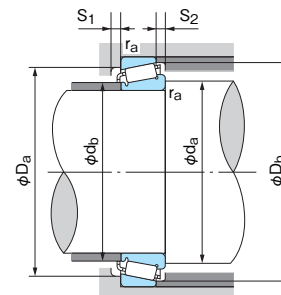
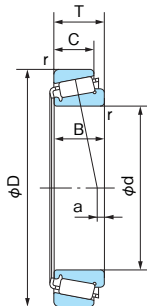


# Tapered Roller Bearings

## Metric Series

Bore Diameter: 70~80mm



Dynamic equivalent radial load  
 $P_r = XFr + YFa$

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

Values e and Y<sub>1</sub> from table.

Static equivalent radial load

Larger value of following to be used:

$$P_{0r} = 0.5Fr + Y_0Fa$$

$$P_{0r} = Fr$$

Values Y<sub>0</sub> 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 <sup>-1</sup> )		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 <sub>1</sub> (min)	S <sub>2</sub> (min)	Cone ra (max)	Cup ra (max)			Y <sub>1</sub>	Y <sub>0</sub>		
70	100	20	20	16	1	1	E32914J	2BC	71000	115000	3500	4700	75.5	77	91	96	4	4	1	1	2.2	0.32	1.90	1.05	0.496	E32914J
	110	25	25	19	1.5	1.5	E32014J	4CC	108000	163000	3300	4400	78.5	78	98	105	5	6	1.5	1.5	1.4	0.43	1.38	0.76	0.884	E32014J
	110	31	31	25.5	1.5	1.5	E33014J	2CE	134000	208000	3300	4400	78.5	78	99	105	5	5.5	1.5	1.5	8.1	0.28	2.11	1.16	1.09	E33014J
	125	26.25	24	21	2	1.5	E30214J	3EB	138000	173000	3100	4100	80	81	110	118	4	5	2	1.5	0.3	0.42	1.43	0.79	1.32	E30214J
	125	33.25	31	27	2	1.5	E32214J	3EC	169000	225000	3100	4100	80	80	108	119	4	6	2	1.5	4.0	0.42	1.43	0.79	1.71	E32214J
	125	41	41	32	2	1.5	E33214J	3EE	206000	294000	3100	4100	80	79	107	120	7	9	2	1.5	9.8	0.41	1.47	0.81	2.16	E33214J
	150	38	35	30	3	2.5	E30314J	2GB	230000	273000	2600	3500	84	89	130	140	4	8	2.5	2	7.5	0.35	1.74	0.96	3.08	E30314J
	150	38	35	25	3	2.5	E30314DJ	7GB	197000	235000	2300	3200	84	84	118	142	4	13	2.5	2	-9.1	0.83	0.73	0.40	2.97	E30314DJ
150	54	51	42	3	2.5	E32314J	2GD	317000	414000	2700	3600	84	86	125	140	4	12	2.5	2	16.6	0.35	1.74	0.96	4.50	E32314J	
75	105	20	20	16	1	1	E32915J	2BC	73600	123000	3300	4400	80.5	81	97	101	4	4	1	1	1.1	0.33	1.80	0.99	0.526	E32915J
	115	25	25	19	1.5	1.5	E32015J	4CC	110000	169000	3100	4200	83.5	83	103	110	5	6	1.5	1.5	-0.1	0.46	1.31	0.72	0.93	E32015J
	115	31	31	25.5	1.5	1.5	E33015J	2CE	141000	225000	3000	4100	83.5	83	104	110	6	5.5	1.5	1.5	8.1	0.30	2.01	1.11	1.16	E33015J
	125	37	37	29	2	1.5	E33115J	3DE	186000	280000	3000	4000	85	84	109	120	6	8	2	1.5	7.5	0.40	1.51	0.83	1.84	E33115J
	130	27.25	25	22	2	1.5	E30215J	4DB	142000	181000	2900	3900	85	86	115	124	4	5	2	1.5	-0.3	0.44	1.38	0.76	1.42	E30215J
	130	33.25	31	27	2	1.5	E32215J	4DC	174000	234000	2900	3900	85	85	114	123	4	6	2	1.5	3.0	0.44	1.38	0.76	1.77	E32215J
	130	41	41	31	2	1.5	E33215J	3EE	212000	310000	2900	3900	85	83	111	125	7	10	2	1.5	8.5	0.43	1.40	0.77	2.26	E33215J
	160	40	37	31	3	2.5	E30315	2GB	250000	297000	2500	3300	89	95	139	149	4	9	2.5	2	8.1	0.35	1.73	0.95	3.52	E30315
160	40	37	26	3	2.5	E30315D	-	222000	266000	2100	2900	89	91	127	151	6	14	2.5	2	-8.8	0.81	0.74	0.41	3.47	E30315D	
160	58	55	45	3	2.5	E32315J	2GD	363000	481000	2500	3300	89	91	133	149	4	13	2.5	2	18	0.35	1.74	0.96	5.41	E32315J	
80	110	20	20	16	1	1	E32916J	2BC	76100	131000	3100	4200	85.5	86	101	106	4	4	1	1	-0.1	0.35	1.71	0.94	0.556	E32916J
	125	29	29	22	1.5	1.5	E32016J	3CC	147000	225000	2900	3900	88.5	89	112	120	6	7	1.5	1.5	2.3	0.42	1.42	0.78	1.32	E32016J
	125	36	36	29.5	1.5	1.5	E33016J	2CE	173000	288000	2900	3900	88.5	90	112	119	6	6.5	1.5	1.5	10.9	0.28	2.16	1.19	1.63	E33016J
	130	37	37	29	2	1.5	E33116J	3DE	191000	294000	2800	3800	90	89	114	126	6	8	2	1.5	6.5	0.42	1.44	0.79	1.93	E33116J
	140	28.25	26	22	2.5	2	E30216J	3EB	161000	202000	2700	3600	92	91	124	132	4	6	2	2	-0.3	0.42	1.43	0.79	1.72	E30216J
	140	35.25	33	28	2.5	2	E32216J	3EC	203000	271000	2700	3600	92	90	122	134	4	7	2	2	3.8	0.42	1.43	0.79	2.17	E32216J
	140	46	46	35	2.5	2	E33216	3EE	250000	371000	2700	3600	92	89	119	135	7	11	2	2	10.3	0.43	1.41	0.78	2.99	E33216
	170	42.5	39	33	3	2.5	E30316J	2GB	294000	355000	2300	3100	94	102	148	159	4	9.5	2.5	2	7.7	0.35	1.73	0.96	4.46	E30316J
170	42.5	39	27	3	2.5	E30316DJ	7GB	236000	282000	2000	2800	94	97	134	159	6	15.5	2.5	2	-11.0	0.83	0.73	0.40	4.12	E30316DJ	
170	61.5	58	48	3	2.5	E32316	2GD	378000	497000	2300	3100	94	98	142	159	4	13.5	2.5	2	19.5	0.35	1.73	0.95	6.32	E32316	

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