



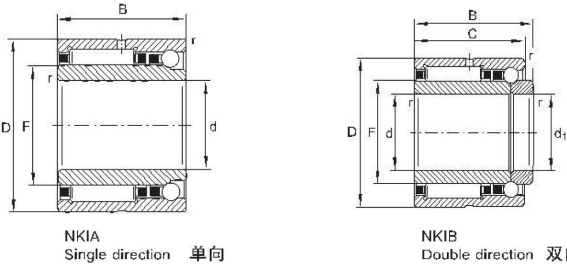
组合滚针轴承

LWB组合滚针轴承由向心滚针轴承和推力轴承部件组成的单元，其结构紧凑体积小，旋转精度高，可在承受高径向载荷的同时承受一定的轴向载荷。广泛用于机床、冶金机械、纺织机械和印刷机械等各种机械设备。

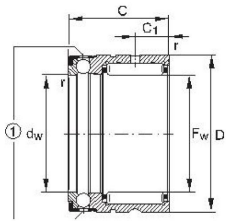
LWB combined needle roller bearings are units comprising radial needle roller bearings with thrust bearings. With compact structure and small size and high rotating accuracy capable of supporting axial loads while holding very high radial loads. It is widely used in machine toll, metallurgical, textile and printing machinery.

结 构 Structure

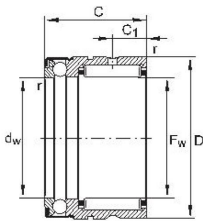
NKIA	向心滚针轴承与单向角接触球的组合，用于轴向轻负荷	Radial needle bearing and single direction angular contact ball bearing's combination,used for axial light load
NKIB	向心滚针轴承与双向角接触球的组合，用于轴向轻负荷	Radial needle bearing and double direction angular contact ball bearing's combination,used for axial light load
NX NX...Z	向心滚针轴承与满装推力球轴承的组合，带固定罩壳，用于中等轴向负荷	Radial needle bearing and full complement thrust ball bearings'scombination,with fixed cap,used for medium axial load
NKX NKX...Z	向心滚针轴承与推力球轴承的组合，带或不带固定罩壳，用于轴向重负荷	Radial needle bearing and thrust ball bearing's combination, with or without fixed cap, used for heavy axial load
NKXR NKXR...Z	向心滚针轴承与推力圆柱滚子轴承的组合，带或不带固定罩壳，用于轴向极重负荷	Radial needle bearing and thrust cylindrical roller bearing's combination, with or without fixed cap, used for very heavy axial load
RAX700	穿孔型冲压外圈滚针轴承与推力滚针轴承的组合	Open end drawn cup needle bearing and thrust needle bearing's combination
RAXF700	封口型冲压外圈滚针轴承与推力滚针轴承的组合	Close end drawn cup needle bearing and thrust needle bearing's combination
RAX400	向心滚针轴承与推力滚针轴承的组合	Radial needle bearing and thrust needle bearing's combination
RAX500	向心滚针轴承与推力圆柱滚子轴承的组合	Radial needle bearing and thrust cylindrical roller bearing's combination
RAXPZ400	向心滚针轴承与推力滚针轴承的组合，带固定罩壳	Radial needle bearing and thrust needle bearing's combination with fixed cap
RAXZ500	向心滚针轴承与推力圆柱滚子轴承的组合，带固定罩壳	Radial needle bearing and thrust cylindrical roller bearing's combination with fixed cap



