

NFR

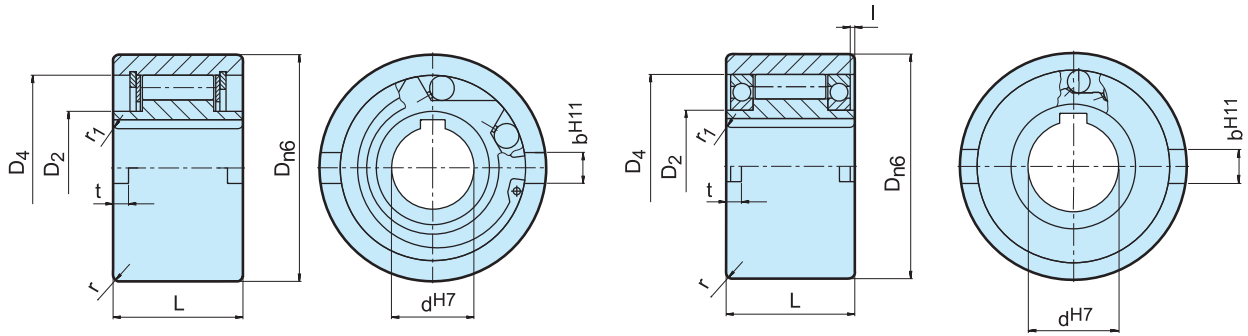
TYPE



Type NFR is a bearing supported roller type freewheel without any sealing. Lubrication and sealing must be provided by the installation. Standard lubrication is oil.

Size 8 to 20 units use steel on steel bearing support from the inner race. Above size 25, two 160.. series ball bearings are used, giving a higher overrunning speed capacity. A typical arrangement is shown overleaf.

The inner race is keyed to the shaft. The outer race has a positive n6 tolerance to give a press fit in a housing to H7. Additional side notches provide for positive torque transmission. The housing must be strong enough to not expand after assembly.



NFR 8-20*

NFR 25-130**

Type	Size	Overrunning speeds			Bearing										Weight
		$T_{KN}^{1)}$ [Nm]	$n_{max}^{2)}$ [min ⁻¹]	$n_{amax}^{3)}$ [min ⁻¹]		D_{n6} [mm]	D_2 [mm]	D_4 [mm]	L [mm]	l [mm]	t [mm]	b^{H11} [mm]	r [mm]	r_1 [mm]	
NFR (ANR-ANG)	8	20	1000	1000	*	37	20	30	20		3	6	1	1.5	0.1
	12	20	1000	1000	*	37	20	30	20		3	6	1	1.5	0.1
	15	78	850	850	*	47	26	37	30		3.5	7	1.5	1.5	0.3
	20	188	650	650	*	62	37	52	36		3.5	8	2	2	0.6
	25	250	2100	3600	16008**	80	40	68	40	0.2	4	9	2.5	2	1.2
	30	500	1700	3200	16009**	90	45	75	48	0.2	5	12	2.5	2	1.8
	35	663	1550	3000	16010**	100	50	80	53	1.2	6	13	2.5	2.5	2.4
	40	1100	1150	2600	16011**	110	55	90	63	2.2	7	15	3	2.5	3.3
	45	1500	1000	2400	16012**	120	60	95	63	2.2	7	16	3	2.5	4.0
	50	2375	800	2150	16014**	130	70	110	80	2.7	8.5	17	3.5	3	5.7
	55	2550	750	2000	16015**	140	75	115	80	4.2	9	18	3.5	3	6.5
	60	4250	650	1900	16016**	150	80	125	95	3.2	9	18	3.5	3.5	8.9
	70	5875	550	1750	16018**	170	90	140	110	1.1	9	20	3.5	3.5	13.5
	80	10000	500	1600	16021**	190	105	160	125	0	9	20	4	3.5	19.0
	90	17250	450	1450	16024**	215	120	180	140	0.6	11.5	24	4	4	27.2
100	19625	350	1250	16028**	260	140	210	150	2.6	14.5	28	4	4	44.5	
130	34750	250	1000	16032**	300	160	240	180	2	17.5	32	5	5	68.0	

NOTES

- 1) $T_{max} = 2 \times T_{KN}$
» Refer to Selection page 10 to 13
- 2) Inner race overruns
- 3) Outer race overruns
Keyway to DIN 6885.1
- *) With plain bearing steel on steel
- **) With 2 ball bearings series 160.
- » Refer to mounting and maintenance instructions page 16 to 19

MOUNTING EXAMPLE

