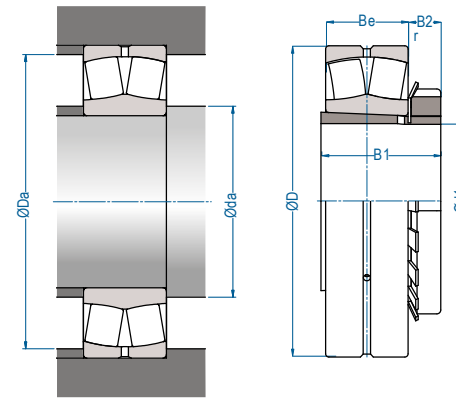
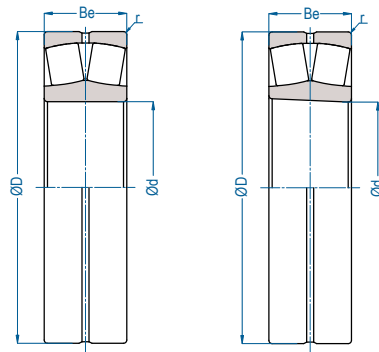


rolamento CILÍNDRICO  
serviço PESADO  
carreira de rolos DUPLA  
furo interno CILÍNDRICO ou CÔNICO



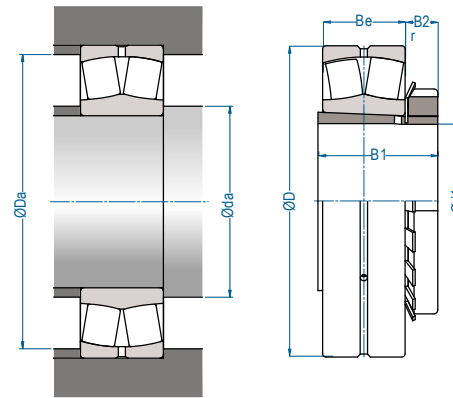
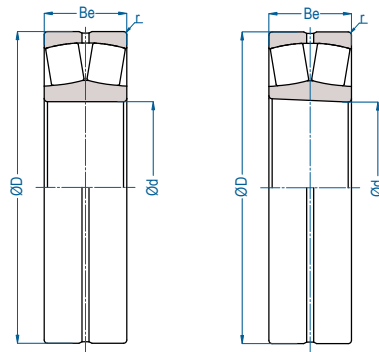
**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)						
	Cilíndrico	Cônico	pol	mm		ØD	Be	r	Ø da	Ø Da	B1	B2
100	23120	23120K	3.7/16"	-	HA3120	165	52	2,0	111	154	76	20,0
			3.1/2"	-	HE3120							
			-	90	H3120							
			3.5/8"	-	HS3120							
100	23220	23220K	3.7/16"	-	HA2320	180	60,3	2,1	112	168	97	20,0
			3.1/2"	-	HE2320							
			-	90	H2320							
			3.5/8"	-	HS2320							
110	23022	23022K	3.7/8"	-	HS322	170	45	2,0	119	161	77	21,0
			-	100	H322							
			3.15/16"	-	HA322							
			4"	-	HE322							
110	23122	23122K	3.7/8"	-	HS3122	180	56	2,0	121	169	81	21,0
			-	100	H3122							
			3.15/16"	-	HA3122							
			4"	-	HE3122							
110	23222	23222K	3.7/8"	-	HS2322	200	69,8	2,1	122	188	105	21,0
			-	100	H2322							
			3.15/16"	-	HA2322							
			4"	-	HE2322							
120	23024	23024K	4.3/16"	-	HA3024	180	46	2,0	129	171	72	22,0
			4.1/4"	-	HE3024							
			-	110	H3024							
			4.3/8"	-	HS3024							
120	23124	23124K	4.3/16"	-	HA3124	200	62	2,0	131	189	88	22,0
			4.1/4"	-	HE3124							
			-	110	H3124							
			4.3/8"	-	HS3124							
120	23224	23224K	4.3/16"	-	HA2324	215	76	2,1	132	203	112	22,0
			4.1/4"	-	HE2324							
			-	110	H2324							
			4.3/8"	-	HS2324							
130	23026	23026K	4.7/16"	-	HA3026	200	52	2,0	139	191	80	23,0
			4.1/2"	-	HE3026							
			-	115	H3026							
			4.7/16"	-	HA3126							
130	23126	23126K	4.1/2"	-	HE3126	210	64	2,0	141	199	92	23,0
			-	115	H3126							
			4.7/16"	-	HA2326							
			4.1/2"	-	HE2326							
130	23226	23226K	4.7/16"	-	HA2326	230	80	3,0	144	216	121	23,0
			4.1/2"	-	HE2326							
			-	115	H2326							
			-	115								

