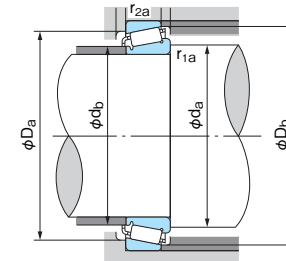
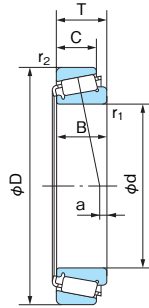


**Tapered Roller Bearings**  
**Inch Series**  
 Bore Diameter: 15.875~30.163mm



Dynamic equivalent radial load  
 $P_r = X F_r + Y F_a$

$\frac{F_a}{F_r} \leq e$		$\frac{F_a}{F_r} > e$	
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:  
 $P_{0r} = 0.5 F_r + Y_0 F_a$   
 $P_{0r} = F_r$   
 Values Y<sub>0</sub> from table.

1N=0.102kgf

Boundary dimensions (mm)							Bearing No.		Basic load rating		Limiting speed (min <sup>-1</sup> )		Abutment and fillet dimensions (mm)						Load center	Constant	Axial load factor		Mass(kg) Reference		Bearing No.	
d	D	T	B	C	r <sub>1</sub> (min)	r <sub>2</sub> (min)	Cone	Cup	Cr (kN)	Cor (kN)	Grease	Oil	d <sub>a</sub>	d <sub>b</sub>	D <sub>a</sub>	D <sub>b</sub>	r <sub>1a</sub>	r <sub>2a</sub>	a (mm)	e	Y <sub>1</sub>	Y <sub>0</sub>	Cone	Cup	Cone	Cup
15.875	42.863	14.288	14.288	9.525	1.60	1.60	H-11590	H-11520	17.8	17.7	10000	14000	24.5	22.5	34.5	39.5	1.60	1.60	1.2	0.70	0.85	0.47	0.06	0.04	H-11590	H-11520
17.463	39.878	13.843	14.605	10.668	1.20	1.20	H-LM11749R	H-LM11710	25.4	26.0	11000	14000	23.0	21.5	34.0	37.0	1.20	1.20	5.2	0.29	2.10	1.15	0.058	0.028	H-LM11749R	H-LM11710
19.050	45.237	15.494	16.637	12.065	1.20	1.20	H-LM11949	H-LM11910	29.4	30.1	9400	13000	25.0	23.5	39.5	41.5	1.20	1.20	5.5	0.30	2.00	1.10	0.081	0.044	H-LM11949	H-LM11910
	49.225	18.034	19.050	14.288	1.20	1.20	H-09067	H-09195	37.7	37.7	8900	12000	25.5	24.0	42.0	44.5	1.20	1.20	7.4	0.27	2.26	1.24	0.114	0.065	H-09067	H-09195
	53.975	22.225	21.839	15.875	1.57	2.36	H-21075	H-21212	42	41.2	8400	11000	31.5	26.0	43.0	50.0	1.57	2.36	5.6	0.59	1.02	0.56	0.159	0.095	H-21075	H-21212
21.430	50.005	17.526	18.288	13.970	1.17	1.17	H-M12649	H-M12610	39.1	40.7	8500	11000	27.5	25.5	44.0	46.0	1.17	1.17	6.4	0.28	2.16	1.19	0.119	0.058	H-M12649	H-M12610
21.987	45.237	15.494	16.637	12.065	1.27	1.27	H-LM12749	H-LM12710	30.1	34.6	8900	12000	27.5	26.0	39.5	42.0	1.27	1.27	5.5	0.31	1.96	1.08	0.078	0.038	H-LM12749	H-LM12710
	45.975	15.494	16.637	12.065	1.27	1.27	H-LM12749	H-LM12711	30.1	34.6	8900	12000	27.5	26.0	40.0	42.5	1.27	1.27	5.5	0.31	1.96	1.08	0.078	0.043	H-LM12749	H-LM12711
22.225	52.388	19.368	20.168	14.288	1.60	1.60	H-1380	H-1328	36.7	37.9	8000	11000	29.5	29.5	45.0	48.5	1.60	1.60	7.7	0.29	2.05	1.13	0.132	0.066	H-1380	H-1328
	56.896	19.368	19.837	15.875	1.20	1.20	H-1755	H-1729	40.0	43.1	7600	10000	29.0	27.5	49.0	51.0	1.20	1.20	7.1	0.31	1.95	1.07	0.150	0.100	H-1755	H-1729
	57.150	22.225	22.225	17.463	0.80	1.60	H-1280	H-1220	52.6	55.7	7600	10000	29.5	29.0	49.0	52.0	0.80	1.60	7.9	0.35	1.73	0.95	0.189	0.105	H-1280	H-1220
23.812	56.896	19.368	19.837	15.875	0.80	1.20	H-1779	H-1729	40.0	43.1	7600	10000	29.5	28.5	49.0	51.0	0.80	1.20	7.1	0.31	1.95	1.07	0.141	0.100	H-1779	H-1729
	50.292	14.224	14.732	10.668	1.20	1.20	H-L44643R	H-L44610	31.2	37.0	7800	10000	31.5	29.5	44.5	47.0	1.20	1.20	3.2	0.37	1.60	0.88	0.092	0.039	H-L44643R	H-L44610
	57.150	19.431	19.431	14.732	1.57	1.57	H-M84548	H-M84510	42.2	49.2	7300	9700	36.0	33.0	48.5	54.0	1.57	1.57	3.4	0.55	1.10	0.60	0.156	0.088	H-M84548	H-M84510
	61.999	19.050	20.638	14.288	3.60	1.20	H-15100	H-15245	44.6	50.7	6400	8600	38.0	31.5	55.0	58.0	3.60	1.20	5.7	0.35	1.71	0.94	0.215	0.081	H-15100	H-15245