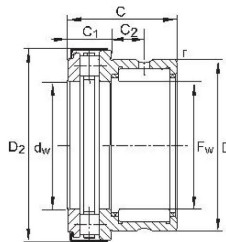
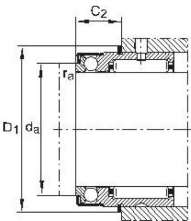
轴承型号 Bearing Designation	质量 (克) Mass ≈ g	尺寸(毫米) Dimensions (mm)						基本额定负荷 Basic load ratings				极限疲劳载荷 Fatigue limit load		极限转速 Limiting speed n _g	参考转速 Reference speed n _B
		d	F	D	B	C	r	radial dyn. C _r 动 N	径向 stat. C _{or} 静 N	axial dyn. C _a N	轴向 stat. C _{oa} N	C _{ur}	C _{ua}	min ⁻¹	min ⁻¹
							min.					N	N		
NKIA5901	40	12	16	24	16	-	0.3	10600	10900	2700	3450	1940	152	23600	21000
NKIB5901	43	12	16	24	17.5	16	0.3	10600	10900	2700	3450	1940	152	23600	21000
NKIA5902	50	15	20	28	18	-	0.3	12000	13600	2900	4200	2430	186	21600	17000
NKIB5902	52	15	20	28	20	18	0.3	12000	13600	2900	4200	2430	186	21600	17000
NKIA5903	56	17	22	30	18	-	0.3	12400	14600	3150	4900	2600	216	20600	15000
NKIB5903	58	17	22	30	20	18	0.3	12400	14600	3150	4900	2600	216	20600	15000
NKIA5904	103	20	25	37	23	-	0.3	23700	25500	4900	7400	4600	330	17200	14000
NKIB5904	107	20	25	37	25	23	0.3	23700	25500	4900	7400	4600	330	17200	14000
NKIA59/22	118	22	28	39	23	-	0.3	26 000	29500	5300	8600	5300	380	16100	12000
NKIB59/22	122	22	28	39	25	23	0.3	26000	29500	5300	8600	5300	380	16100	12000
NKIA5905	130	25	30	42	23	-	0.3	26500	31500	5400	9300	5700	410	14600	12000
NKIB5905	134	25	30	42	25	23	0.3	26500	31500	5400	9300	5700	410	14600	12000
NKIA5906	147	30	35	47	23	-	0.3	28500	35500	5900	11200	6400	495	12700	10000
NKIB5906	151	30	35	47	25	23	0.3	28500	35500	5900	11200	6400	495	12700	10000
NKIA5907	243	35	42	55	27	-	0.6	35500	50000	7400	14900	9400	660	10900	9000
NKIB5907	247	35	42	55	30	27	0.6	3500	50000	7400	14900	9400	660	10900	9000
NKIA5908	315	40	48	62	30	-	0.6	48500	67000	9200	19400	11500	860	9600	7500
NKIB5908	320	40	48	62	34	30	0.6	48500	67000	9200	19400	11500	860	9600	7500
NKIA5909	375	45	52	68	30	-	0.6	51000	73000	9600	21400	12600	950	8700	7000
NKIB5909	380	45	52	68	34	30	0.6	51000	73000	9600	21400	12600	950	8700	7000
NKIA5910	380	50	58	72	30	-	0.6	53000	80000	10100	24300	13800	1080	8000	6500
NKIB5910	385	50	58	72	34	30	0.6	53000	80000	10100	24300	13800	1080	8000	6500
NKIA5911	550	55	63	80	34	-	1	65000	100000	12100	29500	17300	1300	7300	6000
NKIB5911	555	55	63	80	38	34	1	65000	100000	12100	29500	17300	1300	7300	6000
NKIA5912	590	60	68	85	34	-	1	68000	108000	12400	32000	18800	1510	6800	5500
NKIB5912	595	60	68	85	38	34	1	68000	108000	12400	32000	18800	1510	6800	5500
NKIA5913	635	65	72	90	34	-	1	69000	112000	12800	34000	19500	1410	6300	5500
NKIB5913	640	65	72	90	38	34	1	69000	112000	12800	34000	19500	1410	6300	5500
NKIA5914	980	70	80	100	40	-	1	95000	156000	16800	44500	27500	1970	5800	4900
NKIB5914	985	70	80	100	45	40	1	95000	156000	16800	44500	27500	1970	5800	4900



