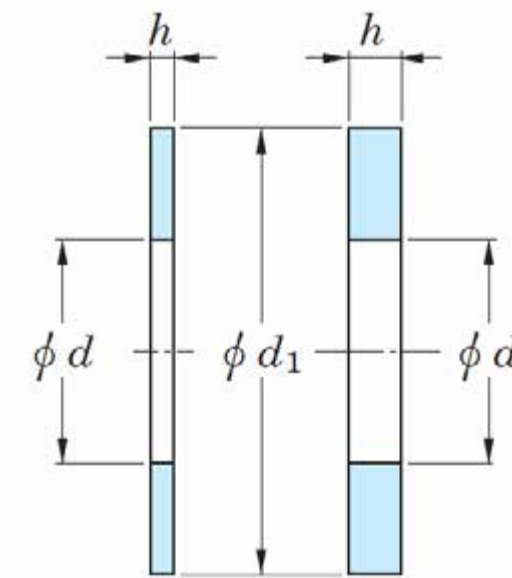
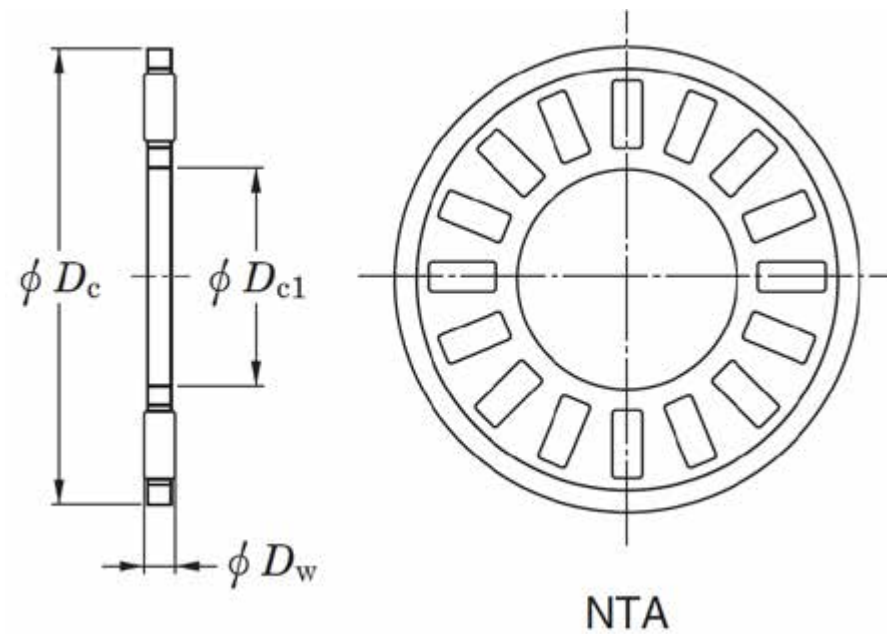
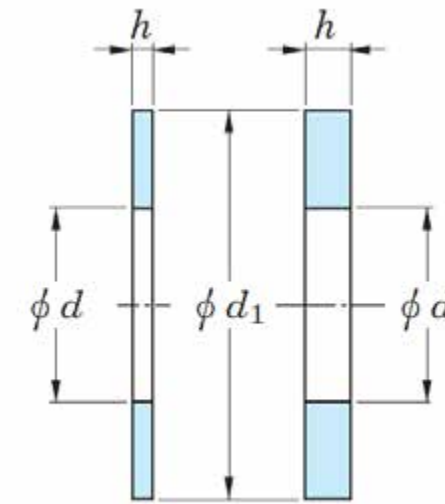
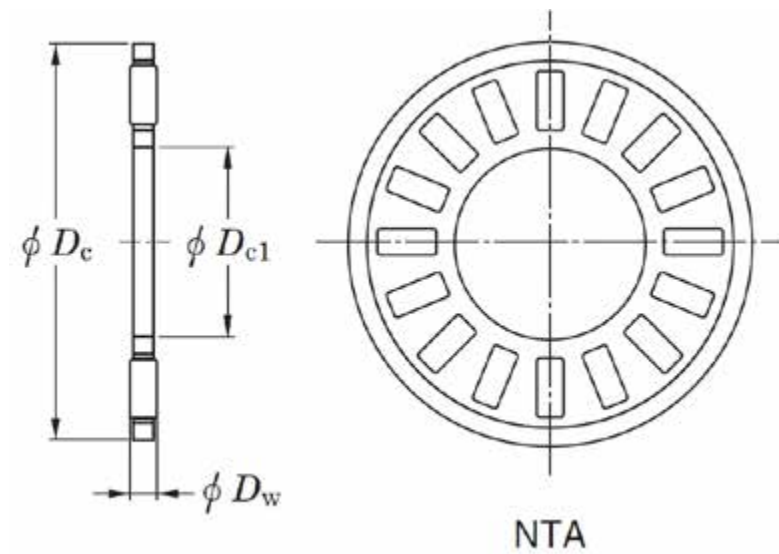


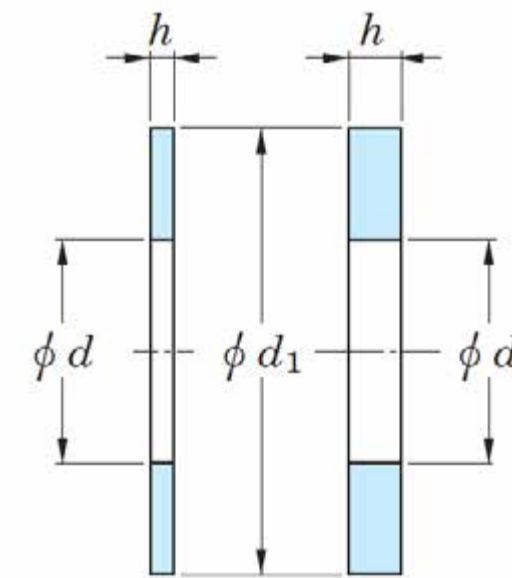
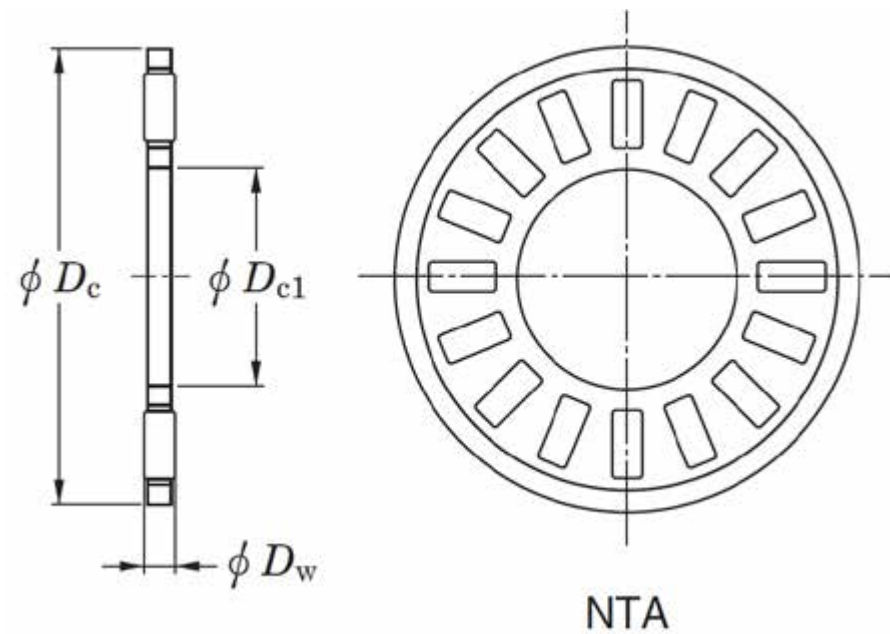
shaft dia. (inch)	Dc1	Dc	Dw	Ea	Eb	Bearing no.	Basic load ratings (kN)		Fatigue Load limit (kN) Cu	Limiting speed (min <sup>-1</sup> )	Mass (kg)	Washer No.	Washer Dimensions mm				Piloting dimensions(mm)		Dia. to clear O.D.(mm)	Washer mass (kg)
							Cr	Cor					d	d1	h		S			
											TRA Washers	d	d1	max.	min.	max.	min.	H 2)		
1/4	6.35	17.45	1.984	8.636	14.732	NTA-411	5.12	10.76	1.05	26000	0.001	TRA-411	6.35	17.45	0.81	0.76	6.35	6.27	18.26	0.001
												TRB-411	6.35	17.45	1.60	1.52	6.35	6.27	18.26	0.002
												TRC-411	6.35	17.45	2.41	2.34	6.35	6.27	18.26	0.004
3/8	9.53	20.625	1.984	11.68	18.034	NTA-613	6.05	14.32	1.40	22000	0.002	TRA-613	9.53	20.62	0.81	0.76	9.53	9.45	21.44	0.001
												TRB-613	9.53	20.62	1.60	1.52	9.53	9.45	21.44	0.003
												TRC-613	9.53	20.62	2.41	2.34	9.53	9.45	21.44	0.004
1/2	12.70	23.80	1.984	14.99	21.08	NTA-815	7.16	19.13	1.85	19000	0.002	TRA-815	12.70	23.80	0.81	0.76	12.70	12.62	24.61	0.002
												TRB-815	12.70	23.80	1.60	1.52	12.70	12.62	24.61	0.004
												TRC-815	12.70	23.80	2.41	2.34	12.70	12.62	24.61	0.005
