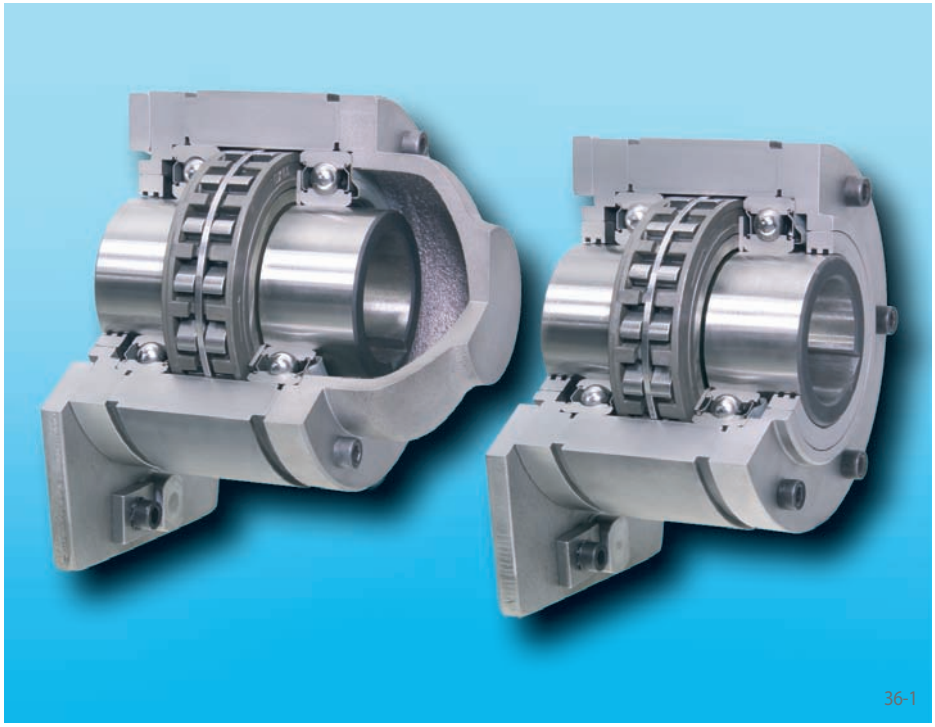
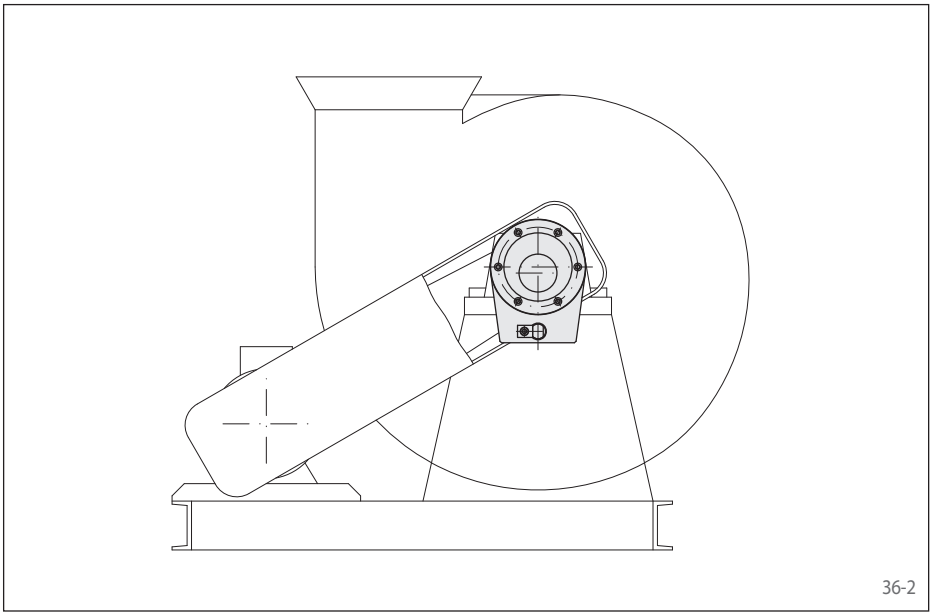
Complete Freewheels BA … XG and BC … XG

with lever arm
with sprag lift-off X and grease lubrication





Features

Complete Freewheels BA … XG and BC … XG with lever arm are sprag freewheels with sprag lift-off X and grease-lubricated ball bearings.

The sprag lift-off X ensures wear-free freewheeling operation when the inner ring rotates at high speed.

The freewheels BA ... XG have an end cover and are fitted to shaft ends.

The freewheels BC ... XG are arranged on through shafts or shaft ends.

The freewheels BA … XG and BC … XG are used as:

- Backstops

for applications with high speed freewheeling operation.

Nominal torques up to 42 500 Nm.

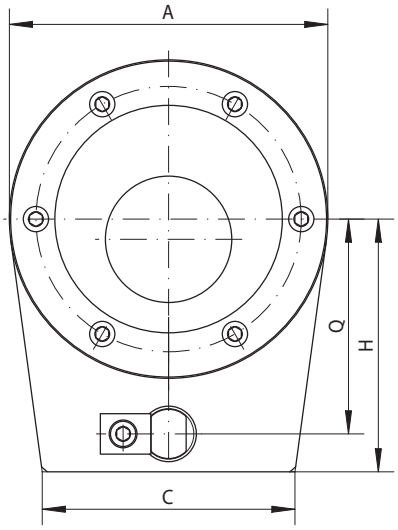
Bores up to 150 mm.