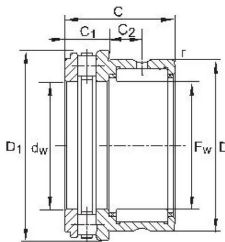
NX
① Oil lubrication holes 润滑油孔



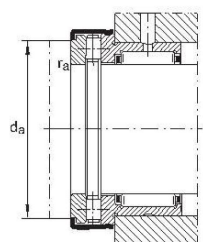
NX...Z



NKXR...Z



NKXR

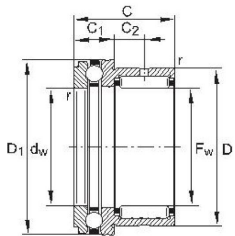


轴承型号 Bearing Designation			尺寸(毫米) Dimensions (mm)						安装尺寸 Mounting dimensions			
For oil lubrication 润滑油	For grease lubrication 脂润滑	质量 (克) Mass ≈ g	F _w	D	C	C ₁	d _w	r	C ₂	D ₁	d _a	r _a
								min.				min.
NX7-TV	NX7-Z-TV	14	7	14	18	4.7	7	0.3	10	16.5	9.6	0.3
NX10	NX10-Z	25	10	19	18	4.7	10	0.3	10	21.9	14.6	0.3
NX12	NX12-Z	28	12	21	18	4.7	12	0.3	10	23.7	16.6	0.3
NX15	NX15-Z	48	15	24	28	8	15	0.3	12.2	26.5	19	0.3
NX17	NX17-Z	53	17	26	28	8	17	0.3	12.2	28.5	21	0.3
NX20	NX20-Z	68	20	30	28	8	20	0.3	12.2	33.6	25	0.3
NX25	NX25-Z	115	25	37	30	8	25	0.3	14.2	40.4	31.6	0.3
NX30	NX30-Z	130	30	42	30	10	30	0.3	14.2	45.1	36.5	0.3
NX35	NX35-Z	160	35	47	30	10	35	0.3	14.2	50.1	40.5	0.3

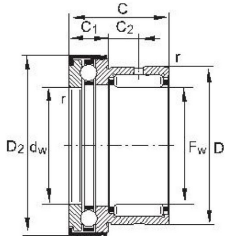
轴承型号 Bearing Designation	轴承型号 Bearing Designation DIN 5492	质量 (克) Mass ≈ g	轴承型号 Bearing Designation	轴承型号 Bearing Designation DIN 5492	质量 (克) Mass ≈ g	尺寸(毫米) Dimensions (mm)					
						F _w	D	D ₁	D ₂	C	C ₁
								max	max	-0.25	-0.2
NKXR15	NAXR15	42	NKXR15-Z	NAXR15Z	45	15	24	28.1	29.2	23	9
NKXR17	NAXR17	50	NKXR17-Z	NAXR17Z	53	17	26	30.1	31.2	25	9
NKXR20	NAXR20	80	NKXR20-Z	NAXR20Z	84	20	30	35.1	36.2	30	10
NKXR25	NAXR25	120	NKXR25-Z	NAXR25Z	125	25	37	42.1	43.2	30	11
NKXR30	NAXR30	135	NKXR30-Z	NAXR30Z	141	30	42	47.1	48.2	30	11
NKXR35	NAXR35	157	NKXR35-X	NAXR35Z	165	35	47	52.1	53.2	30	12
NKXR40	NAXR40	204	NKXR40-Z	NAXR40Z	214	40	52	60.1	61.2	32	13
NKXR45	NAXR45	244	NKXR45-Z	NAXR45Z	260	45	58	65.2	66.5	32	14
NKXR50	NAXR50	268	NKXR50-Z	NAXR50Z	288	50	62	70.2	71.5	35	14

