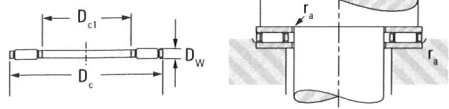
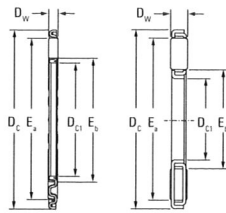


NEEDLE ROLLER BEARINGS

THRUST NEEDLE ROLLER AND CAGE ASSEMBLIES, THRUST WASHERS
METRIC SERIES
AXK, FNT SERIES



CAGE DESIGN

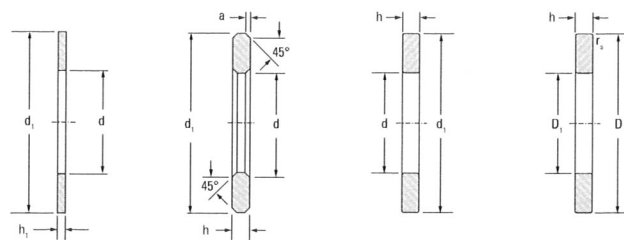


AXK

FNT

Shaft Dia. mm	Dc1 mm	Dc mm	Dw mm	E1 mm	E2 mm	ra max mm	Assembly Designation	Load Ratings		Fatigue Load Limit C10 kN	Speed Rating Oil min-1	Approx. Wt. kg
								Dynamic	Static			
								C	C0			
40	40 1.5748	60 2.3622	3 0.1181	58.0 2.283	45.0 1.772	0.6 0.024	AXK4060	27.1 6090	110.0 24700	11.9	7000	0.016 0.035
				57.0 2.244	43.0 1.693	0.6 0.024	FNT-4060	31.5 7080	132.0 29700	14.6	7100	0.020 0.044
45	45 1.7717	65 2.5591	3 0.1181	63.0 2.480	50.0 1.969	0.6 0.024	AXK4565	29.0 6520	124.0 27900	13.4	6500	0.020 0.044
				63.0 2.480	47.0 1.850	0.6 0.024	FNT-4565	37.6 8450	172.0 38700	18.5	6400	0.024 0.053
50	50 1.9685	70 2.7559	3 0.1181	68.0 2.677	55.0 2.165	0.6 0.024	AXK5070	30.8 6920	137.0 30600	14.9	6000	0.020 0.044
				68.0 2.677	52.0 2.047	0.6 0.024	FNT-5070	37.9 8520	179.0 40200	19.1	5900	0.026 0.057
55	55 2.1654	78 3.0709	3 0.1181	76.0 2.992	60.0 2.362	0.6 0.024	AXK5578	39.4 8860	195.0 43800	20.5	5300	0.026 0.057
				76.0 2.992	57.0 2.244	0.6 0.024	FNT-5578	48.5 10900	254.0 57100	26.3	5300	0.033 0.073
60	60 2.3622	85 3.3465	3 0.1181	83.0 3.268	65.0 2.559	0.6 0.024	AXK6085	44.5 10000	234.0 52600	24.7	4900	0.035 0.077
65	65 2.5591	90 3.5433	3 0.1181	88.0 3.465	70.0 2.756	0.6 0.024	AXK6590	46.7 10500	254 57100	26.8	4600	0.036 0.079
70	70 2.7559	95 3.7402	4 0.1575	93.0 3.661	74.0 2.913	0.6 0.024	AXK7095	53.8 12100	253 56900	28.0	4400	0.055 0.121
				93.0 3.661	73.0 2.874	0.6 0.024	FNTA-7095	66.6 15000	333 74900	35.3	4400	0.057 0.126
75	75 2.9528	100 3.9370	4 0.1575	98.0 3.858	78.0 3.110	0.6 0.024	AXK75100	55.1 12400	266 59800	29.4	4200	0.058 0.128
				98.0 3.858	78.0 3.071	0.6 0.024	FNT-75100	71.6 16100	374 84100	39.7	4100	0.064 0.141
80	80 3.1496	105 4.1339	4 0.1575	103.0 4.055	84.0 3.307	0.6 0.024	AXK80105	56.4 12700	279 62700	30.8	4000	0.052 0.203
				103.0 4.055	83.0 3.268	0.6 0.024	FNTA-80105	71.3 16100	379 85200	40.1	3900	0.062 0.137
85	85 3.3465	110 4.3307	4 0.1575	108.0 4.252	89.0 3.504	0.6 0.024	AXK85110	57.6 12900	291 65400	32.2	3800	0.063 0.139
90	90 3.5433	120 4.7244	4 0.1575	118.0 4.646	94.0 3.701	0.6 0.024	AXK90120	72.9 16400	405 91000	43.0	3500	0.081 0.179
100	100 3.9370	135 5.3150	4 0.1575	133.0 5.236	105.0 4.134	0.6 0.024	AXK100135	90.2 20300	552 124000	56.4	3100	0.106 0.234
110	110 4.3307	145 5.7087	4 0.1575	143.0 5.630	115.0 4.528	0.6 0.024	AXK110145	93.2 21000	591 133000	59.0	2800	0.117 0.258

