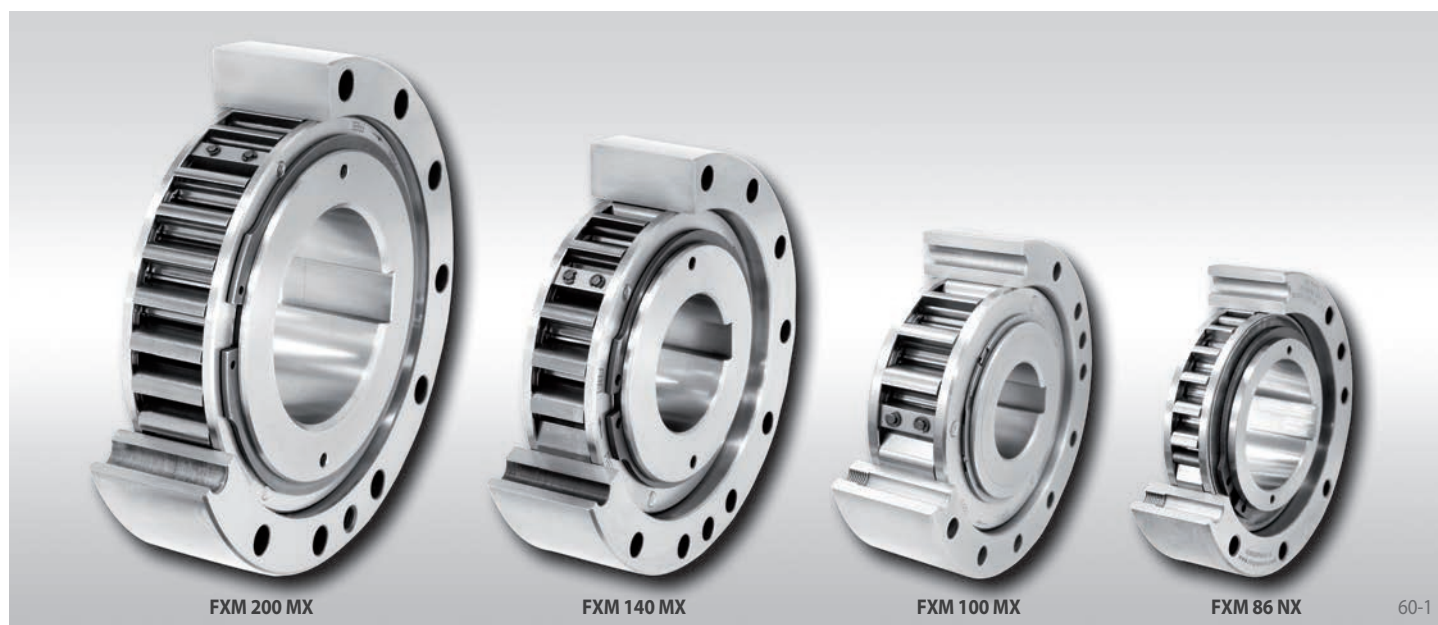


Integrated Freewheels FXM ... NX and FXM ... MX

RINGSPANN®

for bolting to the face
with sprag lift-off X



		Type with sprag lift-off X	
		For extended service life using sprag lift-off at high speed rotating inner ring	
Backstop	→		
Overrunning Clutch	→		

Freewheel Size	Type	Theoretical nominal torque	Nominal torque at existing run out (T.I.R.)						Sprag lift-off at inner ring speed min ⁻¹	Max. speed	
		 0 A	 0,1 A	 0,2 A	 0,3 A	 0,4 A	 0,5 A	Inner ring freewheels/ overruns min ⁻¹		Outer ring drives min ⁻¹	
		Nm	Nm	Nm	Nm	Nm	Nm				
FXM 31 - 17	NX	110	110	105	100			890	5 000	356	
FXM 38 - 17	NX	180	170	160	150			860	5 000	344	
FXM 46 - 25	NX	460	450	440	430			820	5 000	328	
FXM 51 - 25	NX	560	550	540	530			750	5 000	300	
FXM 56 - 25	NX	660	650	640	630			730	5 000	292	
FXM 61 - 19	NX	520	500	480	460			750	5 000	300	
FXM 66 - 25	NX	950	930	910	890			700	5 000	280	
FXM 76 - 25	NX	1 200	1 170	1 140	1 110			670	5 000	268	
FXM 86 - 25	NX	1 600	1 550	1 500	1 450			630	5 000	252	
FXM 101 - 25	NX	2 100	2 050	2 000	1 950			610	5 000	244	
FXM 85 - 40	MX	2 500	2 500	2 450	2 450	2 450	2 450	430	6 000	172	
FXM 100 - 40	MX	3 700	3 600	3 600	3 500	3 500	3 500	400	4 500	160	
FXM 120 - 50	MX	7 700	7 600	7 500	7 300	7 300	7 300	320	4 000	128	
FXM 140 - 50	MX	10 100	10 000	9 800	9 600	9 500	9 500	320	3 000	128	
FXM 170 - 63	MX	20 500	20 500	20 000	19 500	19 000	19 000	250	2 700	100	
FXM 200 - 63	MX	31 000	30 500	30 000	26 500	23 000	20 500	240	2 100	96	

The maximum transmissible torque is 2 times the specified nominal torque. See page 14 for determination of selection torque.
The theoretical nominal torque applies only for ideal concentricity between the inner and outer ring. In practice, the concentricity is affected by the bearing play and centering errors of the neighbouring parts. Then the nominal torques specified in the table apply, whilst taking into consideration the existing run out (T.I.R.).
Higher speeds upon request.

