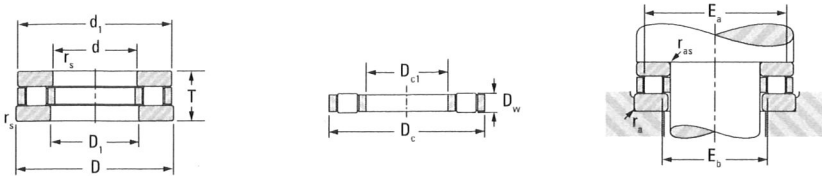


THRUST CYLINDRICAL ROLLER AND CAGE ASSEMBLIES, THRUST WASHERS
METRIC SERIES



811, 812

K.811, K.812

Shaft Dia.	Assembly Dimensions							Assembly Designation	Load Ratings		Fatigue Load Limit C_0	Speed Rating C_1
	D_{E1}	D_2	D_w	T	$E_2 \text{ max}$	$E_2 \text{ min}$	$F_2 \text{ max}$ $F_2 \text{ min}$		Dynamic	Static		
	(E11)	(a13)							C	C_0		
mm	mm	mm	mm	mm	mm	mm	mm		kN	lbf	kN	min ⁻¹
15	15 0.5906	28 1.1024	3.5 0.1378	9 0.354	18 0.709	25 0.984	0.3 0.012	K.81102LPB	12.1 2720	26.3 5910	3.70	12000
	15 0.5906	28 1.1024	3.5 0.1378	9 0.354	18 0.709	25 0.984	0.3 0.012	K.81102TVP	12.8 2880	28.6 6430	4.05	12000
17	17 0.6693	30 1.1811	3.5 0.1378	—	20 0.787	27 1.063	0.3 0.012	K.81103LPB	12.6 2830	28.6 6430	4.05	11000
	17 0.6693	30 1.1811	3.5 0.1378	9 0.354	20 0.787	27 1.063	0.3 0.012	K.81103TVP	14.2 3190	33.4 7510	4.70	11000
20	20 0.7874	35 1.3780	4.5 0.1772	10 0.394	23 0.906	32 1.260	0.3 0.012	K.81104TVP	23.6 5310	56.8 12800	6.85	9500
25	25 0.9843	42 1.6535	5.0 0.1969	11 0.433	28 1.102	39 1.535	0.6 0.024	K.81105TVP	31.2 7010	81.0 18200	11.4	8000
30	30 1.1811	47 1.8504	5.0 0.1969	—	33 1.299	44 1.732	0.6 0.024	K.81106LPB	28.5 6410	69.5 15600	10.7	6700
	30 1.1811	47 1.8504	5.0 0.1969	11 0.433	33 1.299	44 1.732	0.6 0.024	K.81106TVP	33.0 7420	91.1 20500	12.8	6700
	30 1.1811	52 2.0472	7.5 0.2953	—	33 1.299	49 1.929	0.6 0.024	K.81206LPB	53.4 12000	129 29000	13.9	6300
	30 1.1811	52 2.0472	7.5 0.2953	16 0.630	33 1.299	49 1.929	0.6 0.024	K.81206TVP	56.9 12800	141 31700	15.2	6300
35	35 1.3780	52 2.0472	5.0 0.1969	—	38 1.496	49 1.929	0.6 0.024	K.81107LPB	30.8 6920	86.0 19300	12.1	6000
	35 1.3780	52 2.0472	5.0 0.1969	12 0.472	38 1.496	49 1.929	0.6 0.024	K.81107TVP	34.8 7820	101 22700	14.2	6000
	35 1.3780	62 2.4409	7.5 0.2953	—	41 1.614	56 2.205	1.0 0.039	K.81207LPB	58.3 13100	152 34200	16.5	5300
	35 1.3780	62 2.4409	7.5 0.2953	18 0.709	41 1.614	56 2.205	1.0 0.039	K.81207TVP	61.6 13800	164 36900	17.7	5300
40	40 1.5748	60 2.3622	6.0 0.2362	—	44 1.732	56 2.205	0.6 0.024	K.81108LPB	44.2 9940	126 28300	12.0	5300
	40 1.5748	60 2.3622	6.0 0.2362	13 0.512	44 1.732	56 2.205	0.6 0.024	K.81108TVP	49.8 11200	148 33300	14.1	5300
	40 1.5748	68 2.6772	9.0 0.3543	19 0.748	45 1.772	63 2.480	1.0 0.039	K.81208TVP	86.8 19500	233 52400	26.9	4800
45	45 1.7717	65 2.5591	6.0 0.2362	—	49 1.929	61 2.402	0.6 0.024	K.81109LPB	47.0 10600	140 31500	13.4	4800
	45 1.7717	65 2.5591	6.0 0.2362	14 0.551	49 1.929	61 2.402	0.6 0.024	K.81109TVP	52.3 11800	163 36600	15.5	4800
	45 1.7717	73 2.8740	9.0 0.3543	—	50 1.969	68 2.677	1.0 0.039	K.81209TVP	94.2 21200	266 59800	30.8	4500