Carga (Kgf)		Limite de Rotação (rpm)		Peso	
dinâmica C <sub>r</sub>	estática C <sub>0r</sub>	Graxa	Óleo	Rolamento (kg)	Rol. + Bucha (kg)
38500	49000	2400	3000	4,40	6,30
49800	60000	2300	2900	6,60	8,85
32600	44000	2600	3300	3,70	5,96
45000	58500	2200	2800	5,55	7,85
62600	76500	2100	2600	9,60	12,45
36600	50000	2400	3100	4,05	6,05
53400	69500	2000	2500	7,75	10,45
73200	93000	1900	2400	12,00	15,29
45200	61000	2200	2900	5,80	8,80
58600	78000	1900	2400	8,50	12,30
82600	106000	1700	2300	14,00	18,73

rolamento CILÍNDRICO  
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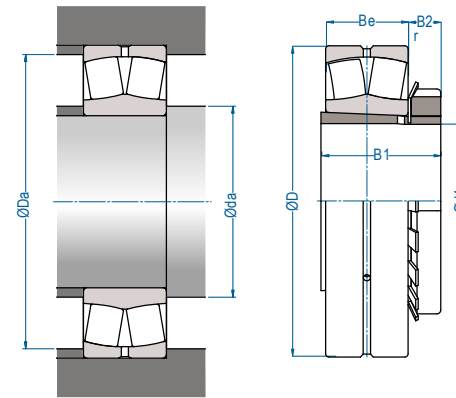
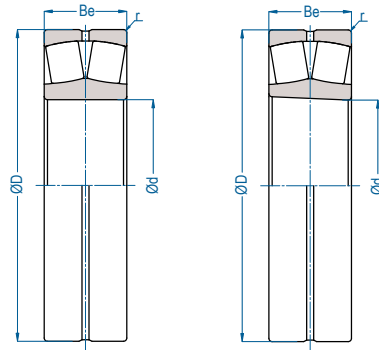
**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)						
	Cilíndrico	Cônico	pol	mm		ØD	Be	r	Ø da	Ø Da	B1	B2
140	23028	23028K	4.7/8"	-	HS3028	210	53	2,0	149	201	82	24,0
			-	125	H3028							
	4.15/16"	-	HA3028									
	5"	-	HE3028									
	4.7/8"	-	HS3128									
	-	125	H3128									
4.15/16"	-	HA3128										
5"	-	HE3128										
150	23228	23228K	4.7/8"	-	HS2328	250	88	3,0	154	236	131	24,0
			-	125	H2328							
	4.15/16"	-	HA2328									
	5"	-	HE2328									
	5.3/16"	-	HA3030									
	5.1/4"	-	HE3030									
-	135	H3030										
5.3/8"	-	HS3030										
160	23130	23130K	5.3/16"	-	HA3130	250	80	2,1	162	238	111	26,0
			-	135	HE3130							
	5.1/4"	-	H3130									
	-	135	HS3130									
	5.3/8"	-	HA2330									
	5.3/16"	-	HE2330									
5.1/4"	-	H2330										
-	135	HS2330										
170	23032	23032K	5.7/16"	-	HA3032	240	60	2,1	171	229	93	27,5
			-	140	HE3032							
	5.1/2"	-	H3032									
	-	140	HA3132									
	5.7/16"	-	HE2332									
	5.1/2"	-	H2332									
-	140	HS3034										
180	23034	23034K	5.7/8"	-	H3034	260	67	2,1	181	249	101	28,5
			-	150	HA3034							
	5.15/16"	-	HE3034									
	6"	-	HS3134									
	5.7/8"	-	H3134									
	-	150	HA3134									
5.15/16"	-	HE3134										
6"	-	HS2334										
190	23134	23134K	5.7/8"	-	H2334	280	88	2,1	182	268	122	28,5
			-	150	HA3134							
	5.15/16"	-	HE3134									
	6"	-	HS2334									
23234	23234K	5.7/8"	-	H2334	310	110	4,0	187	293	154	29,0	
		-	150	HA2334								
5.15/16"	-	HE2334										
6"	-	HE2334										