	61.999	19.050	20.638	14.288	0.80	1.20	H-15101	H-15245	44.6	50.7	6400	8600	32.5	31.5	55.0	58.0	0.80	1.20	5.7	0.35	1.71	0.94	0.215	0.081	H-15101	H-15245
	64.292	21.433	21.433	16.670	1.57	1.57	H-M86643R	H-M86610	55.2	70.7	6400	8500	38.0	36.5	54.0	61.0	1.57	1.57	3.4	0.55	1.10	0.60	0.248	0.127	H-M86643R	H-M86610
26.157	65.088	22.225	21.463	15.875	1.60	1.60	H-23100	H-23256	47.8	51.7	5600	7900	39.0	34.5	53.0	61.0	1.60	1.60	2.2	0.73	0.82	0.45	0.231	0.141	H-23100	H-23256
	61.913	19.050	20.638	14.288	0.80	2.00	H-15103	H-15243	44.6	50.7	6400	8600	33.0	32.5	55.0	58.0	0.80	2.00	5.7	0.35	1.71	0.94	0.213	0.079	H-15103	H-15243
	61.999	19.050	20.638	14.288	0.80	1.20	H-15103	H-15245	44.6	50.7	6400	8600	33.0	32.5	55.0	58.0	0.80	1.20	5.7	0.35	1.71	0.94	0.213	0.081	H-15103	H-15245
26.988	50.292	14.224	14.732	10.668	3.60	1.20	H-L44649R	H-L44610	31.2	37	7800	10000	37.5	31.0	44.5	47.0	3.60	1.20	3.2	0.37	1.60	0.88	0.083	0.039	H-L44649R	H-L44610
	61.999	19.050	20.638	14.288	0.80	1.20	H-15106	H-15245	44.6	50.7	6400	8600	33.5	33.0	55.0	58.0	0.80	1.20	5.7	0.35	1.71	0.94	0.206	0.081	H-15106	H-15245
	63.500	20.638	20.638	15.875	0.80	1.20	H-15106	H-15250	44.6	50.7	6400	8600	33.5	33.0	56.0	59.0	0.80	1.20	5.7	0.35	1.71	0.94	0.206	0.112	H-15106	H-15250
	63.500	20.638	20.638	15.875	0.80	1.60	H-15106	H-15250X	44.6	50.7	6400	8600	33.5	33.0	55.0	59.0	0.80	1.60	5.7	0.35	1.71	0.94	0.206	0.111	H-15106	H-15250X
28.575	57.150	19.845	19.355	15.875	3.60	1.60	H-1988R	H-1922	48.8	57.1	7000	9300	39.5	33.5	51.0	53.5	3.60	1.60	5.9	0.33	1.82	1.00	0.151	0.076	H-1988R	H-1922
	61.999	19.050	20.638	14.288	3.60	1.20	H-15112	H-15245	44.6	50.7	6400	8600	40.0	34.0	55.0	58.0	3.60	1.20	5.7	0.35	1.71	0.94	0.193	0.081	H-15112	H-15245
	63.500	20.638	20.638	15.875	3.60	1.20	H-15112	H-15250	44.6	50.7	6400	8600	40.0	34.0	56.0	59.0	3.60	1.20	5.7	0.35	1.71	0.94	0.193	0.112	H-15112	H-15250
	64.292	21.433	21.433	16.670	1.60	1.60	H-M86647R	H-M86610	55.2	70.7	6400	8500	40.0	38.0	54.0	61.0	1.60	1.60	3.4	0.55	1.10	0.60	0.225	0.127	H-M86647R	H-M86610
	68.263	22.225	22.225	17.463	0.80	1.60	H-02474	H-02420	51.0	61.1	6000	8000	36.5	36.0	59.0	63.0	0.80	1.60	5.1	0.42	1.44	0.79	0.252	0.150	H-02474	H-02420
	73.025	22.225	22.225	17.463	0.80	3.20	H-02872	H-02820	55.0	65.7	5500	7400	37.5	37.0	62.0	68.0	0.80	3.20	3.7	0.45	1.32	0.73	0.319	0.158	H-02872	H-02820
29.000	50.292	14.224	14.732	10.668	3.60	1.27	H-L45449	H-L45410	28.9	37.2	7600	10000	39.5	33.0	44.5	48.0	3.60	1.27	3.3	0.37	1.62	0.89	0.079	0.036	H-L45449	H-L45410
29.987	61.999	19.050	20.638	14.288	1.20	1.20	H-15117	H-15245	44.6	50.7	6400	8600	36.5	35.0	55.0	58.0	1.20	1.20	5.7	0.35	1.71	0.94	0.184	0.081	H-15117	H-15245
30.000	72.085	22.385	19.202	18.415	0.80	2.40	H-14118	H-14283	46.1	55	5900	7800	37.0	36.5	60.0	65.0	0.80	2.40	4.4	0.38	1.57	0.86	0.224	0.21	H-14118	H-14283
30.163	64.292	21.433	21.433	16.670	1.57	1.57	H-M86649R	H-M86610	55.2	70.7	6400	8500	41.0	38.0	54.0	61.0	1.57	1.57	3.4	0.55	1.10	0.60	0.213	0.127	H-M86649R	H-M86610
	68.263	22.225	22.225	17.463	2.40	1.60	H-M88043	H-M88010	56.1	71.1	6000	7900	43.5	39.5	58.0	65.0	2.40	1.60	3.0	0.55	1.10	0.60	0.258	0.144	H-M88043	H-M88010

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