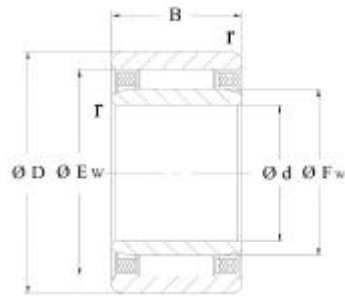


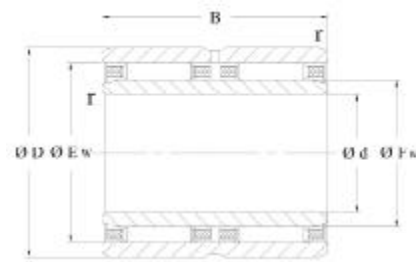
## Needle roller bearings without ribs

with inner ring

Series NAO



NAO  
single row



NAO  
double row

Shaft diameter	Dimensions				Basic Load rating		Fatigue limit load Pu kN	Limiting speed nG min <sup>-1</sup>	Reference speed nB min <sup>-1</sup>	Code Bearing HMEC d x D B	Mass Bearing ≈ g
	F <sub>w</sub>	E <sub>w</sub>	r	s <sup>1)</sup>	dyn. C	stat. Co					
	mm	mm	mm		kN	kN					
6	10	13	0.3	0.5	4.75	5.5	0.71	29000	28000	NAO 6X17X10 TN	14
9	12	18	0.3	0.5	10	9.9	1.25	25000	21000	NAO 9X22X12 TN	23.5
12	16	20	0.3	0.5	8.9	11.8	1.46	24000	18000	NAO 12X24X13	30
	16	22	0.3	0.5	11.5	12.5	1.58	22000	17000	NAO 12X28X12	40
15	20	24	0.3	0.5	9.8	14.3	1.78	22000	14000	NAO 15X28X13	29
	20	26	0.3	0.5	13.4	16.2	2.05	21000	13000	NAO 15X32X12	50
17	22	26	0.3	0.5	10.4	15.9	1.98	21000	13000	NAO 17X30X13	42
	22	29	0.3	0.5	20	25.5	3.15	19000	12000	NAO 17X35X16	78
20	25	29	0.3	0.5	14.9	26	3.3	18000	12000	NAO 20X35X17	76
	25	32	0.3	0.5	21	28	3.5	17000	11000	NAO 20X37X16	82
25	30	35	0.3	0.8	19.6	34	3.95	15000	9500	NAO 25X40X17	88
	30	37	0.3	0.8	23.1	33.5	4.15	15000	9000	NAO 25X42X16	86
	30	37	0.3	0.8	39.5	67	8.3	15000	9000	NAO 25X42X32	190
30	35	40	0.3	0.8	20.8	38.5	4.55	13000	8500	NAO 30X45X17	102
	35	40	0.3	0.8	27.5	56	6.7	13000	8500	NAO 30X45X26	157
	35	42	0.3	0.8	24.4	37.5	4.65	13000	8000	NAO 30X47X16	109
	35	42	0.3	0.8	27.5	43	5.5	13000	8000	NAO 30X47X18	119
35	40	45	0.3	0.8	21.4	41.5	4.85	12000	7500	NAO 35X50X17	113
	40	47	0.3	0.8	32.5	57	6.8	11000	7500	NAO 35X55X20	190
40	45	50	0.3	0.8	22.5	46	5.4	10000	7000	NAO 40X55X17	127
50	55	60	0.3	1	28.5	66	8	8500	6000	NAO 50X68X20	230
70	80	88	1	1	71	176	22.4	6000	3900	NAO 70X100X30	850
80	90	98	1	1	68	172	21.3	5000	3800	NAO 80X110X30	920
90	100	108	1	1	71	188	23.1	4700	3500	NAO 90X120X30	1044