Carga (Kgf)		Limite de Rotação (rpm)		Peso	
dinâmica	estática	Graxa	Óleo	Rolamento (kg)	Rol. + Bucha (kg)
$C_r$	$C_{0r}$				
48500	68000	2100	2700	6,30	9,60
65900	90000	1800	2200	10,50	15,00
96200	125000	1600	2100	18,50	24,23
53100	75000	2000	2500	7,65	11,75
88300	120000	1600	2000	16,00	21,70
112900	146000	1500	1900	23,50	30,36
61400	88000	1800	2300	9,25	14,75
102900	137000	1500	1900	20,00	27,80
128100	166000	1400	1800	29,50	38,85
74500	106000	1700	2200	12,50	18,80
108600	150000	1400	1800	21,50	30,00
147200	193000	1300	1700	36,00	46,50

rolamento CILÍNDRICO  
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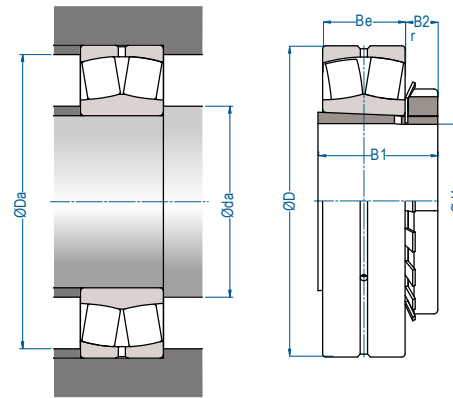
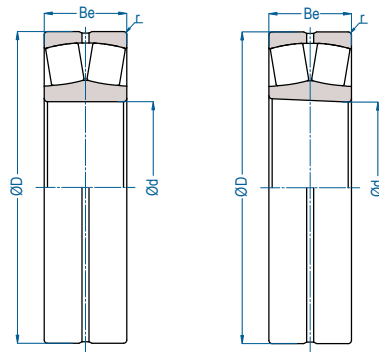
**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)							
	Cilíndrico	Cônico	pol	mm		ØD	Be	r	Ø da	Ø Da	B1	B2	
180	23936	23936K	-	160	H3936	250	52	2,0	189	241	87	29,5	
	23036	23036K	6.3/8"	-	H3036	280	74	2,1	191	269	109	29,5	
			6.7/16"	-	HS3036								
			6.1/2"	-	HA3036								
	23136	23136K	-	160	HE3036								
			6.3/8"	-	H3136								
6.7/16"			-	HS3136									
190	23236	23236K	6.3/8"	-	HA3136	300	96	3,0	194	286	131	29,5	
			6.7/16"	-	HE3136								
			6.1/2"	-	HE3136								
	23938	23938K	-	170	H2336	260	52	2,0	199	251	89	30,5	
			6.3/8"	-	HS2336								
			6.7/16"	-	HA2336								
200	23038	23038K	6.5/8"	-	HE2336	290	75	2,1	201	279	112	30,5	
			6.3/4"	-	H3038								
			6.15/16"	-	HA3038								
	23138	23138K	6.5/8"	-	HS3138	320	104	3,0	204	306	141	30,5	
			6.3/4"	-	H3138								
			6.15/16"	-	HA3138								
220	23238	23238K	6.5/8"	-	HS2338	340	120	4,0	207	323	169	30,5	
			6.3/4"	-	H2338								
			6.15/16"	-	HA2338								
	23940	23940K	-	180	HE3040	280	60	2,1	211	269	98	31,5	
			7"	-	H3040								
			7.1/8"	-	HS3040								
230	23040	23040K	7.3/16"	-	HA3040	310	82	2,1	211	299	120	31,5	
			7"	-	HE3140								
			7.3/16"	-	H3140								
	23140	23140K	-	180	HS3140	340	112	3,0	214	326	150	31,5	
			7"	-	HE2340								
			7.3/16"	-	H2340								
240	23240	23240K	7"	-	HS2340	360	128	4,0	217	343	176	31,5	
			7.1/8"	-	HA2340								
			7.3/16"	-	HA2340								
	260	23944	23944K	-	200	H3944	300	60	2,1	231	289	96	30,0
				7.15/16"	-	H3044							
				8"	-	HA3044							
23044		23044K	-	200	HE3044	340	90	3,0	233	327	126	30,0	
			7.15/16"	-	H3144								
			8"	-	HA3144								
23144	23144K	-	200	HE3144	370	120	4,0	237	353	161	32,0		
		7.15/16"	-	H2344									
		8"	-	HA2344									
23244	23244K	-	200	HE2344	400	144	4,0	237	383	186	32,0		
		7.15/16"	-	HA2344									
		8"	-	HE2344									