基本额定负荷 Basic load ratings				极限疲劳载荷 Fatigue limit load		极限转速 Limiting speed n _G	推荐内圈型号 Recommended inner rings Designation	匹配卡簧 Suitable snap rings
radial dyn. C _r N	径向 stat. C _{or} N	axial dyn. C _a N	轴向 stat. C _{oa} N	C _{ur}	C _{ua}			
				N	N	min ⁻¹		
3250	2650	3150	4300	410	190	15000	-	WR14,SW14
6000	3700	4600	7200	720	320	11000	IR6X10X10-IS1	WR19,SW19
5400	4300	4850	8200	830	365	9500	IR8X12X10-IS1	WR21,SW21
12100	12700	5600	10400	2320	460	8000	IR12X15X16	WR24,SW24
13500	15000	5800	11500	2750	510	7500	IR14X17X17	WR26,SW26
14600	17500	7000	14700	3200	650	6500	IR17X20X16	WR30,SW30
16800	22400	11100	24300	4250	1080	4900	IR20X25X16-IS1	WR37,SW37
25500	36000	11700	28000	6300	1230	4300	IR25X30X20	WR42,SW42
27500	41500	12400	32500	7300	1440	3700	IR30X35X20	WR47,SW47

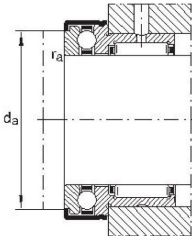
			安装尺寸		基本额定负荷				极限疲劳载荷		极限转速	参考转速	推荐内圈型号
			Mounting dimensions		Basic load ratings				Fatigue limit load		Limiting speed n _G	Reference speed n _B	Recommended inner rings Designation
C ₂	d _W	r	d _a	r _a	radial	径向	axial	轴向	C _{Ur}	C _{Ua}			
					dyn. C _r N	静 态 C _{or} N	dyn. C _a N	静 态 C _{oa} N					
	E8	min.		max.					N	N	min ⁻¹	min ⁻¹	
6.5	15	0.3	23.7	0.3	12100	12700	14400	28500	2320	4000	9200	6500	IR12X15X16
8	17	0.3	25.7	0.3	13500	15000	15900	33500	2750	4650	8400	5500	IR14X17X17
10.5	20	0.3	30.7	0.3	18600	23800	24900	53000	4150	7300	7200	4200	IR17X20X20
9.5	25	0.6	37.7	0.6	21300	30500	33500	76000	5300	7100	5800	3400	IR20X25X20
9.5	30	0.6	42.7	0.6	25500	36000	35500	86000	6300	8000	5000	2900	IR25X30X20
9	35	0.6	47.7	0.6	27500	41500	39000	101000	7300	9500	4400	2500	IR30X35X20
10	40	0.6	55.7	0.6	29500	47000	56000	148000	8300	14500	3800	2000	IR35X40X20
9	45	0.6	60.6	0.6	31000	53000	59000	163000	9300	16000	3500	1900	IR40X45X20
10	50	0.6	65.5	0.6	43000	74000	61000	177000	12700	17400	3200	1700	IR45X50X25