Mounting

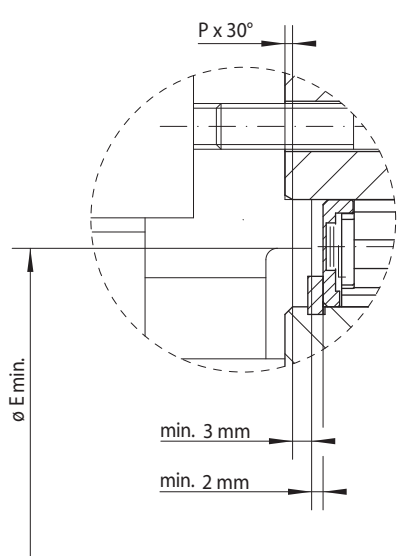
Integrated Freewheels FXM are without bearing support. Concentric alignment of inner and outer ring must be provided by the customer. The permissible run out (T.I.R.) must be observed.

The Integrated Freewheel FXM is centered via the outer track F on the customer attachment part and bolted to this (refer to figure 61-1). The tolerance of the pilot diameter of the attachment part must be ISO h6 or h7.

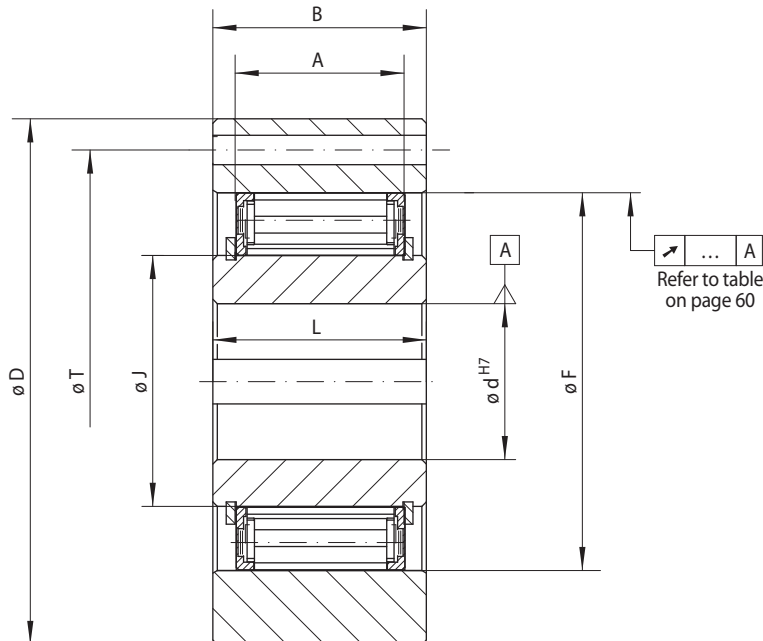
The tolerance of the shaft must be ISO h6 or j6.

For fitting to shaft ends, end covers can be supplied upon request (refer to figure 61-3).

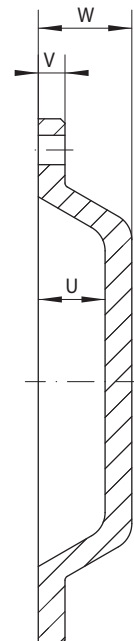
for bolting to the face
with sprag lift-off X



61-1



61-2



61-3

Freewheel Size	Type	Bore d			A	B	D	E min.	F	G**	J	L	P	T	U	V	W	Z**	Weight
		mm	mm	max. mm															
FXM 31 -17	NX	20*		20*	17	25	85	41	55	M 6	31	24	1,0	70	15	6	21	6	0,8
FXM 38 -17	NX	25*		25*	17	25	90	48	62	M 6	38	24	1,0	75	15	6	21	6	0,9
FXM 46 -25	NX	30		30	25	35	95	56	70	M 6	46	35	1,0	82	15	6	21	6	1,3
FXM 51 -25	NX	35		36	25	35	105	62	75	M 6	51	35	1,0	90	15	6	21	6	1,7
FXM 56 -25	NX	35	40	40	25	35	110	66	80	M 6	56	35	1,0	96	15	6	21	8	1,8
FXM 61 -19	NX	35	40	45*	19	27	120	74	85	M 8	61	25	1,0	105	15	6	21	6	1,8
FXM 66 -25	NX	40	45	48	25	35	132	82	90	M 8	66	35	1,0	115	15	8	23	8	2,8
FXM 76 -25	NX	50	55	60*	25	35	140	92	100	M 8	76	35	1,0	125	15	8	23	8	3,1
FXM 86 -25	NX	50	60	70*	25	40	150	102	110	M 8	86	40	1,0	132	15	8	23	8	4,2
FXM 101 -25	NX	75		80*	25	50	175	117	125	M 10	101	50	1,0	155	20	8	28	8	6,9
FXM 85 -40	MX	60		65	40	50	175	102	125	M 10	85	60	1,0	155	20	8	28	8	7,4
FXM 100 -40	MX	70		80*	40	50	190	130	140	M 10	100	60	1,5	165	25	10	35	12	8,8
FXM 120 -50	MX	80		95	50	60	210	150	160	M 10	120	70	1,5	185	25	10	35	12	12,7
FXM 140 -50	MX	90		110	50	70	245	170	180	M 12	140	70	2,0	218	25	12	35	12	19,8
FXM 170 -63	MX	100		130	63	80	290	200	210	M 16	170	80	2,0	258	28	12	38	12	33,0
FXM 200 -63	MX	120		155	63	80	310	230	240	M 16	200	80	2,0	278	32	12	42	12	33,6

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.

Lubrication

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 FXM 140 - 50, type with sprag lift-off X and 90 mm bore and end cover:

- FXM 140 - 50 MX, d = 90 mm, with end cover