Carga (Kg)		Limite de Rotação		Peso	
dinâmica	estática	(rpm)		Rolamento	Rol. + Bucha
C <sub>r</sub>	C <sub>or</sub>	Graxa	Óleo	(kg)	(kg)
51900	83000	1700	2100	7,80	13,80
88300	125000	1600	2000	16,50	23,70
126300	176000	1300	1700	27,50	37,30
155700	212000	1200	1600	38,50	50,20
49900	80000	1600	2000	8,05	14,55
91600	134000	1500	1900	17,50	24,40
145600	208000	1200	1600	34,50	45,60
175900	240000	1200	1500	47,00	60,00
65100	104000	1500	1900	11,50	21,1
105800	153000	1400	1800	22,50	32,10
166500	236000	1100	1400	42,00	54,50
194700	270000	1100	1300	56,50	70,90
66100	108000	1400	1700	12,00	19,40
126100	186000	1300	1600	29,50	34,70
188800	275000	1000	1300	53,00	64,19
248500	345000	1000	1200	79,50	92,40

rolamento CILÍNDRICO  
serviço PESADO  
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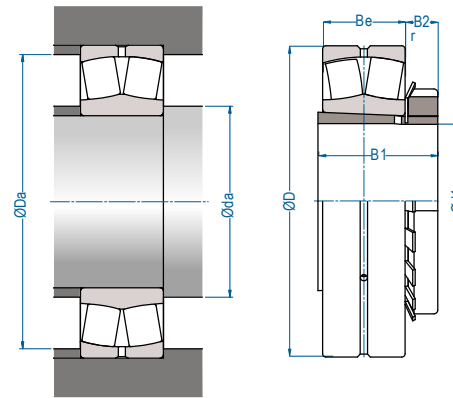
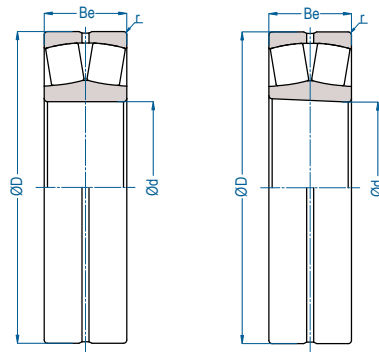
**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)						
			Ø d1			ØD	Be	r	Ø da	Ø Da	B1	B2
	Cilíndrico	Cônico	pol	mm								
240	23948	23948K	-	220	H3948	320	60	2,1	251	309	101	34,0
	23048	23048K	8.7/16" 8.1/2"	- 220	HA3048 HE3048 H3048	360	92	3,0	253	347	133	34,0
	23148	23148K	8.7/16" 8.1/2"	- 220	HA3148 HE3148 H3148	400	128	4,0	257	383	172	34,0
	23248	23248K	8.7/16" 8.1/2"	- 220	HA2348 HE2348 H2348	440	160	4,0	257	423	199	34,0
260	23952	23952K	-	240	H3952	360	75	2,1	271	349	116	34,0
	23052	23052K	9.7/16" 9.1/2"	- 240	HA3052 HE3052 H3052	400	104	4,0	275	385	145	34,0
	23152	23152K	9.7/16" 9.1/2"	- 240	HA3152 HE3152 H3152	440	144	4,0	277	423	190	36,0
	23252	23252K	9.7/16" 9.1/2"	- 240	HA2352 HE2352 H2352	480	174	5,0	280	460	211	36,0
280	23956	23956K	-	260	H3956	380	75	2,1	291	369	121	38,0
	23056	23056K	10" 10.7/16"	- 260	HE3056 H3056 HA3056	420	106	4,0	295	405	152	38,0
	23156	23156K	10" 10.7/16"	- 260	HE3156 H3156 HA3156	460	146	5,0	300	440	195	38,0
	23256	23256K	10" 10.7/16"	- 260	HE2356 H2356 HA2356	500	176	5,0	300	480	224	38,0
300	23960	23960K	-	280	H3960	420	90	3,0	313	407	140	42,0
	23060	23060K	10.15/16" 11"	- 280	HA3060 HE3060 H3060	460	118	4,0	315	445	168	42,0
	23160	23160K	10.15/16" 11"	- 280	HA3160 HE3160 H3160	500	160	5,0	320	480	208	40,0
	23260	23260K	11" -	- 280	HE3260 H3260	540	192	5,0	320	520	240	40,0
320	23964	23964K	-	300	H3964	440	90	3,0	333	427	140	42,0
	23064	23064K	11.1/2" 11.15/16"	- 300	HE3064 H3064 HA3064	480	121	4,0	335	465	171	42,0
	23164	23164K	11.1/2" 11.15/16"	- 300	HE3164 H3164 HA3164	540	176	5,0	340	520	226	42,0
	23264	23264K	11.1/2" -	- 300	HE3264 H3264	580	208	5,0	340	560	258	42,0

