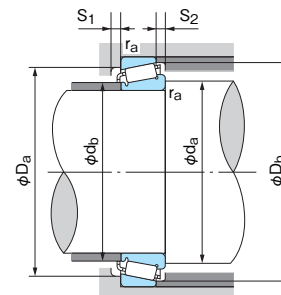
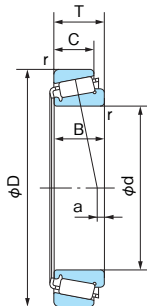


Tapered Roller Bearings

Metric Series

Bore Diameter: 100~110mm



Dynamic equivalent radial load

$$Pr = XFr + YFa$$

$\frac{Fa}{Fr} \leq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	0	0.4	Y ₁

Values e and Y₁ from table.

Static equivalent radial load

Larger value of following to be used:

$$Por = 0.5Fr + Y_0Fa$$

$$Por = Fr$$

Values Y₀ from table.

1N=0.102kgf

Boundary dimensions (mm)							Bearing No.	(Ref.) ISO355 Dimension series	Basic dynamic load rating Cr (N)	Basic static load rating Cor (N)	Limiting speed (min ⁻¹)		Abutment and fillet dimensions (mm)								Load center (mm) a (1)	Constant e	Axial load factor		Mass(kg) Reference	Bearing No.
d	D	T	B	C	Cone r (min)	Cup r (min)					Grease lubrication	Oil lubrication	da (min)	db (max)	Da (min)	Db (min)	S ₁ (min)	S ₂ (min)	Cone ra (max)	Cup ra (max)			Y ₁	Y ₀		
100	140	25	25	20	1.5	1.5	E32920J	2CC	126000	217000	2400	3300	108.5	108	128	135	5	5	1.5	1.5	1.0	0.33	1.82	1.00	1.19	E32920J
	150	32	32	24	2	1.5	E32020J	4CC	185000	298000	2400	3200	110	109	134	144	6	8	2	1.5	-0.6	0.46	1.31	0.72	1.95	E32020J
	150	39	39	32.5	2	1.5	E33020J	2CE	231000	397000	2400	3200	110	108	135	143	7	6.5	2	1.5	10.4	0.29	2.09	1.15	2.40	E33020J
	165	52	52	40	2.5	2.5	E33120J	3EE	325000	523000	2200	3000	112	111	142	159	8	12	2	2	11.9	0.41	1.48	0.81	4.29	E33120J
	180	37	34	29	3	2.5	E30220J	3FB	258000	338000	2100	2800	114	116	157	168	5	8	2.5	2	0.2	0.42	1.43	0.79	3.83	E30220J
	180	49	46	39	3	2.5	E32220J	3FC	347000	495000	2100	2800	114	114	154	171	5	10	2.5	2	6.9	0.42	1.43	0.79	5.21	E32220J
	180	63	63	48	3	2.5	E33220	3FE	431000	680000	2100	2800	114	112	151	172	10	15	2.5	2	17.3	0.40	1.48	0.82	6.92	E33220
	215	51.5	47	39	4	3	30320	—	344000	400000	1800	2400	118	127	184	200	6	12.5	3	2.5	10.1	0.35	1.73	0.95	7.76	30320
	215	51.5	47	34	4	3	30320D	—	318000	374000	1500	2100	118	121	183	204	5	17	3	2.5	-14.4	0.81	0.74	0.41	8.02	30320D
	215	77.5	73	60	4	3	32320	—	491000	637000	1800	2400	118	123	177	200	8	17.5	3	2.5	24.9	0.35	1.73	0.95	12.2	32320
215	56.5	51	35	4	3	E31320J	—	373000	459000	1500	2200	118	120	183	202	6	17.5	3	2.5	-11.2	0.83	0.73	0.40	8.72	E31320J	
105	145	25	25	20	1.5	1.5	E32921J	2CC	128000	224000	2400	3100	113.5	113	133	140	5	5	1.5	1.5	-0.1	0.34	1.75	0.96	1.23	E32921J
	160	35	35	26	2.5	2	E32021J	4DC	215000	344000	2200	3000	117	116	143	154	6	9	2	2	0.5	0.44	1.35	0.74	2.45	E32021J
	160	43	43	34	2.5	2	E33021J	2DE	267000	461000	2200	3000	117	116	145	153	7	9	2	2	12.1	0.28	2.12	1.17	3.08	E33021J
	190	39	36	30	3	2.5	E30221J	—	288000	380000	2000	2600	119	122	165	178	6	9	2.5	2	0.0	0.42	1.43	0.79	4.49	E30221J
	190	53	50	43	3	2.5	E32221J	3FC	392000	567000	2000	2700	119	120	161	180	6	10	2.5	2	8.2	0.42	1.43	0.79	6.37	E32221J
	225	53.5	49	41	4	3	30321	—	371000	432000	1700	2300	123	132	193	209	7	12.5	3	2.5	10.4	0.35	1.73	0.95	8.74	30321
	225	53.5	49	36	4	3	30321D	—	339000	396000	1400	2000	123	127	193	209	6	11	3	2.5	-15.6	0.81	0.74	0.41	8.76	30321D
225	81.5	77	63	4	3	E32321J	2GD	635000	886000	1800	2300	123	128	185	209	8	18.5	3	2.5	25.4	0.35	1.74	0.96	14.9	E32321J	
110	150	25	25	20	1.5	1.5	E32922J	2CC	129000	231000	2300	3000	118.5	118	138	145	5	5	1.5	1.5	-1.3	0.36	1.69	0.93	1.28	E32922J
	170	38	38	29	2.5	2	E32022J	4DC	248000	395000	2100	2800	122	122	152	163	7	9	2	2	1.9	0.43	1.39	0.77	3.12	E32022J
	170	47	47	37	2.5	2	E33022J	2DE	287000	502000	2100	2800	122	123	152	161	7	10	2	2	13.6	0.29	2.09	1.15	3.81	E33022J
	180	56	56	43	2.5	2	E33122J	3EE	369000	634000	2000	2700	122	121	155	174	9	13	2	2	11.5	0.42	1.43	0.79	5.33	E33122J
	200	41	38	32	3	2.5	E30222J	3FB	324000	434000	1900	2500	124	129	174	188	6	9	2.5	2	0.2	0.42	1.43	0.79	5.33	E30222J
	200	56	53	46	3	2.5	E32222J	3FC	438000	640000	1900	2500	124	126	170	190	6	10	2.5	2	9.3	0.42	1.43	0.79	7.45	E32222J
	240	54.5	50	42	4	3	E30322J	—	481000	590000	1600	2100	128	141	206	222	8	12.5	3	2.5	8.2	0.35	1.74	0.96	11.4	E30322J
	240	54.5	50	36	4	3	30322D	—	365000	429000	1400	1900	128	135	205	222	6	18	3	2.5	-17.0	0.81	0.74	0.41	10.2	30322D
	240	84.5	80	65	4	3	32322	—	607000	796000	1600	2200	128	137	198	222	9	19.5	3	2.5	27.2	0.35	1.73	0.95	16.6	32322

Note: (1) Minus value of load center "a" indicates that the center is located outside of cone backface.