Application example

Complete Freewheel BA 52 SXG as a backstop on a radial fan. The backstop prevents a reverse rotation of the fan shaft from air flow or from an incorrectly polarized drive motor. By pulling out the holding pin in the lever arm, the shaft can be turned in both directions in order to carry out maintenance work. With the high shaft speed, the type with sprag lift-off X is used; the sprags work in freewheeling operation without contact and hence are wear-free.

Complete Freewheels BA … XG and BC … XG

with lever arm
with sprag lift-off X and grease lubrication



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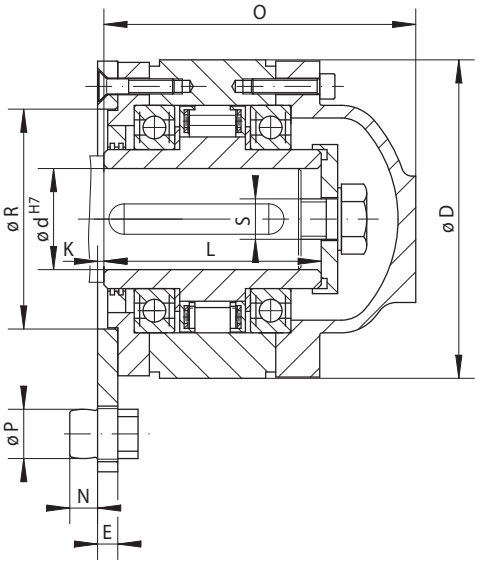
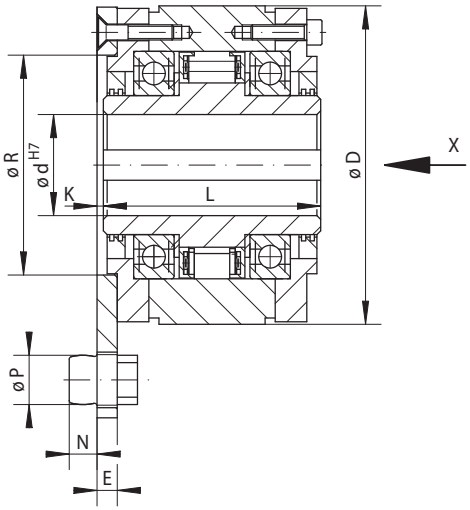


Series BA … XG 37-2



Series BC … XG 37-3

Backstop

Type with sprag lift-off X For extended service life using sprag lift-off at high speed rotating inner ring	Dimensions

Freewheel Size		Type	Nominal Torque	Sprag lift-off at inner ring speed	Max. speed Inner ring freewheels	Bore d Standard			Bore d max.	A	C	D	E	H	K	L	N	O	P	Q	R	S for Screw	Weight
			Nm	min^{-1}	min^{-1}	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		kg
BA 20	BC 20	DXG	400	750	2 500	30			30	110	90	106	8	80	2,5	77	11	104	19,5	65	70	M10	5
BA 25	BC 25	DXG	650	700	2 350	35	40		40	126	100	126	8	90	2,5	93	11	125	19,5	75	80	M12	8
BA 30	BC 30	DXG	1 100	630	2 350	45	50		50	155	120	151	10	120	3,5	102	16	140	27,5	95	100	M16	12
BA 40	BC 40	SXG	1 400	430	2 200	45	55	60	60	190	150	181	12	160	5,5	116	22	160	37,5	130	120	M16	20
BA 45	BC 45	SXG	2 300	400	2 200	55	65	70	70	210	160	196	14	175	7,5	130	26	176	41,5	140	130	M16	25
BA 52	BC 52	SXG	4 900	320	2 200	65	75	80	80	230	190	216	14	200	4,5	150	26	208	41,5	160	150	M20	35
BA 55	BC 55	SXG	6 500	320	2 000	75	85	90	90	255	200	246	15	210	3,5	170	29	228	49,5	170	160	M20	50
BA 60	BC 60	SXG	14 500	250	1 800	85	95	100	105	295	220	291	20	250	8,5	206	35	273	60,5	200	190	M24	91
BA 70	BC 70	SXG	21 000	240	1 650	120			120	335	260	321	25	280	14,5	215	39	291	65,5	225	210	M24	115
BA 100	BC 100	UXG	42 500	210	1 450	150			150	420	380	411	45	345	31,5	276	60	372	80,5	280	270	M30	260

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.

The freewheels BC … XG are supplied ready for installation.

In the case of freewheels BA … XG, the inner ring must be secured axially with a retainer plate. Retainer plate with fastening screw can be supplied upon request.

Example for ordering

Freewheel size BC 45 type with sprag lift-off X, grease lubrication and 65 mm bore:

- BC 45 SXG, d = 65 mm

When ordering, please also specify the freewheeling direction of the inner ring when viewed in direction X:

- anticlockwise free or
- clockwise free