Carga (Kgf)		Limite de Rotação (rpm)		Peso	
dinâmica	estática	Graxa	Óleo	Rolamento (kg)	Rol. + Bucha (kg)
$C_r$	$C_{or}$				
68500	116000	1300	1600	13,00	22,30
134000	208000	1100	1400	32,50	44,50
218700	320000	960	1200	65,00	80,80
304200	430000	720	940	105,00	123,00
105500	180000	1100	1400	23,50	35,10
167500	255000	1100	1300	46,50	60,50
266400	390000	710	920	89,50	109,50
339500	475000	660	860	140,00	162,00
101600	176000	1000	1300	24,00	37,40
179700	285000	960	1200	50,50	66,50
278400	425000	650	850	96,00	118,60
342500	490000	610	790	145,00	170,40
141300	250000	770	1000	39,00	58,80
221900	345000	720	940	70,00	90,80
336800	510000	600	780	130,00	157,40
405200	585000	560	730	195,00	229,10
148000	270000	720	930	41,00	60,20
234800	380000	680	880	76,50	99,10
392300	600000	560	730	165,00	196,80
460700	670000	520	680	250,00	286,00

rolamento CILÍNDRICO  
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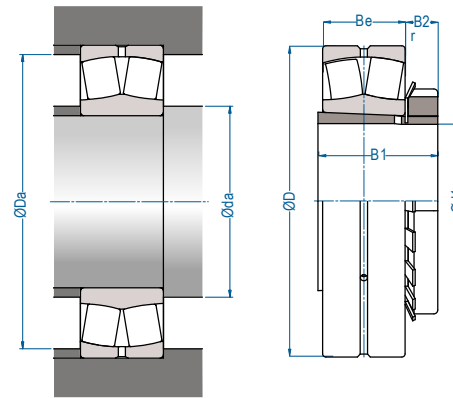
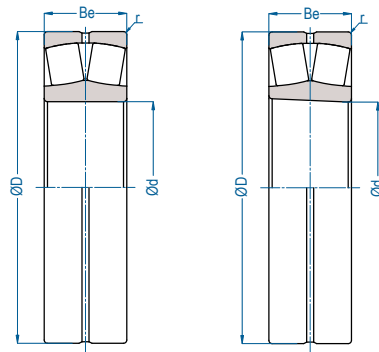
**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)							
	Cilíndrico	Cônico	Ø d1			ØD	Be	r	Ø da	Ø Da	B1	B2	
			pol	mm									
340	23968	23968K	-	320	H3968	460	90	3,0	353	447	144	45,0	
	23068	23068K	12"	-	HE3068	520	133	5,0	358	502	187	45,0	
			12.7/16"	-	HA3068								
			-	320	H3068								
	23168	23168K	12"	-	HE3168	580	190	5,0	360	560	254	55,0	
		12.7/16"	-	HA3168									
			-	320	H3168								
	23268	23268K	12"	-	HE3268	620	224	6,0	366	594	288	55,0	
		12.7/16"	-	HA3268									
			-	320	H3268								
360	23972	23972K	-	340	H3972	480	90	3,0	373	467	144	45,0	
	23072	23072K	13"	-	HE3072	540	134	5,0	378	522	188	45,0	
			13.7/16"	-	H3072								
				-	HA3072								
	23172	23172K	13"	-	HE3172	600	192	5,0	380	580	259	58,0	
		13.7/16"	-	H3172									
			-	HA3172									
380	23272	-	-	-	-	650	232	6,0	386	624	-	-	
	23976	23976K	-	360	H3976	520	106	4,0	395	505	164	48,0	
	23076	23076K	13.15/16"	-	HA3076	560	135	5,0	398	542	193	48,0	
			14"	-	HE3076								
			-	360	H3076								
	23176	23176K	13.15/16"	-	HA3176	620	194	5,0	400	600	264	60,0	
		14"	-	HE3176									
			-	360	H3176								
