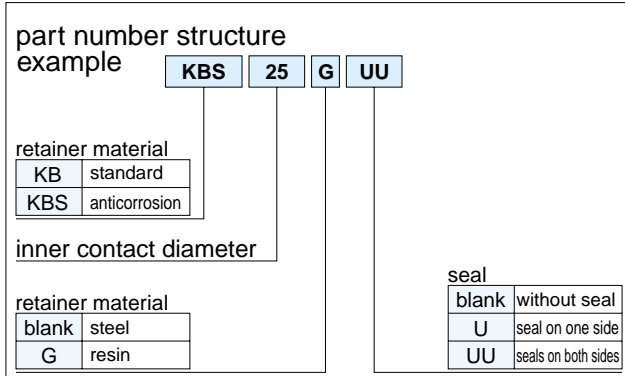


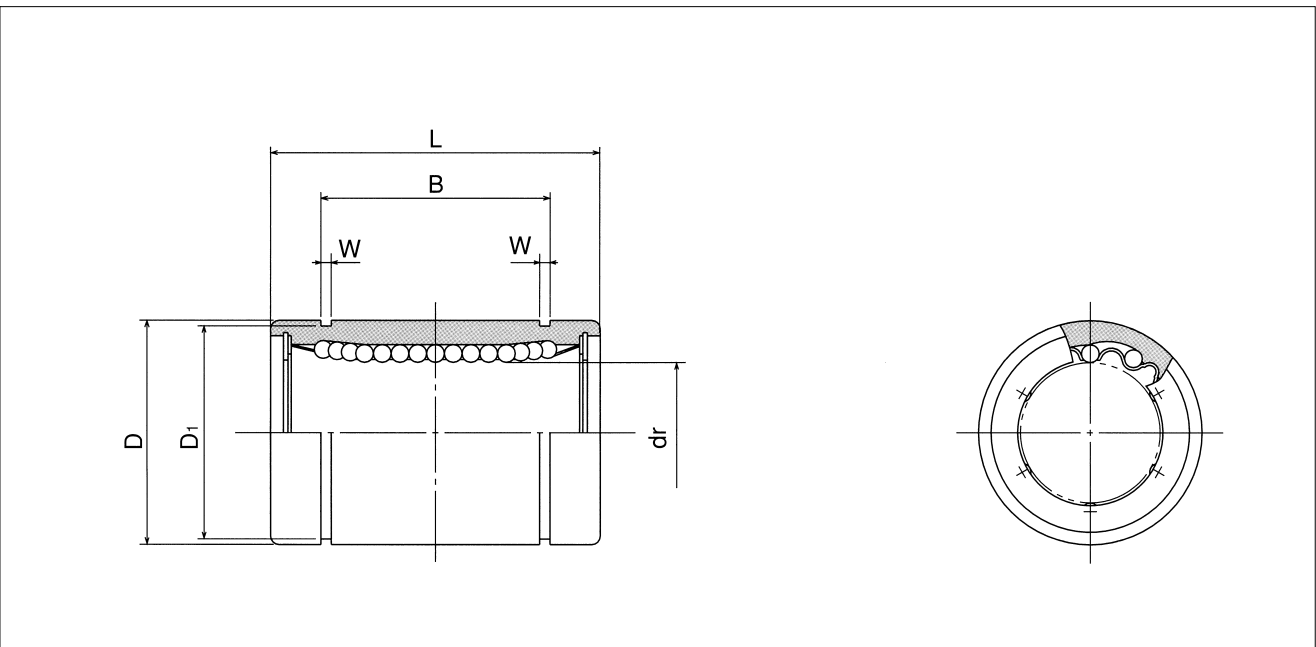
KB TYPE

– Standard Type –

This type is a metric dimension series generally used in Europe.