9/16	14.275	25.40	1.9837	16.51	22.606	NTA-916	7.70	21.53	2.10	18000	0.003	TRA-916	14.27	25.40	0.81	0.76	14.27	14.20	26.19	0.002
												TRB-916	14.27	25.40	1.60	1.52	14.27	14.20	26.19	0.004
												TRC-916	14.27	25.40	2.41	2.34	14.27	14.20	26.19	0.006
5/8	15.88	28.575	1.9837	18.03	25.908	NTA-1018	9.79	30.38	2.85	15000	0.003	TRA-1018	15.88	28.58	0.81	0.76	15.88	15.8	29.36	0.003
												TRB-1018	15.88	28.58	1.6	1.52	15.88	15.8	29.36	0.005
												TRC-1018	15.88	28.58	2.41	2.34	15.88	15.8	29.36	0.008
												TRD-1018	15.88	28.58	3.2	3.12	15.88	15.8	29.36	0.011
5/16	7.92	19.05	1.984	10.16	16.256	NTA-512	5.83	13.17	1.30	24000	0.002	TRA-512	7.92	19.05	0.81	0.76	7.92	7.85	19.84	0.001
												TRB-512	7.92	19.05	1.60	1.52	7.92	7.85	19.84	0.003
3/4	19.05	31.75	1.9837	21.34	28.956	NTA-1220	10.90	36.48	3.40	14000	0.004	TRA-1220	19.05	31.75	0.81	0.76	19.05	18.97	32.54	0.003
												TRB-1220	19.05	31.75	1.60	1.52	19.05	18.97	32.54	0.006
												TRC-1220	19.05	31.75	2.41	2.34	19.05	18.97	32.54	0.010
												TRD-1220	19.05	31.75	3.20	3.12	19.05	18.97	32.54	0.012
												TRE-1220	19.05	31.75	3.99	3.91	19.05	18.97	32.54	0.015
7/8	22.23	36.50	1.984	24.38	33.782	NTA-1423	13.43	49.82	4.65	12000	0.005	TRA-1423	22.23	36.50	0.81	0.76	22.23	22.15	37.31	0.004
												TRB-1423	22.23	36.50	1.60	1.52	22.23	22.15	37.31	0.008