NKX

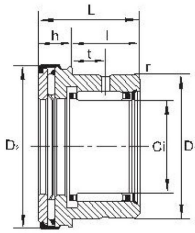


NKX..-Z

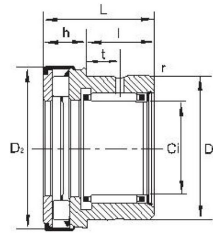


轴承型号 Bearing Designation	轴承型号 Bearing Designation DIN 5492	质量 (克) Mass ≈ g	轴承型号 Bearing Designation	轴承型号 Bearing Designation DIN 5492	质量 (克) Mass ≈ g	尺寸(毫米) Dimensions (mm)					
						F _w	D	D ₁	D ₂	C	C ₁
								max.	max.	-0.25	-0.2
NKX10-TV	NAXK10TV	34	NKX10-Z-TV	NAXK10ZTN	36	10	19	24.1	25.2	23	9
NKX12	NAXK12	38	NKX12-Z	NAXK12Z	40	12	21	26.1	27.2	23	9
NKX15	NAXK15	44	NKX15-Z	NAXK15Z	47	15	24	28.1	29.2	23	9
NKX17	NAXK17	53	NKX17-Z	NAXK17Z	55	17	26	30.1	31.2	25	9
NKX20	NAXK20	83	NKX20-Z	NAXK20Z	90	20	30	35.1	36.2	30	10
NKX25	NAXK25	125	NKX25-Z	NAXK25Z	132	25	37	42.1	43.2	30	11
NKX30	NAXK30	141	NKX30-Z	NAXK30Z	148	30	42	47.1	48.2	30	11
NKX35	NAXK35	163	NKX35-Z	NAXK35Z	168	35	47	52.1	53.2	30	12
NKX40	NAXK40	200	NKX40-Z	NAXK40Z	208	40	52	60.1	61.2	32	13
NKX45	NAXK45	252	NKX45-Z	NAXK45Z	265	45	58	65.2	66.5	32	14
NKX50	NAXK50	280	NKX50-Z	NAXK50Z	300	50	62	70.2	71.5	35	14
NKX60	NAXK60	360	NKX60-Z	NAXK60Z	380	60	72	85.2	86.5	40	17
NKX70	NAXK70	500	NKX70-Z	NAXK70Z	520	70	85	95.2	96.5	40	18

			安装尺寸 Mounting dimensions		基本额定负荷 Basic load ratings				极限疲劳载荷 Fatigue limit load		极限转速 Limiting speed n _G	推荐内圈型号 Recommended inner rings Designation
C ₂	d _W	r	d _a	r _a	radial	径向	axial	轴向	C _{1ir}	C _{1ia}		
					dyn. C _r N	静 态 C _{or} N	dyn. C _a N	静 态 C _{oa} N				
	E8	min.		max.					N	N	min ⁻¹	
6,5	10	0.3	19.7	0.3	7000	7800	10000	14000	1310	670	12400	IR7X10X16
6,5	12	0.3	21.7	0.3	10100	11000	10300	15400	1920	740	10900	IR9X12X16
6,5	15	0.3	23.7	0.3	12100	12700	10500	16800	2320	810	9200	IR12X15X16
8	17	0.3	25.7	0.3	13500	15000	10800	18200	2750	870	8400	IR14X17X17
10,5	20	0.3	30.7	0.3	18600	23800	14300	24700	4150	1190	7200	IR17X20X20
9,5	25	0.6	37.7	0.6	21300	30500	19600	37500	5300	1790	5800	IR20X25X20
9,9	30	0.6	42.7	0.6	25500	3600	20400	42000	6300	2030	5000	IR25X30X20
9	35	0.6	47.7	0.6	27500	41500	21200	47000	7300	2270	4400	IR30X35X20
10	40	0.6	55.7	0.6	29500	47000	27000	63000	8300	3000	3900	IR35X40X20
9	45	0.6	60.5	0.6	31000	53000	28000	69000	9300	3350	3500	IR40X45X20
10	50	0.6	65.5	0.6	43000	74000	29000	75000	12700	3650	3200	IR45X50X25
12	60	1	80.5	1	47500	90000	41500	113000	15400	5400	2750	IR50X60X25
11	70	1	90.5	1	50000	92000	43000	127000	15700	6100	2320	IR60X70X25

