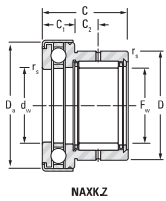
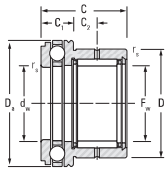


NEEDLE ROLLER BEARINGS

**BALL THRUST SERIES
METRIC SERIES**



Shaft Diameter	F ₁₀	D	C	d ₁₀		D ₂	C ₁	C ₂	r _{1 min.}
				E7					
				mm	in.				
10	10	19	23	19	24	9	6.5	0.3	
0.394	0.394	0.748	0.906	0.394	0.945	0.354	0.256	0.012	
10	10	19	23	19	25	9	6.5	0.3	
0.394	0.394	0.748	0.906	0.394	0.984	0.354	0.256	0.012	
12	12	21	23	12	26	9	6.5	0.3	
0.472	0.472	0.827	0.906	0.472	1.024	0.354	0.256	0.012	
12	12	21	23	12	27	9	6.5	0.3	
0.472	0.472	0.827	0.906	0.472	1.063	0.354	0.256	0.012	
15	15	24	23	15	28	9	6.5	0.3	
0.591	0.591	0.945	0.906	0.591	1.102	0.354	0.256	0.012	
15	15	24	23	15	29	9	6.5	0.3	
0.591	0.591	0.945	0.906	0.591	1.142	0.354	0.256	0.012	
17	17	26	25	17	30	9	8	0.3	
0.669	0.669	1.024	0.984	0.669	1.181	0.354	0.315	0.012	
17	17	26	25	17	31	9	8	0.3	
0.669	0.669	1.024	0.984	0.669	1.220	0.354	0.315	0.012	
20	20	30	30	20	35	10	10.5	0.3	
0.787	0.787	1.181	1.181	0.787	1.378	0.394	0.413	0.012	
20	20	30	30	20	36	10	10.5	0.3	
0.787	0.787	1.181	1.181	0.787	1.417	0.394	0.413	0.012	
25	25	37	30	25	42	11	8.5	0.6	
0.984	0.984	1.457	1.181	0.984	1.654	0.433	0.374	0.024	
25	25	37	30	25	43	11	8.5	0.6	
0.984	0.984	1.457	1.181	0.984	1.693	0.433	0.374	0.024	
30	30	42	30	30	47	11	8.5	0.6	
1.181	1.181	1.654	1.181	1.181	1.850	0.433	0.374	0.024	
30	30	42	30	30	48	11	8.5	0.6	
1.181	1.181	1.654	1.181	1.181	1.890	0.433	0.374	0.024	
35	35	47	30	35	52	12	9	0.6	
1.378	1.378	1.850	1.181	1.378	2.047	0.472	0.354	0.024	
35	35	47	30	35	53	12	9	0.6	
1.378	1.378	1.850	1.181	1.378	2.087	0.472	0.354	0.024	
40	40	52	32	40	60	13	10	0.6	
1.575	1.575	2.047	1.260	1.575	2.362	0.512	0.394	0.024	
40	40	52	32	40	61	13	10	0.6	
1.575	1.575	2.047	1.260	1.575	2.402	0.512	0.394	0.024	
45	45	58	32	45	65	14	9	0.6	
1.772	1.772	2.283	1.260	1.772	2.559	0.551	0.354	0.024	
45	45	58	32	45	66.5	14	9	0.6	
1.772	1.772	2.283	1.260	1.772	2.618	0.551	0.354	0.024	

