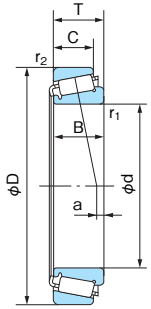
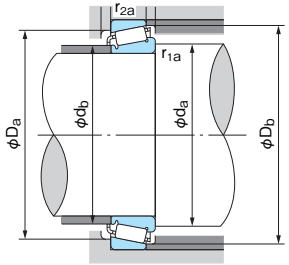
■ Tapered Roller Bearings

Inch Series

Bore Diameter: 44.450～45.618mm





■Dynamic equivalent radial load

Pr=XFr+YFa

$\frac{Fa}{Fr} \leqq e$		$\frac{Fa}{Fr} > e$	
X	Y	X	Y
1	0	0.4	Y_1

Values e and Y_1 from table.

■Static equivalent radial load

Larger value of following to be used:

$Por=0.5Fr+Y_0Fa$

Por=Fr

Values Y_0 from table.

1N=0.102kgf

Boundary dimensions (mm)							Bearing No.		Basic load rating		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	r_1 (min)	r_2 (min)	Cone	Cup	Cr (kN)	Cor (kN)	Grease	Oil	da	db	Da	Db	r_{1a}	r_{2a}			Y_1	Y_0	Cone	Cup	Cone	Cup
44.450	82.931	23.813	25.400	19.050	3.60	0.80	H-25580	H-25520	77.3	100	4800	6300	57.0	55.0	74.0	77.0	3.60	0.80	6.3	0.33	1.79	0.99	0.362	0.2	H-25580	H-25520
	82.931	23.813	25.400	19.050	0.50	0.80	H-25581	H-25520	77.3	100	4800	6300	51.0	50.0	74.0	77.0	0.50	0.80	6.3	0.33	1.79	0.99	0.365	0.2	H-25581	H-25520
	83.058	23.876	25.400	19.114	3.60	2.00	H-25580	H-25522	77.3	100	4800	6300	57.0	50.0	73.0	77.0	3.60	2.00	6.3	0.33	1.79	0.99	0.362	0.203	H-25580	H-25522
	84.138	30.163	30.886	23.813	3.60	3.20	3578R	3520	95.8	120	4600	6200	57.0	51.0	74.0	79.5	3.60	3.20	9.7	0.31	1.96	1.08	0.479	0.221	3578R	3520
	85.001	20.638	21.692	17.463	3.60	1.30	355X	354A	71.8	81.7	4600	6200	56.0	50.0	77.0	80.0	3.60	1.30	5.1	0.31	1.96	1.08	0.342	0.16	355X	354A
	87.313	30.163	30.886	23.813	3.60	3.20	H-3578R	H-3525	95.8	120	4600	6200	57.0	51.0	75.0	81.0	3.60	3.20	9.7	0.31	1.96	1.08	0.483	0.3	H-3578R	H-3525
	88.900	30.163	29.370	23.020	3.60	3.20	HM803149	HM803110	99.6	125	4600	6100	62.0	53.4	74.0	85.0	3.60	3.20	4.1	0.55	1.10	0.60	0.525	0.318	HM803149	HM803110
	90.119	23.000	21.692	21.808	3.60	2.40	355X	352	71.8	81.7	4600	6200	56.0	50.0	82.0	78.0	3.60	2.40	5.1	0.31	1.96	1.08	0.342	0.318	355X	352
	92.075	30.163	29.370	23.020	3.60	3.20	HM803149	HM803112	99.6	125	4600	6100	62.0	53.4	75.0	85.0	3.60	3.20	4.1	0.55	1.10	0.60	0.525	0.398	HM803149	HM803112
	93.264	30.163	30.302	23.813	3.60	3.20	3782	3720	103	137	4200	5500	58.0	52.0	82.0	88.0	3.60	3.20	8.0	0.34	1.77	0.97	0.658	0.288	3782	3720
	95.250	30.958	28.301	20.638	1.20	0.80	53176	53375	88.7	98.4	3700	5200	59.0	52.5	81.0	89.0	1.20	0.80	1.0	0.74	0.81	0.45	0.562	0.363	53176	53375
	95.250	30.958	28.301	20.638	3.60	0.80	53177	53375	88.7	98.4	3700	5200	63.0	52.5	81.0	89.0	3.60	0.80	1.0	0.74	0.81	0.45	0.557	0.363	53177	53375
	95.250	27.783	28.575	22.225	0.80	0.80	33885	33822	108	141	4100	5400	53.0	53.0	86.0	90.0	0.80	0.80	7.4	0.33	1.82	1.00	0.714	0.267	33885	33822
	95.250	30.958	28.575	22.225	3.60	0.80	HM903249	HM903210	99.7	120	3700	5100	65.0	54.0	81.0	91.0	3.60	0.80	0.1	0.74	0.81	0.45	0.613	0.383	HM903249	HM903210
	95.250	30.163	29.370	23.020	3.60	3.20	HM804843	HM804810	104	140	3300	4400	63.0	57.0	81.0	91.0	3.60	3.20	3.7	0.55	1.10	0.60	0.67	0.351	HM804843	HM804810