part number				number of ball circuits	D			
standard		anticorrosion			dr	D		tolerance μm
steel retainer	resin retainer	stainless retainer	resin retainer			mm	tolerance μm	
KB 3	KB 3G	KBS 3	KBS 3G	4	3	+ 8 0	7	0 - 8
KB 4	KB 4G	KBS 4	KBS 4G	4	4		8	
KB 5	KB 5G	KBS 5	KBS 5G	4	5		12	
KB 8	KB 8G	KBS 8	KBS 8G	4	8		16	
KB10	KB10G	KBS10	KBS10G	4	10	+ 9	19	0 - 9
KB12	KB12G	KBS12	KBS12G	4	12		22	
KB16	KB16G	KBS16	KBS16G	4	16	- 1	26	0 - 11
KB20	KB20G	KBS20	KBS20G	5	20		32	
KB25	KB25G	KBS25	KBS25G	6	25	+11	40	- 13
KB30	KB30G	KBS30	KBS30G	6	30	- 1	47	
KB40	KB40G	KBS40	KBS40G	6	40	+13	62	0
KB50	KB50G	KBS50	KBS50G	6	50	- 2	75	0
KB60	KB60G	KBS60	KBS60G	6	60		90	
KB80	—	—	—	6	80	+16/-4	120	-15



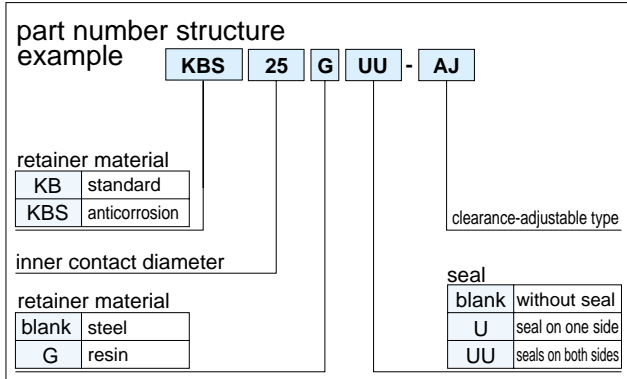
major dimensions						eccentricity μm	radial clearance (maximum) μm	basic load rating		mass g	shaft diameter mm
mm	L	B		W mm	D ₁ mm			dynamic C N	static C ₀ N		
	tolerance mm	mm	tolerance mm								
10	0	—	—	—	—	10	— 3	69	105	1.4	3
12	-0.12	—	—	—	—			88	127	2	4
22	0	14.5	0	1.1	11.5	12	— 4	206	265	11	5
25		16.5		1.1	15.2			265	402	22	8
29		22		1.3	18			372	549	36	10
32		22.9		1.3	21			510	784	45	12
36	-0.2	24.9	-0.2	1.3	24.9	15	— 6	578	892	60	16
45	31.5	1.6	30.3	862	1,370			102	20		
58	0	44.1	0	1.85	37.5	17	— 8	980	1,570	235	25
68		52.1		1.85	44.5			1,570	2,740	360	30
80	-0.3	60.6	-0.3	2.15	59	20	-13	2,160	4,020	770	40
100	77.6	2.65	72	3,820	7,940			1,250	50		
125	0	101.7	0	3.15	86.5	-20	-20	4,700	9,800	2,220	60
165	-0.4	133.7	-0.4	4.15	116			7,350	16,000	5,140	80