400	23276	-	-	-	-	680	240	6,0	406	654	-	-	
	23980	23980K	-	380	H3980	540	106	4,0	415	525	168	52,0	
	23080	23080K	-	380	H3080	600	148	5,0	418	582	210	52,0	
			15"	-	HE3080								
	23180	23180K	-	380	H3180	650	200	6,0	426	624	272	62,0	
		15"	-	HE3180									
			-	380	H3280								
	23280	23280K	-	380	H3280	720	256	6,0	426	694	328	62,0	
		15"	-	380	HE3280								
	23984	23984K	-	400	H3984	560	106	4,0	435	545	168	52,0	
420	23084	23084K	-	400	H3084	620	150	5,0	438	602	212	52,0	
			15.3/4"	-	HE3084								
		23184	23184K	-	400	H3184	700	224	6,0	446	674	304	70,0
			15.3/4"	-	HE3184								
			-	400	H3284								
	23284	23284K	-	400	HE3284	760	272	7,5	452	728	352	70,0	
		15.3/4"	-	400									
440	23988	23988K	-	410	H3988	600	118	4,0	455	585	189	60,0	
	23088	23088K	16"	-	HE3088	650	157	6,0	463	627	228	60,0	
			-	410	H3088								
		23188	23188K	16"	-	HE3188	720	226	5,0	466	694	307	70,0
		-	410	H3188									
			-	410	HE3288								
	23288	23288K	16"	-	H3288	790	280	7,5	472	758	361	70,0	
		-	-	410									

Carga (Kgf)		Limite de Rotação (rpm)		Peso	
dinâmica	estática	Graxa	Óleo	Rolamento (kg)	Rol. + Bucha (kg)
$C_r$	$C_{or}$				
149000	280000	650	870	43,50	67,00
281200	455000	630	820	100,00	126,40
444500	680000	520	680	220,00	265,40
536200	780000	490	630	295,00	349,60
145600	275000	630	820	45,00	69,50
285000	480000	590	770	110,00	137,40
451500	695000	490	630	230,00	280,00
566300	830000	450	590	335,00	-
201100	380000	590	770	64,50	93,50
298400	500000	550	720	110,00	142,80
456100	710000	450	590	230,00	286,20
612600	915000	430	550	375,00	-
203800	390000	550	720	69,50	104,50
351100	585000	520	680	145,00	183,00
486400	765000	430	560	260,00	323,80
688100	1040000	400	520	450,00	525,20
208300	415000	530	690	77,00	113,60
354100	600000	490	640	155,00	195,00
591900	930000	410	530	345,00	412,40
767700	1160000	380	490	535,00	621,80
250600	490000	500	650	98,00	152,30
383100	655000	470	610	180,00	239,60
621500	1000000	390	500	365,00	460,20
815000	1250000	360	470	590,00	708,00

rolamento CILÍNDRICO  
serviço PESADO  
carreira de rolos DUPLA  
furo interno CILÍNDRICO ou CÔNICO