shaft dia. (inch)	Dc1	Dc	Dw	Ea	Eb	Bearing no.	Basic load ratings (kN)		Fatigue Load limit (kN) Cu	Limiting speed (min-1)	Mass (kg)	Washer No.	Washer Dimensions mm				Piloting dimensions(mm)		Dia. to clear O.D.(mm)	Washer mass (kg)
							Cr	Cor					d	d1	h		S			
											TRA Washers			max.	min.	max.	min.	H 2)		
1	25.40	39.675	1.984	27.69	36.83	NTA-1625	13.83	53.82	5.00	11000	0.006	TRA-1625	25.40	39.67	0.81	0.76	25.40	25.32	40.49	0.005
												TRB-1625	25.40	39.67	1.60	1.52	25.40	25.32	40.49	0.009
												TRD-1625	25.40	39.67	3.20	3.12	25.40	25.32	40.49	0.017
												TRE-1625	25.40	39.67	3.99	3.91	25.40	25.32	40.49	0.021
1 1/8	28.58	44.45	1.9837	30.73	41.656	NTA-1828	16.68	71.17	7.30	9600	0.009	TRA-1828	28.58	44.45	0.81	0.76	28.58	28.50	45.24	0.006
												TRB-1828	28.58	44.45	1.60	1.52	28.58	28.50	45.24	0.011
												TRC-1828	28.58	44.45	2.41	2.34	28.58	28.50	45.24	0.017
												TRD-1828	28.58	44.45	3.20	3.12	28.58	28.50	45.24	0.022
1 1/4	31.75	49.20	1.9837	34.04	46.228	NTA-2031	20.15	93.41	9.55	8600	0.010	TRA-2031	31.75	49.20	0.81	0.76	31.75	31.67	50.01	0.007
												TRB-2031	31.75	49.20	1.60	1.52	31.75	31.67	50.01	0.014
												TRC-2031	31.75	49.20	2.41	2.34	31.75	31.67	50.01	0.020
												TRD-2031	31.75	49.20	3.20	3.12	31.75	31.67	50.01	0.026
												TRF-2031	31.75	49.20	4.78	4.70	31.75	31.67	50.01	0.041
