

Integrated Freewheels FON

for bolting to the face
with sprags, available in three types



Application as

- ▶ Backstop
- ▶ Overrunning Clutch
- ▶ Indexing Freewheel

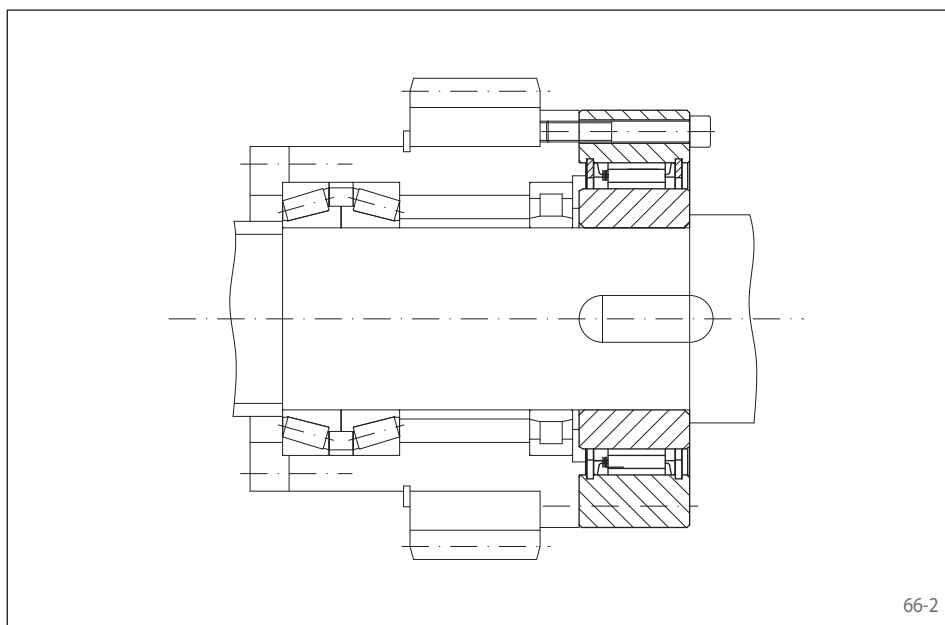
Features

Integrated Freewheels FON are sprag free-wheels without bearing support.

In addition to the standard type, two other types are available for extended service life and indexing accuracy.

Nominal torques up to 25 000 Nm.

Bores up to 155 mm. A multitude of standardized bore diameters are available with short delivery times.



Application example

Integrated Freewheel FON 57 SFT as an over-running clutch, arranged on the main drive shaft of a packaging machine. The outer ring is connected to a creep drive by means of a gear wheel. This drive is used during set-up. In this operating state, the freewheel works in driving operation and drives the machine at a very low speed via the main shaft. In normal operation (freewheeling operation), the inner ring overruns and the creep drive is automatically disengaged. The RIDUVIT® sprags give the freewheel an extended service life.

Mounting

Integrated Freewheels FON are without bearing support. Concentric alignment of inner and outer ring must be provided by the customer. The permissible run out (T.I.R.) must be observed.

The Integrated Freewheel FON is centered via the outer track F on the customer attachment part and bolted to this. The tolerance of the pilot diameter of the attachment part must be ISO h6.

The tolerance of the shaft must be ISO h6 or j6.

Lubrication

In the case of standard type and type with RIDUVIT®, an oil lubrication of the specified oil quality must be provided.

In the case of the type with sprag lift-off Z, at speeds in excess of the sprag lift-off speed, no special lubrication is required; the freewheel functions maintenance-free. When operating below the sprag lift-off speed, an oil lubrication of the specified oil quality must be provided.

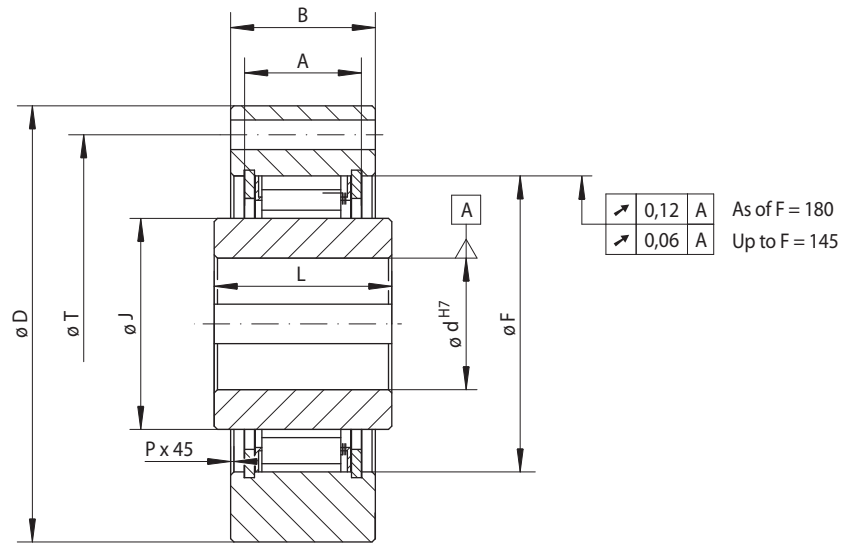
Example for ordering

Freewheel size FON 72, type with RIDUVIT® and 45 mm bore:

- FON 72 SFT, d = 45 mm

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Indexing Freewheel Overrunning Clutch Backstop	Standard type For universal use	Type with RIDUVIT® For extended service life with coated sprags	Type with sprag lift-off Z For extended service life using sprag lift-off at high speed rotating outer ring
Indexing Freewheel			
Overrunning Clutch			
Backstop			

Freewheel Size	Type	Nominal torque M _N Nm	Max. speed		Type	Nominal torque M _N Nm	Max. speed		Type	Nominal torque M _N Nm	Sprag lift-off at outer ring speed min ⁻¹	Max. speed	
			Inner ring freewheels/ overruns min ⁻¹	Outer ring freewheels/ overruns min ⁻¹			Inner ring freewheels/ overruns min ⁻¹	Outer ring freewheels/ overruns min ⁻¹				Outer ring freewheels/ overruns min ⁻¹	Inner ring drives min ⁻¹
FON 37	SF	220	2 500	2 600	SFT	220	2 500	2 600	SFZ	180	2 900	3 700	340
FON 44	SF	315	1 900	2 200	SFT	315	1 900	2 200	SFZ	250	2 250	3 000	320
FON 57	SF	630	1 400	1 750	SFT	630	1 400	1 750	SFZ	630	2 000	2 200	560
FON 72	SF	1 250	1 120	1 600	SFT	1 250	1 120	1 600	SFZ	1 250	1 550	1 850	488
FON 82	SF	1 900	1 025	1 450	SFT	1 900	1 025	1 450	SFZ	1 700	1 450	1 600	580
FON 107	SF	2 800	880	1 250	SFT	2 800	880	1 250	SFZ	2 500	1 300	1 350	520
FON 127	SF	6 300	800	1 150	SFT	6 300	800	1 150	SFZ	5 000	1 200	1 200	480
FON 140	SF	10 000	750	1 100	SFT	10 000	750	1 100	SFZ	10 000	950	1 150	380
FON 170	SF	16 000	700	1 000	SFT	16 000	700	1 000	SFZ	14 000	880	1 000	352
FON 200	SF	25 000	630	900	SFT	25 000	630	900	SFZ	20 000	680	900	272

The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.
The specified maximum speeds apply for installation conditions as given with Complete Freewheels. Knowing the actual installation conditions higher speeds can be permitted under some circumstances.

Freewheel Size	Bore d		A	B	D	F	G**	J	L	P	T	Z**	Weight
	Standard mm	max. mm											
FON 37	20	25*	18,5	25	85	55	M 6	37	35	0,5	70	6	0,8
FON 44	25	32*	18,5	25	95	62	M 6	44	35	0,5	80	8	1,0
FON 57	30	42*	23,5	30	110	75	M 8	57	45	0,5	95	8	1,7
FON 72	40	55*	29,5	38	132	90	M 8	72	60	1,0	115	12	3,0
FON 82	55	65*	31,0	40	145	100	M 10	82	60	1,0	125	12	4,0
FON 107	70	85*	33,0	45	170	125	M 10	107	65	1,0	150	12	6,0
FON 127	90	100*	58,0	68	200	145	M 12	127	75	1,0	180	12	11,5
FON 140	100	115*	58,0	68	250	180	M 16	140	75	1,0	225	12	17,0
FON 170	120	140*	60,0	70	290	210	M 16	170	75	1,0	258	16	24,0
FON 200	140	155	73,0	85	320	240	M 16	200	85	1,5	288	16	34,0

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

Keyway according to DIN 6885, page 1 • Tolerance of keyway width JS10.

* Keyway according to DIN 6885, page 3 • Tolerance of keyway width JS10.

** Z = Number of fastening holes for screws G on pitch circle T.

Morskate®



Any questions? Please contact us.

Morskate Aandrijvingen BV

Oosterveldsingel 47A
7558 PJ Hengelo (Ov)
The Netherlands

NL

T +31 (0)74 - 760 11 11
info@morskateaandrijvingen.nl
www.morskateaandrijvingen.nl

DE

T +49 692 - 222 34 95
info@morskateantriebstechnik.de
www.morskateantriebstechnik.de

EN

T +31 (0)74 - 760 11 11
info@morskatedrivetechnology.com
www.morskatedrivetechnology.com