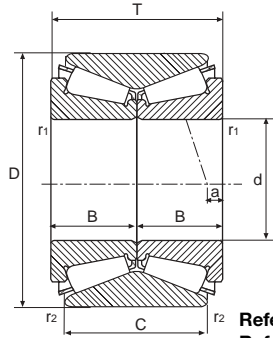


Other types of bearings

Otros tipos de rodamientos

07 Other Types of Bearings / Otros tipos de rodamientos

Double Row Bearings / Rodamientos bicónicos



Equivalent load /Carga equivalente

Dynamic/Dinámica Static/Estática
 $P = XFr + YFa$ $P_o = Fr + Y_oFa$
 (If $P_o < Fr$, then $P_o = Fr$) (Si $P_o < Fr$, hacer $P_o = Fr$)

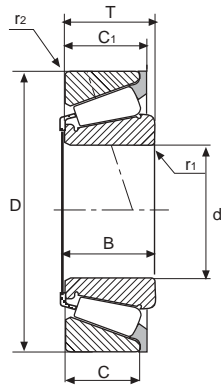
References Referencias	Weight Pesos	Load-Carga (kN)		Load factor-Factores de carga		Statics Estáticos
		Dynamic Dinámica	Static Estática	Dynamics-Dinámicos Fa/Fr<e	Fa/Fr<e	

Dimensions mm / Dimensiones mm

d	D	T	B	C	r1	r2	a		kg	C	Co	e	Xk	Yk	X	Y	Yo
25,000	52,000	37,000	18,500	37,000	2,0	0,3	3,5	(E) F 15041	0,363	60,8	78,9	0,37	1	1,81	0,67	1,60	0,88
	52,000	37,000	18,500	37,000	2,0	0,3	3,5	(E) F 15050	0,363	60,8	78,9	0,37	1	1,81	0,67	1,60	0,88
	52,000	43,000	18,500	43,000	0,6	0,3	3,5	(E) F 15042	0,410	60,8	78,9	0,37	1	1,81	0,67	1,60	0,88
	55,000	43,000	21,500	43,000	0,6	0,3	5,0	(E) F 15043	0,495	74,5	98,0	0,37	1	1,81	0,67	1,60	0,88
29,000	53,000	37,000	18,500	37,000	2,5	1,0	4,0	(E) F 15067	0,345	45,9	63,5	0,37	1	1,82	0,67	2,72	1,78
35,000	65,000	35,000	17,500	35,000	1,8	0,3	1,5	(E) F 15044	0,508	61,7	87,2	0,43	1	1,57	0,67	1,39	0,77
39,000	68,000	37,000	18,500	37,000	3,8	0,3	0,5	(E) F 15045	0,522	64,7	95,1	0,47	1	1,43	0,67	1,27	0,70
41,000	68,000	40,000	20,000	35,000	3,2	0,8	4,6	(E) F 15015	0,500	76,6	118,5	0,35	1	1,93	0,67	2,88	1,89
49,000	84,000	48,000	24,000	48,000	2,8	0,5	2,7	(E) F 15068	1,040	107,2	168,6	0,46	1	1,47	0,67	2,19	1,44
55,000	90,000	52,000	26,000	41,000	1,5	0,5	3,3	(E) F 15024	1,215	146,0	244,0	0,40	1	1,65	0,67	2,46	1,62
	93,000	51,000	23,000	40,000	2,0	0,8	3,5	(E) F 15062	1,310	145,01	245,4	0,40	1	1,66	0,67	2,47	1,62
70,000	120,000	60,000	29,950	60,000	2,0	0,2	3,0	(E) F 15030	2,804	186,1	331,0	0,43	1	1,55	0,67	2,31	1,51

(M) Metric tolerance / Tolerancia metrica
 (P) Inch tolerance / Tolerancia pulgadas
 (E) Special tolerance / Tolerancia especial

Series "U" Bearings / Rodamientos series "U"



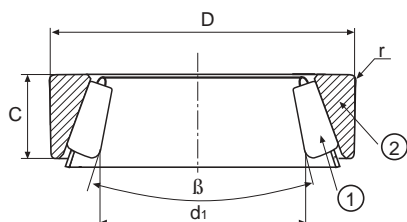
Equivalent load /Carga equivalente

Dynamic/Dinámica Static/Estática
 $P = XFr + YFa$ $Po = 0,5Fr + YoFa$
 (If $Po < Fr$, then $Po = Fr$) (Si $Po < Fr$, hacer $Po = Fr$)

