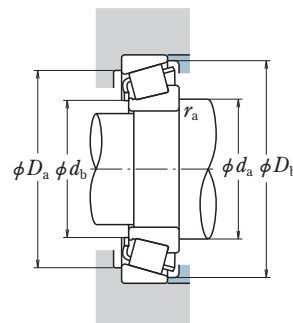
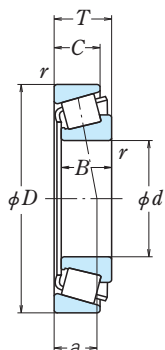


SINGLE-ROW TAPERED ROLLER BEARINGS

Bore Diameter 100 – 130 mm



Dynamic Equivalent Load

$$P = XF_r + YF_a$$

$F_a/F_r \leq e$		$F_a/F_r > e$	
X	Y	X	Y
1	0	0.4	Y_1

Static Equivalent Load

$$P_0 = 0.5F_r + Y_0F_a$$

When $F_r > 0.5F_r + Y_0F_a$, use $P_0 = F_r$
 The values of e , Y_1 , and Y_0 are given in the table below.

d	Boundary Dimensions (mm)					Basic Load Ratings (kN) (kgf)				Bearing Numbers
	D	T	B	C	CONE r min.	C _r	C _{0r}	C _r	C _{0r}	
100	140	25	25	20	1.5	117	205	12 000	20 900	HR32920J
	145	24	22.5	17.5	3	113	163	11 500	16 600	T4CB100
	150	32	32	24	2	176	294	17 900	30 000	HR32020XJ
180	37	34	29	3	2.5	255	330	26 000	34 000	HR30220J
	49	46	39	3	2.5	325	450	33 000	46 000	HR32220J
	215	51.5	47	39	4	425	525	43 000	53 500	HR30320J
	215	77.5	73	60	4	565	755	57 500	77 000	HR32320J
	105	145	25	25	20	1.5	119	212	12 100	21 600
160		35	35	26	2.5	204	340	20 800	34 500	HR32021XJ
190		39	36	30	3	280	365	28 500	37 500	HR30221J
190	53	50	43	3	2.5	360	510	37 000	52 000	HR32221J
	225	53.5	49	41	4	455	565	46 500	57 500	HR30321J
	225	81.5	77	63	4	670	925	68 000	94 500	HR32321J
110	150	25	25	20	1.5	123	224	12 500	22 800	HR32922J
	170	38	38	29	2.5	236	390	24 000	40 000	HR32022XJ
	200	41	38	32	3	315	420	32 000	43 000	HR30222J
200	56	53	46	3	2.5	400	565	40 500	57 500	HR32222J
	240	54.5	50	42	4	485	595	49 500	60 500	HR30322J
	240	84.5	80	65	4	675	910	68 500	93 000	HR32322J
120	165	29	29	23	1.5	161	291	16 400	29 700	HR32924J
	170	27	25	19.5	3	153	243	15 600	24 800	T4CB120
	180	38	38	29	2.5	242	405	24 600	41 000	HR32024XJ
215	43.5	40	34	3	2.5	335	450	34 000	46 000	HR30224J
	215	61.5	58	50	3	440	635	44 500	65 000	HR32224J
	260	59.5	55	46	4	535	655	54 500	67 000	HR30324J
	260	90.5	86	69	4	770	1 060	78 500	108 000	HR32324J
	130	180	32	32	25	2	200	365	20 400	37 500
200		45	45	34	2.5	320	535	32 500	54 500	HR32026XJ
230		43.75	40	34	4	375	505	38 000	51 500	HR30226J
230	67.75	64	54	4	3	530	790	54 000	80 500	HR32226J
	280	63.75	58	49	5	650	820	66 000	83 500	HR30326J
	280	98.75	93	78	5	830	1 150	84 500	117 000	32326

Abutment and Fillet Dimensions (mm)						Eff. Load Centers (mm) a	Constant e	Axial Load Factors		Mass (kg) approx.
da	db	Da	Db	CONE ra max.	CUP			Y ₁	Y ₀	
112	106	131	136	1.5	1.5	24.2	0.33	1.8	1.0	1.18
114	106	133	141	2.5	2.5	30.1	0.47	1.3	0.70	1.18
115	106	138	146	2	1.5	32.5	0.46	1.3	0.72	1.95
121	110	163	172	2.5	2	36.1	0.42	1.4	0.79	3.78
122	110	161	174	2.5	2	41.5	0.42	1.4	0.79	5.05
129	119	193	202	3	2.5	41.4	0.35	1.7	0.96	8.41
130	114	190	206	3	2.5	53.2	0.35	1.7	0.96	12.7
117	111	136	141	1.5	1.5	25.3	0.34	1.8	0.96	1.23
122	112	146	155	2	2	34.3	0.44	1.4	0.74	2.48
127	116	172	182	2.5	2	38.1	0.42	1.4	0.79	4.52
128	115	170	183	2.5	2	44.8	0.42	1.4	0.79	6.26
136	124	202	212	3	2.5	43.2	0.35	1.7	0.96	9.52
136	122	199	213	3	2.5	55.2	0.35	1.7	0.96	14.9
122	116	141	146	1.5	1.5	26.5	0.36	1.7	0.93	1.29
128	117	156	165	2	2	35.9	0.43	1.4	0.77	3.09
134	121	181	192	2.5	2	40.1	0.42	1.4	0.79	5.28
135	121	179	193	2.5	2	47.2	0.42	1.4	0.79	7.35
143	129	216	228	3	2.5	45.1	0.35	1.7	0.96	11
144	127	213	229	3	2.5	58.5	0.35	1.7	0.96	17.1
133	126	155	161	1.5	1.5	29.2	0.35	1.7	0.95	1.8
136	126	157	166	2.5	2.5	35.0	0.47	1.3	0.70	1.78
138	127	165	175	2	2	39.7	0.46	1.3	0.72	3.27
145	132	195	206	2.5	2	44.4	0.44	1.4	0.76	6.28
146	131	192	208	2.5	2	52.0	0.44	1.4	0.76	9.0
155	139	234	247	3	2.5	50.0	0.35	1.7	0.96	13.9
155	137	230	248	3	2.5	62.4	0.35	1.7	0.96	21.8
145	138	168	174	2	1.5	31.4	0.34	1.8	0.97	2.46
151	139	184	195	2	2	43.9	0.43	1.4	0.76	5.06
157	146	210	220	3	2.5	45.8	0.44	1.4	0.76	7.25
158	143	205	221	3	2.5	56.9	0.44	1.4	0.76	11.3
167	149	252	265	4	3	52.7	0.35	1.7	0.96	16.6
172	150	248	269	4	3	69.2	0.36	1.7	0.92	26.6