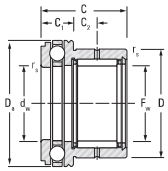
Combined Needle Roller Bearings

Bearing Designation	Speed Rating D11	Load Ratings				Fatigue Load Limits C ₀		Approx. Wt. kg	Matching Inner Ring Designation	Shaft Diameter mm in.
		Radial		Thrust		Radial kN	Thrust kN			
		Dynamic C	Static C ₀	Dynamic C ₁	Static C ₀					
		min ⁻¹	kN	lbf	kN	lbf				
NAXX10	9500	7.0	6.7	16.4	14	1.35	0.630	0.04	JR7x10x16	10
0.394	0.394	1.760	1.960	2240	3150					0.394
NAXX10Z	9500	7.9	6.7	16.4	14	1.35	0.630	0.04	JR7x10x16	
0.394	0.394	1.960	1.960	2240	3150					
NAXX12	9000	7.5	6.5	16.7	15.4	1.30	0.70	0.046	JR9x12x16	12
0.472	0.472	1.690	1.910	2410	3460					0.472
NAXX12Z	9000	7.5	6.5	16.7	15.4	1.30	0.70	0.047	JR9x12x16	
0.472	0.472	1.690	1.910	2410	3460					
NAXX15	8500	5.7	12.6	16.9	16.8	1.90	0.760	0.047	JR12x15x16	15
0.591	0.591	2180	2830	2450	3780					0.591
NAXX15Z	8500	5.7	12.6	16.9	16.8	1.90	0.760	0.05	JR12x15x16	
0.591	0.591	2180	2830	2450	3780					
NAXX17	8000	11.4	16.1	11.8	15.6	2.50	0.890	0.06	JR14x17x17	17
0.669	0.669	2590	3620	2650	4410					0.669
NAXX17Z	8000	11.4	16.1	11.8	15.6	2.50	0.890	0.064	JR14x17x17	
0.669	0.669	2590	3620	2650	4410					
NAXX20	7000	14.8	23.7	15.5	26.6	3.65	1.20	0.089	JR17x20x20	20
0.787	0.787	3330	5330	3480	5980					0.787
NAXX20Z	7000	14.8	23.7	15.5	26.6	3.65	1.20	0.094	JR17x20x20	
0.787	0.787	3330	5330	3480	5980					
NAXX25	6300	18.9	29.8	18.8	35.5	4.60	1.60	0.134	JR20x25x20	25
0.984	0.984	4250	6700	4230	7980					0.984
NAXX25Z	6300	18.9	29.8	18.8	35.5	4.60	1.60	0.141	JR20x25x20	
0.984	0.984	4250	6700	4230	7980					
NAXX30	5600	26.3	34.6	19.5	40	5.35	2.15	0.146	JR25x30x20	30
1.181	1.181	4960	7780	4380	8990					1.181
NAXX30Z	5600	26.3	34.6	19.5	40	5.35	2.15	0.154	JR25x30x20	
1.181	1.181	4960	7780	4380	8990					
NAXX35	5300	22.1	40.8	20.8	46.6	6.35	2.10	0.176	JR30x35x20	35
1.378	1.378	4970	9170	4680	10500					1.378
NAXX35Z	5300	22.1	40.8	20.8	46.6	6.35	2.10	0.184	JR30x35x20	
1.378	1.378	4970	9170	4680	10500					
NAXX40	4600	25	51	28	63	7.30	2.85	0.224	JR35x40x20	40
1.575	1.575	5620	11500	6290	14200					1.575
NAXX40Z	4600	25	51	28	63	7.30	2.85	0.233	JR35x40x20	
1.575	1.575	5620	11500	6290	14200					
NAXX45	4500	14.9	51.8	29	68.2	8.05	3.10	0.262	JR40x45x20	45
1.772	1.772	5980	11600	6520	15600					1.772
NAXX45Z	4500	14.9	51.8	29	68.2	8.05	3.10	0.275	JR40x45x20	
1.772	1.772	5980	11600	6520	15600					

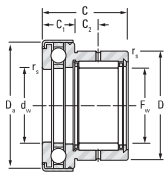
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NEEDLE ROLLER BEARINGS

BALL THRUST SERIES
METRIC SERIES



NAXK



NAXKZ

Shaft Diameter mm in	F _w mm in	D mm in	C mm in	d _{in}		D _o mm in	C ₁ mm in	C ₂ mm in	r ₁ min. mm in
				E7	E7				
50 1.969	58 1.969	62 2.441	35 1.378	58 1.969	70 2.756	14 0.551	10 0.394	10 0.394	0.6 0.024
50 1.969	62 2.441	35 1.378	58 1.969	70 2.756	14 0.551	10 0.394	10 0.394	0.6 0.024	
60 2.362	60 2.362	72 2.835	40 1.575	60 2.362	85 3.346	17 0.669	12 0.472	12 0.472	1 0.039
70 2.756	70 2.756	85 3.346	40 1.575	70 2.756	95 3.740	18 0.709	11 0.433	11 0.433	1 0.039

Combined Needle Roller Bearings

Bearing Designation	Speed Rating D11 min ⁻¹	Load Ratings				Fatigue Load Limits C ₀		Approx. Wt. kg	Matching Inner ring Designation	Shaft Diameter mm in
		Radial		Thrust		Radial	Thrust			
		Dynamic C	Static C ₀	Dynamic C _t	Static C _{t0}					
NAXK50	4300	38.2 6790	66.5 15400	26.8 6470	75.4 17000	10.7	3.40	0.316	JR45x50x25	50 1.969
NAXK60	4300	38.2 6790	66.5 15400	26.8 6470	75.4 17000	10.7	3.40	0.332	JR45x60x25	
NAXK60	3600	35.9 7170	76.1 17000	41.6 9510	113 25400	12.2	5.10	0.48	JR50x60x25	60 2.362
NAXK70	3400	44.8 10100	87.1 19600	40.0 8960	110 24700	13.8	4.95	0.659	JR60x70x25	70 2.756