Dimensions mm / Dimensiones mm									References Referencias	Weight Pesos	Load-Carga (kN)		Load factor-Factores de carga				Statics Estáticos
											Dynamic Dinámica	Static Estática	Dynamics-Dinámicos		Fa/Fr<e		
d	D	T	B	C	C ₁	r ₁	r ₂		kg	C	Co	e	Xk	Yk	X	Y	Yo
34,987	64,975	18,100	20,600	14,000	17,000	2,3	1,3	(P) U 298/U 261 L	0,257	46,1	53,4	0,32	1	0	0,4	1,88	1,04
39,688	73,025	19,395	22,098	15,265	18,500	2,3	1,3	(P) U 399/U 360 L	0,357	53,9	66,6	0,32	1	0	0,4	1,88	1,04
	79,967	19,395	22,098	15,265	20,091	2,3	1,3	(P) U 399/U 365 L	0,431	53,9	66,6	0,32	1	0	0,4	1,88	1,04
44,987	79,975	24,000	26,000	18,000	22,000	2,3	1,3	(P) U 497/U 460 L	0,478	71,6	84,4	0,32	1	0	0,4	1,88	1,04
	79,975	24,000	26,000	18,000	22,000	2,3	1,3	(P) U 499/U 460 L	0,478	71,6	84,4	0,32	1	0	0,4	1,88	1,04

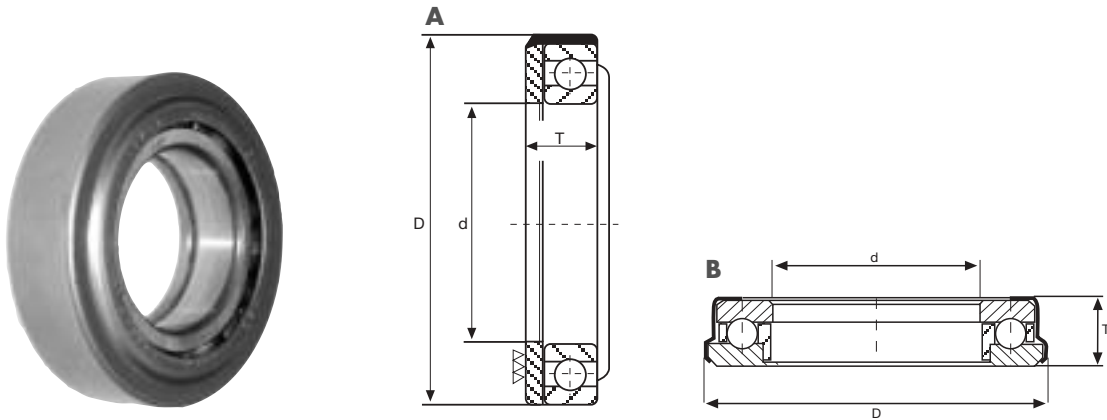
(M) Metric tolerance / Tolerancia metrica
 (P) Inch tolerance / Tolerancia pulgadas
 (E) Special tolerance / Tolerancia especial

Steering Gear Bearings / Rodamientos de dirección



Position Posición	References Referencias	D	C	r	d1	β	Weight Pesos Kg
2	6	44,450	9,525	1,5	*	*	0,036
2	6 CE	49,146	19,050	Esp.	*	*	0,128
2	13 C	49,225	11,509	1,5	*	*	0,055
2	14 XS	57,092	17,094	2,0	*	*	0,173
1	5 BC	*	*	*	28,313	25° 24'	0,022
1	11 BC	*	*	*	33,297	29° 58'	0,030
1	35 BC	*	*	*	43,655	31° 52'	0,062

Clutch Release Bearings / Rodamientos de embragues



References
Referencias

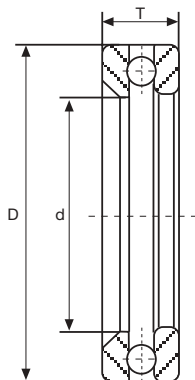
Weight
Pesos

Type
Tipo

Dimensions mm / Dimensiones mm

d	D	T		kg	
41,500	66,000	16,100	F 15004	0,200	B
41,530	72,200	21,400	F 15064	0,335	B
52,400	83,8/89,0	20,300	F 15057	0,360	B
	86,0/90,2	20,550	F 15031	0,376	B
60,000	112,000	29,000	F 15005	1,200	A
63,500	99,9/105,0	23,000	F 15058	0,600	B
65,000	111,7/113,6	22,100	F 15060	0,660	B
69,840	111,7/113,6	22,100	F 15059	0,602	B

