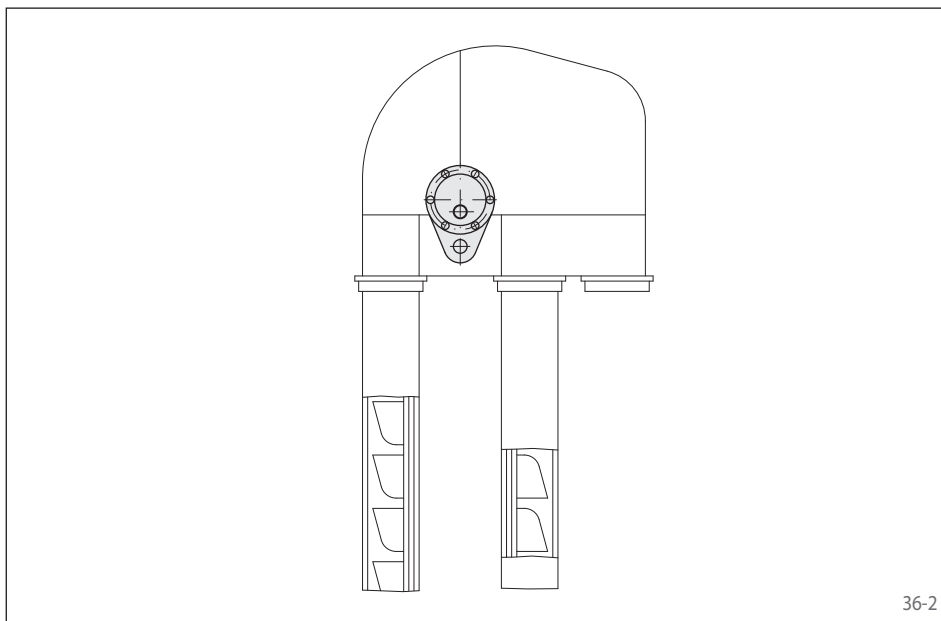
The oil filling is carried out after the freewheel has been installed.

Nominal torques up to 68 000 Nm.

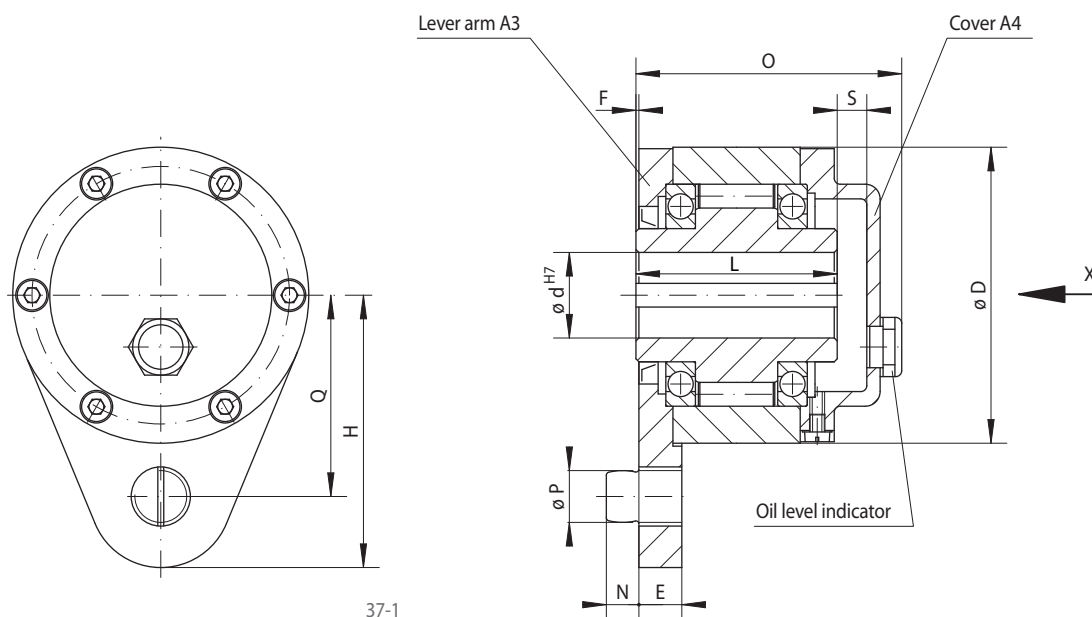
Bores up to 150 mm.

Application example

Complete Freewheel FGR 45 R A3A4 as a backstop on the opposite ends of the drive shaft of a bucket conveyor. In the case of a motor stop, the bucket conveyor must be held securely so that the conveyor goods do not pull the belt backwards and, in doing so, drive the motor quickly. The backdriving torque is supported by the lever arm with holding pin on the housing. If the holding pin is removed, the belt shaft 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 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	A3A4	55	2 500	12	62	13	1	51	42	10	64	10	44	12	1,4
FGR 15	R	A3A4	130	2 200	15	68	13	1	62	52	10	78	10	47	12	1,8
FGR 20	R	A3A4	180	1 900	20	75	15	1	72	57	11	82	12	54	12	2,3
FGR 25	R	A3A4	290	1 550	25	90	17	1	84	60	14	85	16	62	12	3,4
FGR 30	R	A3A4	500	1 400	30	100	17	1	92	68	14	95	16	68	12	4,5
FGR 35	R	A3A4	730	1 300	35	110	22	1	102	74	18	102	20	76	12	5,6
FGR 40	R	A3A4	1 000	1 150	40	125	22	1	112	86	18	115	20	85	13	8,5
FGR 45	R	A3A4	1 150	1 100	45	130	26	1	120	86	22	115	25	90	14	8,9
FGR 50	R	A3A4	2 100	950	50	150	26	1	135	94	22	123	25	102	15	12,8
FGR 55	R	A3A4	2 600	900	55	160	30	1	142	104	25	138	32	108	18	16,2
FGR 60	R	A3A4	3 500	800	60	170	30	1	145	114	25	147	32	112	18	19,3
FGR 70	R	A3A4	6 000	700	70	190	35	1	175	134	30	168	38	135	17	23,5
FGR 80	R	A3A4	6 800	600	80	210	35	1	185	144	30	178	38	145	17	32,0
FGR 90	R	A3A4	11 000	500	90	230	45	1	205	158	40	192	50	155	17	47,2
FGR 100	R	A3A4	20 000	350	100	270	45	1	230	182	40	217	50	180	17	76,0
FGR 130	R	A3A4	31 000	250	130	310	60	1	268	212	55	250	68	205	18	110,0
FGR 150	R	A3A4	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. In the case of freewheels FGR ... R A3A4, the inner ring must be secured axially with a retainer plate. Prior to commissioning, the freewheel must be filled with oil of the specified quality.

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 lever arm A3 and cover A4:

- FGR 25 R A3A4