	104.775	30.163	30.958	23.813	0.80	3.20	45280	45220	126	165	3700	4900	55.0	54.0	93.0	99.0	0.80	3.20	8.0	0.33	1.80	0.99	1	0.345	45280	45220
	104.775	36.513	36.513	28.575	3.60	3.20	HM807040	HM807010	141	195	3800	5100	66.0	59.0	89.0	100.0	3.60	3.20	7.2	0.49	1.23	0.68	1.13	0.497	HM807040	HM807010
	111.125	30.163	26.909	20.638	3.60	3.20	55175CR	55437	111	150	3100	4300	67.0	60.0	92.0	105.0	3.60	3.20	(7.2)	0.88	0.68	0.37	0.938	0.507	55175CR	55437
	114.300	44.450	44.450	34.925	3.60	3.20	65385	65320	189	230	3800	5000	65.0	59.0	97.0	107.0	3.60	3.20	12.5	0.43	1.40	0.77	1.48	0.869	65385	65320
44.983	82.931	23.813	25.400	19.050	1.60	0.80	H-25584	H-25520	77.3	100	4800	6300	53.0	51.0	74.0	77.0	1.60	0.80	6.3	0.33	1.79	0.99	0.357	0.2	H-25584	H-25520
	83.058	23.813	25.400	19.050	1.60	3.20	H-25584	H-25521	77.3	100	4800	6300	53.0	51.0	72.0	77.0	1.60	3.20	6.3	0.33	1.79	0.99	0.357	0.2	H-25584	H-25521
	83.058	23.876	25.400	19.114	1.60	2.00	H-25584	H-25522	77.3	100	4800	6300	53.0	51.0	73.0	77.0	1.60	2.00	6.3	0.33	1.79	0.99	0.357	0.203	H-25584	H-25522
	93.264	30.163	30.302	23.813	3.60	3.20	3776	3720	103	137	4200	5500	59.0	53.0	82.0	88.0	3.60	3.20	8.0	0.34	1.77	0.97	0.650	0.228	3776	3720
45.230	79.985	19.842	20.638	15.080	2.00	1.20	H-17887	H-17831	55.1	70.8	4800	6400	57.0	52.0	68.0	74.0	2.00	1.20	4.0	0.37	1.64	0.90	0.275	0.134	H-17887	H-17831
45.237	84.138	30.163	30.886	23.813	3.60	3.20	3586R	3520	95.8	120	4600	6200	58.0	52.0	74.0	79.5	3.60	3.20	9.7	0.31	1.96	1.08	0.467	0.221	3586R	3520
	87.313	30.163	30.886	23.813	3.60	3.20	3586R	3525	95.8	120	4600	6200	58.0	52.0	75.0	81.0	3.60	3.20	9.7	0.31	1.96	1.08	0.467	0.3	3586R	3525
45.242	73.431	19.558	19.812	15.748	3.60	0.80	H-LM102949	H-LM102910	55.6	78.1	5100	6700	56.0	50.0	68.0	70.0	3.60	0.80	4.9	0.31	1.97	1.08	0.209	0.100	H-LM102949	H-LM102910
	77.788	19.842	19.842	15.080	3.60	0.80	H-LM603049	H-LM603011	57.1	73.5	4900	6500	57.0	50.0	71.0	74.0	3.60	0.80	2.3	0.43	1.41	0.77	0.243	0.120	H-LM603049	H-LM603011
	77.788	21.430	19.842	16.667	3.60	0.80	H-LM603049	H-LM603012	57.1	73.5	4900	6500	57.0	50.0	71.0	74.0	3.60	0.80	2.3	0.43	1.41	0.77	0.243	0.138	H-LM603049	H-LM603012
	79.974	19.842	19.842	15.080	3.60	0.80	H-LM603049	H-LM603014	57.1	73.5	4900	6500	57.0	50.0	71.0	74.0	3.60	0.80	2.3	0.43	1.41	0.77	0.243	0.152	H-LM603049	H-LM603014
45.618	82.931	23.813	25.400	19.050	3.60	0.80	H-25590	H-25520	77.3	100	4800	6300	58.0	51.0	74.0	77.0	3.60	0.80	6.3	0.33	1.79	0.99	0.345	0.201	H-25590	H-25520
	82.931	26.988	25.400	22.225	3.60	2.40	H-25590	H-25523	77.3	100	4800	6300	58.0	51.0	72.0	77.0	3.60	2.40	6.3	0.33	1.79	0.99	0.345	0.246	H-25590	H-25523
	83.058	23.876	25.400	19.114	3.60	2.00	H-25590	H-25522	77.3	100	4800	6300	58.0	51.0	73.0	77.0	3.60	2.00	6.3	0.33	1.79	0.99	0.345	0.203	H-25590	H-25522
	83.058	23.813	25.400	19.050	3.60	3.20	H-25590	H-25521	77.3	100	4800	6300	58.0	51.0	72.0	77.0	3.60	3.20	6.3	0.33	1.79	0.99	0.345	0.2	H-25590	H-25521

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