Thrust Bearings / Rodamientos axiales



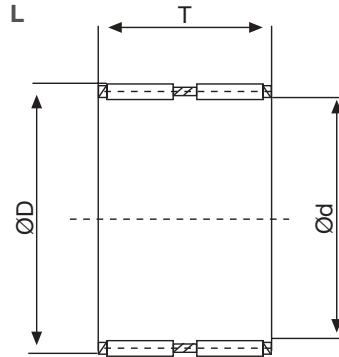
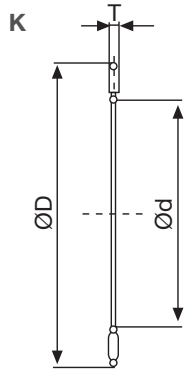
References
Referencias

Weight
Pesos

Dimensions mm / Dimensiones mm

d	D	T		kg
12,200	36,600	11,000	F 15034	0,050
14,200	36,600	11,000	F 15033	0,047

Needle Bearings / Rodamientos de agujas



References
Referencias

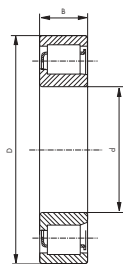
Weight
Pesos

Load-Carga
(kN)

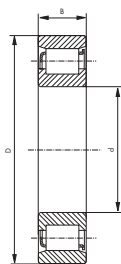
Dimensions mm / Dimensiones mm

Tipo	d	D	T	References Referencias	Weight Pesos kg	Load-Carga (kN)	
						Dynamic Dinámica C	Static Estática Co
L	20,000	26,000	16,8	A 17006	0,016	19,0	26,0
L	25,000	33,000	19,8	A 17004	0,032	27,0	37,3
L	25,400	38,100	24,0	A 17009	0,050	32,5	45,0
L	27,500	33,500	22,0	A 17008	0,030	17,3	27,5
L	38,100	47,624	44,4	A 17007	0,122	80,0	157,0
L	40,000	47,000	30,0	A 17005	0,074	35,5	85,0
K	40,000	60,000	3,0	A 17003	0,017	28,0	114,0
L	55,000	62,000	54,0	A 17002	0,220	78,0	148,0
K	100,000	134,500	4,0	A 17001	0,094	80,0	560,0

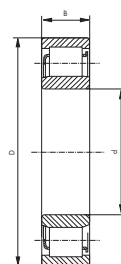
Cylindrical Roller Bearings / Rodamientos de rodillos cilíndricos



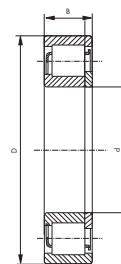
NJ



N



NU



NUP

References
Referencias

Weight
Pesos

Load-Carga
(kN)

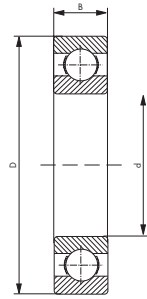
Dynamic
Dinámica

Static
Estática

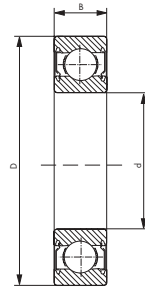
Dimensions mm / Dimensiones mm

d	D	B		kg	C	Co
25,000	52,000	18,000	NJ 2205 F	0,170	34,0	34,0
	52,000	18,000	NJ 2205 C3 F	0,170	34,0	34,0
	62,000	17,000	NJ 305 F	0,250	41,0	36,5
	80,000	21,000	NJ 405 F	0,600	52,0	46,5
30,000	62,000	16,000	NUP 206 F	0,220	38,0	37,0
	72,000	19,000	NJ 306 F	0,370	51,0	48,0
	90,000	23,000	NJ 406 F	0,770	60,0	53,0
	90,0'00	23,000	NJ 406 C3	0,770	60,0	53,0
35,000	80,000	21,000	N 307 F	0,480	64,0	63,0
	80,000	21,000	NJ 307 F	0,490	64,0	63,0
	80,000	21,000	NU 307 F	0,480	64,0	63,0
40,000	90,000	23,000	NJ 308 F	0,670	81,0	78,0
	90,000	23,000	NU 308 F	0,650	81,0	78,0
	90,000	23,000	NUP 308 F	0,680	81,0	78,0
45,000	85,000	19,000	NU 209 F	0,430	61,0	63,0
	85,000	23,000	NU 2209 F	0,530	73,0	81,0
	100,000	25,000	NJ 309 F	0,920	98,0	100,0
	100,000	25,000	NU 309 F	0,900	98,0	100,0
	100,000	25,000	NUP 309 F	0,950	98,0	100,0
50,000	90,000	20,000	N 210 F	0,480	64,0	68,0
	90,000	23,000	NU 2210 F	0,570	78,0	88,0
	90,000	23,000	NU 310 F	1,150	110,0	112,0
55,000	100,000	25,000	NU 2211 F	0,790	98,0	118,0
60,000	110,000	28,000	NU 2212 F	1,090	129,0	153,0
65,000	120,000	31,000	NU 2213 F	1,400	148,0	180,0
70,000	125,000	31,000	NU 2214 F	1,500	154,0	193,0
75,000	130,000	25,000	N 215 F	1,260	130,0	156,0
	130,000	31,000	NU 2215 F	1,600	161,0	208,0
80,000	140,000	33,000	NU 2216 F	2,000	186,0	245,0