**23000**  
**23000 K**



Ød	Rolamento		Eixo		Bucha de Fixação	Dimensão nominal(mm)						
	Cilíndrico	Cônico	Ø d1			ØD	Be	r	Ø da	Ø Da	B1	B2
			pol	mm								
460	23992	23992K	-	430	H3992	620	118	4,0	475	605	189	60,0
	23092	23092K	-	430	H3092	680	163	6,0	483	657	234	60,0
	23192	23192K	-	430	H3192	760	240	7,5	492	728	326	75,0
	23292	23292K	-	430	H3292	830	296	7,5	492	798	382	75,0
480	23996	23996K	-	450	H3996	650	128	5,0	498	632	200	60,0
	23096	23096K	-	450	H3096	700	165	6,0	503	677	237	60,0
	23196	23196K	-	450	H3196	790	248	7,5	512	758	335	75,0
	23296	23296K	-	450	H3296	870	310	7,5	512	838	397	75,0
460	23992	23992K	-	430	H3992	620	118	4,0	475	605	189	60,0
	23092	23092K	-	430	H3092	680	163	6,0	483	657	234	60,0
	23192	23192K	-	430	H3192	760	240	7,5	492	728	326	75,0
	23292	23292K	-	430	H3292	830	296	7,5	492	798	382	75,0
480	23996	23996K	-	450	H3996	650	128	5,0	498	632	200	60,0
	23096	23096K	-	450	H3096	700	165	6,0	503	677	237	60,0
	23196	23196K	-	450	H3196	790	248	7,5	512	758	335	75,0
	23296	23296K	-	450	H3296	870	310	7,5	512	838	397	75,0
460	23992	23992K	-	430	H3992	620	118	4,0	475	605	189	60,0
	23092	23092K	-	430	H3092	680	163	6,0	483	657	234	60,0
	23192	23192K	-	430	H3192	760	240	7,5	492	728	326	75,0
	23292	23292K	-	430	H3292	830	296	7,5	492	798	382	75,0
480	23996	23996K	-	450	H3996	650	128	5,0	498	632	200	60,0
	23096	23096K	-	450	H3096	700	165	6,0	503	677	237	60,0
	23196	23196K	-	450	H3196	790	248	7,5	512	758	335	75,0
	23296	23296K	-	450	H3296	870	310	7,5	512	838	397	75,0

Carga (Kgf)		Limite de Rotação		Peso	
dinâmica	estática	(rpm)		Rolamento	Rol. + Bucha
$C_r$	$C_{or}$	Graxa	Óleo	(kg)	(kg)
255800	500000	480	620	105,00	164,90
406500	695000	450	580	200,00	269,50
676000	1080000	360	470	430,00	537,60
895800	1370000	340	440	695,00	827,00
299000	570000	450	590	125,00	184,20
399600	680000	420	550	210,00	277,20
736200	1200000	350	450	485,00	608,40
980500	1500000	320	420	805,00	957,00
255800	500000	480	620	105,00	164,90
406500	695000	450	580	200,00	269,50
676000	1080000	360	470	430,00	537,60
895800	1370000	340	440	695,00	827,00
299000	570000	450	590	125,00	184,20
399600	680000	420	550	210,00	277,20
736200	1200000	350	450	485,00	608,40
980500	1500000	320	420	805,00	957,00
255800	500000	480	620	105,00	164,90
406500	695000	450	580	200,00	269,50
676000	1080000	360	470	430,00	537,60
895800	1370000	340	440	695,00	827,00
299000	570000	450	590	125,00	184,20
399600	680000	420	550	210,00	277,20
736200	1200000	350	450	485,00	608,40
980500	1500000	320	420	805,00	957,00