Needle Roller Thrust Bearings, Assemblies, Washers



AS
(h1 = 1.0)

LS

WS.811

GS.811

Washer Dimensions				Thin		Heavy (LS)				Heavy			
d	D, d1	D1	h1	Washer Designation	Approx. Wt.	h	a	Washer Designation	Approx. Wt.	h	rs min	Washer Designation	Approx. Wt.
mm	mm	mm	mm		kg	mm	mm		kg	mm	mm	Shaft Potted	Housing Potted
40	60	42	1.00	AS4060	0.012	3.50	1.00	LS4060	0.041	3.50	0.60	WS.81108	GS.81108
1.5748	2.3622	1.6535	0.0394		0.026	0.138	0.039		0.090	0.138	0.024		
45	65	47	1.00	AS4565	0.013	4.00	1.00	LS4565	0.052	4.00	0.60	WS.81109	GS.81109
1.7717	2.5591	1.8504	0.0394		0.029	0.157	0.039		0.115	0.157	0.024		
50	70	52	1.00	AS5070	0.014	4.00	1.00	LS5070	0.0560	4.00	0.60	WS.81110	GS.81110
1.9685	2.7559	2.0472	0.0394		0.031	0.157	0.039		0.1230	0.157	0.024		
55	78	57	1.00	AS5578	0.018	5.00	1.00	LS5578	0.0910	5.00	0.60	WS.81111	GS.81111
2.1654	3.0709	2.2441	0.0394		0.040	0.197	0.039		0.2010	0.197	0.024		
60	85	62	1.00	AS6085	0.022	4.75	1.50	LS6085	0.102	4.75	1.00	WS.81112	GS.81112
2.3622	3.3465	2.4409	0.0394		0.049	0.187	0.059		0.225	0.187	0.039		
65	90	67	1.00	AS6590	0.023	5.25	1.50	LS6590	0.121	5.25	1.00	WS.81113	GS.81113
2.5591	3.5433	2.6378	0.0394		0.051	0.207	0.059		0.267	0.207	0.039		
70	95	72	1.00	AS7095	0.025	5.25	1.50	LS7095	0.1280	5.25	1.00	WS.81114	GS.81114
2.7559	3.7402	2.8346	0.0394		0.055	0.207	0.059		0.2820	0.207	0.039		
75	100	77	1.00	AS75100	0.027	5.75	1.50	LS75100	0.1500	5.75	1.00	WS.81115	GS.81115
2.9528	3.9370	3.0315	0.0394		0.060	0.226	0.059		0.3310	0.226	0.039		
80	105	82	1.00	AS80105	0.028	5.75	1.50	LS80105	0.1580	5.75	1.00	WS.81116	GS.81116
3.1496	4.1339	3.2283	0.0394		0.062	0.226	0.059		0.3480	0.226	0.039		
85	110	87	1.00	AS85110	0.028	5.75	1.50	LS85110	0.166	5.75	1.00	WS.81117	GS.81117
3.3465	4.3307	3.4252	0.0394		0.062	0.226	0.059		0.366	0.226	0.039		
90	120	92	1.00	AS90120	0.038	6.50	1.50	LS90120	0.245	6.50	1.00	WS.81118	GS.81118
3.5433	4.7244	3.6220	0.0394		0.084	0.256	0.059		0.540	0.256	0.039		
100	135		1.00	AS100135	0.050								
3.9370	5.3150		0.0394		0.110								
110	145		1.00	AS110145	0.055	7.00	1.50	LS110145	0.373	7.00			
4.3307	5.7087		0.0394		0.121	0.276	0.059		0.822	0.276			

Continued on next page.