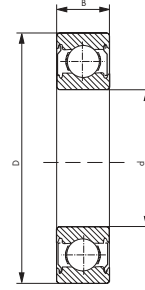
Ball Bearings / Rodamientos de bolas



NORMAL



2RS



ZZ

References
Referencias

Weight
Pesos

Load-Carga
(kN)

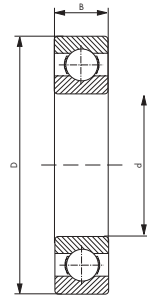
Dynamic
Dinámica

Static
Estática

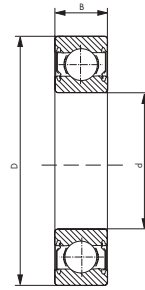
Dimensions mm / Dimensiones mm

d	D	B		kg	C	Co
20,000	42,000	12,000	6004	0,067	9,3	5,0
	47,000	14,000	6204	0,110	12,7	6,6
	52,000	15,000	6304	0,140	16,5	8,0
	72,000	19,000	6404	0,410	30,6	15,0
25,000	47,000	12,000	6005	0,078	10,5	6,8
	52,000	15,000	6205	0,130	14,1	8,0
	62,000	17,000	6305	0,230	22,5	11,5
	80,000	21,000	6405	0,540	36,0	19,3
30,000	55,000	13,000	6006	0,118	13,0	8,2
	62,000	16,000	6206	0,200	19,5	11,2
	72,000	19,000	6306	0,350	28,5	16,2
	90,000	23,000	6406	0,740	43,0	25,0
35,000	62,000	14,000	6007	0,155	16,0	10,3
	72,000	17,000	6207	0,290	25,7	15,3
	80,000	21,000	6307	0,460	33,4	19,0
	85,000	17,000	F 15027	0,420	25,5	15,3
	100,000	25,000	6407	0,960	55,0	31,0
40,000	68,000	15,000	6008	0,190	17,0	11,7
	80,000	18,000	6208	0,370	29,2	17,9
	90,000	23,000	6308	0,630	41,2	24,5
	110,000	27,000	6408	1,255	63,4	36,5
45,000	75,000	16,000	6009	0,240	20,5	14,5
	85,000	19,000	6209	0,410	31,3	19,9
	100,000	25,000	6309	0,840	53,0	31,7
	120,000	29,000	6409	1,560	76,4	45,0
50,000	80,000	16,000	6010	0,260	21,0	15,8
	90,000	20,000	6210	0,460	36,7	24,0
	110,000	27,000	6310	1,075	62,0	38,0
	130,000	31,000	6410	1,925	86,8	52,0
55,000	90,000	18,000	6011	0,390	28,3	21,2
	100,000	21,000	6211	0,610	43,4	29,4
	120,000	29,000	6311	1,370	72,0	46,5
	140,000	33,000	6411	2,330	99,8	62,0

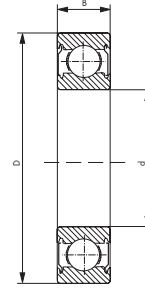
Ball Bearings / Rodamientos de bolas



NORMAL



2RS



ZZ

References
Referencias

Weight
Pesos

Load-Carga
(kN)

Dynamic
Dinámica

Static
Estática

Dimensions mm / Dimensiones mm

d	D	B		kg	C	Co
60,000	95,000	18,000	6012	0,420	29,5	23,2
	110,000	22,000	6212	0,780	52,5	35,8
	130,000	31,000	6312	1,710	82,0	52,0
	150,000	35,000	6412	2,770	110,0	69,5
65,000	100,000	18,000	6013	0,440	30,6	25,0
	120,000	23,000	6213	0,990	59,3	41,7
	140,000	33,000	6313	2,115	92,7	60,0
	160,000	37,000	6413	3,300	118,5	78,0
70,000	110,000	20,000	6014	0,600	38,0	31,3
	125,000	24,000	6214	1,060	62,3	44,0
	150,000	35,000	6314	2,520	104,0	68,0
	180,000	42,000	6414	4,830	143,0	104,0
75,000	115,000	20,000	6015	0,640	40,0	34,0
	130,000	25,000	6215	1,200	66,0	49,0
	160,000	37,000	6315	3,060	76,5	114,0