WS.811, WS.812

GS.811, GS.812

Approx. Wt.	Washer Dimensions			h		r ₁ min.	Washer Designation		Approx. Wt.	Shaft Dia.
	d	D ₁	D ₂ d ₁	Max.	Min.					
kg lbs	mm in	mm in	mm in	mm in	mm in	mm in	Shaft Piloted	Housing Piloted	kg lbs	mm
0.006 0.013	15 0.591	16 0.630	28 1.102	2.75 0.108	2.64 0.104	0.3 0.012	WS.81102	GS.81102	0.010 0.022	15
0.006 0.013	15 0.591	16 0.630	28 1.102	2.75 0.108	2.64 0.104	0.3 0.012	WS.81102	GS.81102	0.010 0.022	
0.008 0.018	17 0.669	18 0.709	30 1.181	2.75 0.108	2.64 0.104	0.3 0.012	WS.81103	GS.81103	0.011 0.024	17
0.008 0.018	17 0.669	18 0.709	30 1.181	2.75 0.108	2.64 0.104	0.3 0.012	WS.81103	GS.81103	0.011 0.024	
0.009 0.020	20 0.787	21 0.827	35 1.378	2.75 0.108	2.62 0.103	0.3 0.012	WS.81104	GS.81104	0.014 0.031	20
0.014 0.031	25 0.984	26 1.024	42 1.654	3.00 0.118	2.87 0.113	0.6 0.024	WS.81105	GS.81105	0.021 0.046	25
0.026 0.057	30 1.181	32 1.260	47 1.850	3.00 0.118	2.87 0.113	0.6 0.024	WS.81106	GS.81106	0.023 0.051	30
0.016 0.035	30 1.181	32 1.260	47 1.850	3.00 0.118	2.87 0.113	0.6 0.024	WS.81106	GS.81106	0.023 0.051	
0.052 0.115	30 1.181	32 1.260	52 2.047	4.25 0.167	4.12 0.162	0.6 0.024	WS.81206	GS.81206	0.047 0.104	
0.034 0.075	30 1.181	32 1.260	52 2.047	4.25 0.167	4.12 0.162	0.6 0.024	WS.81206	GS.81206	0.047 0.104	
0.025 0.055	35 1.378	37 1.457	52 2.047	3.50 0.138	3.34 0.131	0.6 0.024	WS.81107	GS.81107	0.032 0.071	35
0.020 0.044	35 1.378	37 1.457	52 2.047	3.50 0.138	3.34 0.131	0.6 0.024	WS.81107	GS.81107	0.032 0.071	
0.073 0.161	35 1.378	37 1.457	62 2.441	5.25 0.207	5.09 0.200	1.0 0.039	WS.81207	GS.81207	0.085 0.187	
0.055 0.121	35 1.378	37 1.457	62 2.441	5.25 0.207	5.09 0.200	1.0 0.039	WS.81207	GS.81207	0.085 0.187	
0.044 0.097	40 1.575	42 1.654	60 2.362	3.50 0.138	3.34 0.131	0.6 0.024	WS.81108	GS.81108	0.043 0.095	40
0.031 0.068	40 1.575	42 1.654	60 2.362	3.50 0.138	3.34 0.131	0.6 0.024	WS.81108	GS.81108	0.043 0.095	
0.076 0.168	40 1.575	42 1.654	68 2.677	5.00 0.197	4.84 0.191	1.0 0.039	WS.81208	GS.81208	0.093 0.205	
0.035 0.077	45 1.772	47 1.850	65 2.559	4.00 0.157	3.84 0.151	0.6 0.024	WS.81109	GS.81109	0.054 0.119	45
0.035 0.077	45 1.772	47 1.850	65 2.559	4.00 0.157	3.84 0.151	0.6 0.024	WS.81109	GS.81109	0.054 0.119	
0.083 0.183	45 1.772	47 1.850	73 2.874	5.50 0.217	5.34 0.210	1.0 0.039	WS.81209	GS.81209	0.112 0.247	

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