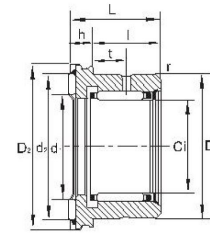


RAXPZ 400

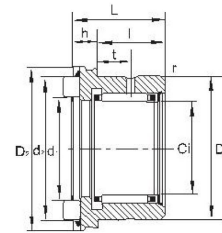


RAXPZ 500

轴径 Shaft Diameter mm	轴承型号 Bearing Designation		外形尺寸 Boundary Dimensions									基本额定负荷 Basic Load Rating				极限转速 Limiting Speed	重量 Mass
	RAX400 系列	RAX500 系列	Ci	D	D ₂ max	l	h	L	t	r min	径向 动	径向 静	轴向 动	轴向 静	rpm	g	
											Dyn Cr	Stat. Cor	Dyn. Ca	Stat. Coa			
mm											N						
10	RAXPZ410	-	10	19	22.4	14	7	21	6	0.35	4 800	5 700	4 000	9 800	15 500	29	
	-	RAXZ510	10	19	22.4	14	7.5	21.5	6	0.35	4 800	5 700	6 500	14 300	15 500	31	
12	RAXPZ412	-	12	21	26.4	14	7	21	6	0.35	5 200	6 700	5 600	14 800	13 000	38	
	-	RAXZ512	12	21	26.4	14	8	22	6	0.35	5 200	6 700	10 100	23 600	13 000	39	
15	RAXPZ415	-	15	24	26.4	14	7	21	6	0.35	7 500	9 300	6 000	16 600	11 500	40	
	-	RAXZ515	15	24	28.4	14	8	22	6	0.35	7 500	9 300	11 200	27 200	11 500	44	
17	RAXPZ417	-	17	26	30.4	16	7	23	8	0.65	9 400	13 000	6 400	18 400	10 500	48	
	-	RAXZ517	17	26	30.4	16	8	24	8	0.65	9 400	13 000	12 000	31 200	10 500	53	
20	RAXPZ420	-	20	30	35.4	18	9	27	9	0.85	11 700	18 200	19 400	31 200	9 000	79	
	-	RAXZ520	20	30	35.4	18	11	29	9	0.85	11 700	18 200	17 600	43 200	9 000	86	
25	RAXPZ425	-	25	37	43	18	9	27	9	0.85	12 800	22 000	10 600	39 200	7 500	118	
	-	RAXZ525	25	37	43	18	11	29	9	0.85	12 800	22 000	20 400	63 000	7 500	131	
30	RAXPZ430	-	30	42	48	18	9	27	9	0.85	16 400	27 200	11 600	45 600	6 500	133	
	-	RAXZ530	30	42	48	18	11	29	9	0.85	16 400	27 200	21 200	61 600	6 500	147	
35	RAXPZ435	-	35	47	54	18	9	27	9	0.85	17 600	31 600	15 100	67 200	5 500	157	
	-	RAXZ535	35	47	54	18	12	30	9	0.85	17 600	31 600	27 000	75 200	5 500	181	
40	RAXPZ440	-	40	52	61	18	9	27	9	0.85	19 000	36 000	16 300	76 800	5 000	184	
	-	RAXZ540	40	52	61	18	13	31	9	0.85	19 000	36 000	36 800	103 200	5 000	218	
45	RAXPZ445	-	45	58	66	18	9	27	9	0.85	20 200	40 800	17 400	87 200	4 500	216	
	-	RAXZ545	45	58	66	18	13	31	9	0.85	20 200	40 800	39 200	114 400	4 500	255	
50	RAXPZ450	-	50	62	71	21	9	30	11	1.3	22 600	48 600	18 000	94 400	4 000	245	
	-	RAXZ550	50	62	71	21	13	34	11	1.3	22 600	48 600	40 800	125 600	4 000	287	
60	RAXPZ460	-	60	72	86	21	11	32	11	1.3	24 800	57 600	25 200	154 400	3 500	365	
	-	RAXZ560	60	72	86	21	15	36	11	1.3	24 800	57 600	56 800	204 000	3 500	423	
70	RAXPZ470	-	70	85	96	21	11	32	11	1.3	30 000	68 800	27 600	178 400	3 000	479	
	-	RAXZ570	70	85	96	21	15	36	11	1.3	30 000	68 800	61 600	236 000	3 000	545	