1 3/8	34.93	52.375	1.9837	37.08	49.53	NTA-2233	21.35	103.20	10.5	8000	0.010	TRA-2233	34.93	52.37	0.81	0.76	34.93	34.85	53.19	0.007
												TRB-2233	34.93	52.37	1.60	1.52	34.93	34.85	53.19	0.015
												TRC-2233	34.93	52.37	2.41	2.34	34.93	34.85	53.19	0.018
												TRD-2233	34.93	52.37	3.20	3.12	34.93	34.85	53.13	0.029
												TRE-2233	34.93	52.37	3.99	3.91	34.93	34.85	53.19	0.037
												TRF-2233	34.93	52.37	4.78	4.70	34.93	34.85	53.19	0.044
1 1/2	38.10	55.55	1.9837	40.39	52.578	NTA-2435	23.22	117.88	12.0	7600	0.011	TRA-2435	38.10	55.55	0.81	0.76	38.10	38.02	56.36	0.008
												TRB-2435	38.10	55.55	1.60	1.52	38.10	38.02	56.36	0.015
1 3/4	44.45	63.50	1.984	46.74	58.928	NTA-2840	25.31	137.45	14.0	6800	0.014	TRA-2840	44.45	63.50	0.81	0.76	44.45	44.37	64.29	0.010
												TRB-2840	44.45	63.50	1.60	1.52	44.45	44.37	64.29	0.020
												TRC-2840	44.45	63.50	2.41	2.34	44.45	44.37	64.29	0.029
												TRD-2840	44.45	63.50	3.20	3.12	44.45	44.37	64.29	0.038
												TRF-2840	44.45	63.50	4.78	4.70	44.45	44.37	64.29	0.057



shaft dia. (inch)	Dc1	Dc	Dw	Ea	Eb	Bearing no.	Basic load ratings (kN)		Fatigue Load limit (kN) Cu	Limiting speed (min <sup>-1</sup> )	Mass (kg)	Washer No.	Washer Dimensions mm				Piloting dimensions(mm)		Dia. to clear O.D.(mm)	Washer mass (kg)
							Cr	Cor					d	d1	h		S			
															max.	min.	max.	min.		