RAX 400



RAX 500

轴径 Shaft Diameter mm	轴承型号 Bearing Designation		外形尺寸 Boundary Dimensions											基本额定负荷 Basic Load Rating				极限转速	重量
	RAX400 系列	RAX500 系列	Ci	D	D ₂ max	l	h	L	t	r min	d ₁	d ₂	径向 动 Dyn. Cr	径向 静 Stat. Cor	轴向 动 Dyn. Ca	轴向 静 Stat. Coa	Limiting Speed rpm	Mass g	
			mm											N					
10	RAX410	-	10	19	22	14	5	19	6	0.35	12	18.6	4 800	5 700	4 000	9 800	15 500	25	
	-	RAX510	10	19	22	14	5.5	19.5	6	0.35	12.2	18.5	4 800	5 700	6 500	14 300	15 500	26	
12	RAX412	-	12	21	26	14	5	19	6	0.35	15	22.6	5 200	6 700	5 600	14 800	13 000	32	
	-	RAX512	12	21	26	14	6	20	6	0.35	14.8	22.9	5 200	6 700	10 100	23 600	13 000	33	
15	RAX415	-	15	24	28	14	5	19	6	0.35	17	24.6	7 500	9 300	6 000	16 600	11 500	34	
	-	RAX515	15	24	28	14	6	20	6	0.35	16.8	24.9	7 500	9 300	11 200	27 200	11 500	36	
17	RAX417	-	17	26	30	16	5	21	8	0.65	19	26.6	9 400	13 000	6 400	18 400	10 500	41	
	-	RAX517	17	26	30	16	6	22	8	0.65	18.8	26.9	9 400	13 000	12 000	31 200	10 500	44	
20	RAX420	-	20	30	35	18	6	24	9	0.85	22	31.6	11 700	18 200	19 400	31 200	9 000	66	
	-	RAX520	20	30	35	18	8	26	9	0.85	22	31.6	11 700	18 200	17 600	43 200	9 000	70	
25	RAX425	-	25	37	42	18	6	24	9	0.85	27.7	37.4	12 800	22 000	10 600	39 200	7 500	99	
	-	RAX525	25	37	42	18	8	26	9	0.85	27.7	37.4	12 800	22 000	20 400	63 000	7 500	105	
30	RAX430	-	30	42	47	18	6	24	9	0.85	32.7	42.4	16 400	27 200	11 600	45 600	6 500	111	
	-	RAX530	30	42	47	18	8	26	9	0.85	32.7	42.3	16 400	27 200	21 200	61 600	6 500	118	
35	RAX435	-	35	47	53	18	6	24	9	0.85	37.2	49	17 600	31 600	15 100	67 200	5 500	130	
	-	RAX535	35	47	53	18	9	27	9	0.85	37.8	47.8	17 600	31 600	27 000	75 200	5 500	146	
40	RAX440	-	40	52	60	18	6	24	9	0.85	43	54.9	19 000	36 000	16 300	76 800	5 000	150	
	-	RAX540	40	52	60.4	18	10	38	9	0.85	42.8	54.8	19 000	36 000	36 800	103 200	5 000	174	
45	RAX445	-	45	58	65	18	6	24	9	0.85	48	59.9	20 200	40 800	17 400	87 200	4 500	179	
	-	RAX545	45	58	65.4	18	10	28	9	0.85	47.8	59.8	20 200	40 800	39 200	114 400	4 500	206	
50	RAX450	-	50	62	70	21	6	27	11	1.3	53.3	65.7	22 600	48 600	18 000	94 400	4 000	205	
	-	RAX550	50	62	70.4	21	10	31	11	1.3	52.8	64.8	22 600	48 600	40 800	125 600	4 000	232	
60	RAX460	-	60	72	85	21	7	28	11	1.3	63.7	79.2	24 800	57 600	25 200	154 400	3 500	282	
	-	RAX560	60	72	85.4	21	11	32	11	1.3	63.5	79.5	24 800	57 600	56 800	204 000	3 500	327	
70	RAX470	-	70	85	95	21	7	28	11	1.3	75.5	89.2	30 000	68 800	27 600	178 400	3 000	386	
	-	RAX570	70	85	95.4	21	11	32	11	1.3	75.5	89.5	30 000	68 800	61 600	236 000	3 000	435	