2	50.80	69.85	1.9837	53.09	65.278	NTA-3244	24.02	132.56	13.5	6100	0.015	TRA-3244	50.80	69.85	0.81	0.76	50.80	50.72	70.64	0.011
												TRB-3244	50.80	69.85	1.60	1.52	50.80	50.72	70.64	0.022
												TRC-3244	50.80	69.85	2.41	2.34	50.80	50.72	70.64	0.033
												TRD-3244	50.80	69.85	3.20	3.12	50.80	50.72	70.64	0.044
												TRF-3244	50.80	69.85	4.78	4.70	50.80	50.72	70.64	0.066
2 1/8	53.98	73.025	1.984	56.39	68.58	NTA-3446	24.42	137.45	14.0	5800	0.016	TRA-3446	53.98	73.03	0.81	0.76	53.98	53.90	73.81	0.012
												TRB-3446	53.98	73.03	1.60	1.52	53.98	53.90	73.81	0.024
												TRC-3446	53.98	73.03	2.41	2.34	53.98	53.90	73.81	0.035
												TRD-3446	53.98	73.03	3.20	3.12	53.98	53.90	73.81	0.047
2 1/4	57.15	76.20	1.984	59.44	71.628	NTA-3648	24.78	142.34	14.6	5600	0.017	TRA-3648	57.15	76.20	0.81	0.76	57.15	57.07	76.99	0.012
												TRB-3648	57.15	76.20	1.60	1.52	57.15	57.07	76.99	0.022
												TRC-3648	57.15	76.20	2.41	2.34	57.15	57.07	76.99	0.037
												TRD-3648	57.15	76.20	3.20	3.12	57.15	57.07	76.99	0.048
												TRF-3648	57.15	76.20	4.78	4.70	57.15	57.07	76.99	0.071
2 1/4	57.15	79.375	3.175	59.94	75.184	NTA-3650	37.68	177.04	18.6	5300	0.029	TRC-3650	57.15	79.38	2.41	2.34	57.15	57.07	76.99	-
2 1/2	63.50	82.55	1.9837	65.79	77.978	NTA-4052	25.52	152.13	15.6	5100	0.019	TRA-4052	63.50	82.55	0.81	0.76	63.50	63.42	83.34	0.013
												TRB-4052	63.50	82.55	1.60	1.52	63.50	63.42	83.34	0.027
												TRC-4052	63.50	82.55	2.41	2.34	63.50	63.42	83.34	0.041
2 3/4	69.85	92.075	3.175	72.64	87.884	NTA-4458	47.60	255.8	26.8	4600	0.037	TRA-4458	69.85	92.08	0.81	0.76	69.85	69.77	92.86	0.018
												TRB-4458	69.85	92.08	1.60	1.52	69.85	69.77	92.86	0.035
												TRC-4458	69.85	92.08	2.41	2.34	69.85	69.77	92.86	0.051
												TRD-4458	69.85	92.08	3.20	3.12	69.85	69.77	92.86	0.069
												TRF-4458	69.85	92.08	4.78	4.70	69.85	69.77	92.86	0.104
3	76.20	95.25	1.9837	78.49	90.678	NTA-4860	26.96	172.1	17.6	4400	0.022	TRA-4860	76.20	95.25	0.81	0.76	76.20	76.12	96.04	0.015
												TRB-4860	76.20	95.25	1.60	1.52	76.20	76.12	96.04	0.032
												TRD-4860	76.20	95.25	3.20	3.12	76.20	76.12	96.04	0.061
3 1/4	82.55	104.78	3.175	85.34	100.58	NTA-5266	51.60	294.9	30.9	4000	0.042	TRA-5266	82.55	104.78	0.81	0.76	82.55	82.47	105.56	0.020
												TRD-5266	82.55	104.78	3.20	3.12	82.55	82.47	105.66	0.080



shaft dia. (inch)	Dc1	Dc	Dw	Ea	Eb	Bearing no.	Basic load ratings (kN)		Fatigue Load limit (kN) Cu	Limiting speed (min-1)	Mass (kg)	Washer No.	Washer Dimensions mm				Piloting dimensions(mm)		Dia. to clear O.D.(mm)	Washer mass (kg)
							Cr	Cor					d	d1	h		S			
												TRA Washers			max.	min.	max.	min.	H 2)	
3 3/4	95.25	117.48	3.175	98.04	113.28	NTA-6074	56.05	344.3	35.5	3500	0.050	TRA-6074	95.25	117.48	0.81	0.76	95.25	95.17	118.26	0.023
												TRB-6074	95.25	117.48	1.60	1.52	95.25	95.17	118.26	0.046
												TRC-6074	95.25	117.48	2.41	2.34	95.25	95.17	118.26	0.069
												TRD-6074	95.25	117.48	3.20	3.12	95.25	95.17	118.26	0.092
4 1/8	104.78	125.57	3.175	107.44	124.46	NTA-6681	63.61	414.6	41.3	3200	0.062	TRA-6681	104.78	128.57	0.81	0.76	104.78	104.70	129.39	0.027
												TRC-6681	104.78	128.57	2.41	2.34	104.78	104.70	129.39	0.081
												TRD-6681	104.78	128.57	3.20	3.12	104.78	104.70	129.39	0.109
												TRF-6681	104.78	128.57	4.78	4.70	104.78	104.70	129.39	0.161