1N \approx 0.102kgf

KB-AJ TYPE

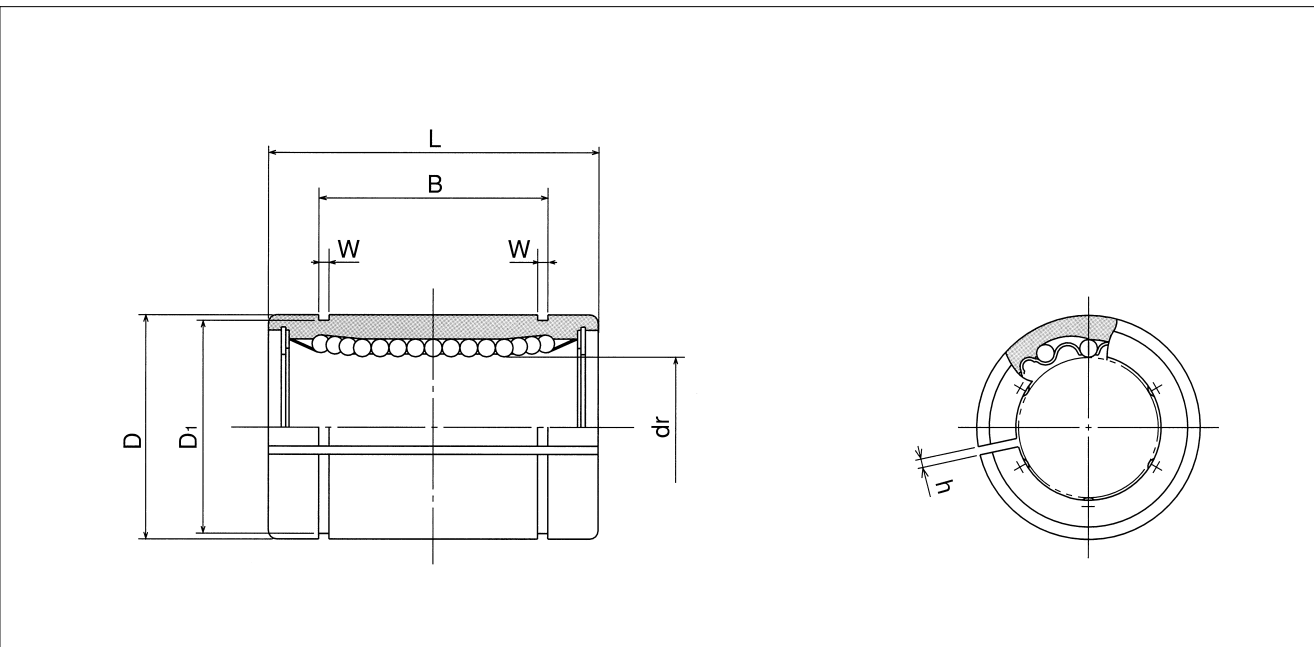
– Clearance Adjustable Type –

This type is a metric dimension series generally used in Europe.



part number				number of ball circuits	D			
standard		anticorrosion			dr	D		tolerance* μm
steel retainer	resin retainer	stainless retainer	resin retainer			mm	tolerance* μm	
—	KB 5G-AJ	—	KBS 5G-AJ	4	5	+ 8	12	0
—	KB 8G-AJ	—	KBS 8G-AJ	4	8		16	- 8
—	KB10G-AJ	—	KBS10G-AJ	4	10	0	19	0
KB12-AJ	KB12G-AJ	KBS12-AJ	KBS12G-AJ	4	12		22	- 9
KB16-AJ	KB16G-AJ	KBS16-AJ	KBS16G-AJ	4	16	+ 9	26	0
KB20-AJ	KB20G-AJ	KBS20-AJ	KBS20G-AJ	5	20	- 1	32	0
KB25-AJ	KB25G-AJ	KBS25-AJ	KBS25G-AJ	6	25	+11	40	-11
KB30-AJ	KB30G-AJ	KBS30-AJ	KBS30G-AJ	6	30	- 1	47	0
KB40-AJ	KB40G-AJ	KBS40-AJ	KBS40G-AJ	6	40	+13	62	-13
KB50-AJ	KB50G-AJ	KBS50-AJ	KBS50G-AJ	6	50	- 2	75	0
KB60-AJ	KB60G-AJ	KBS60-AJ	KBS60G-AJ	6	60	+16/-4	90	-15
KB80-AJ	—	—	—	6	80		120	

* Accuracy is measured prior to machining clearance slot.



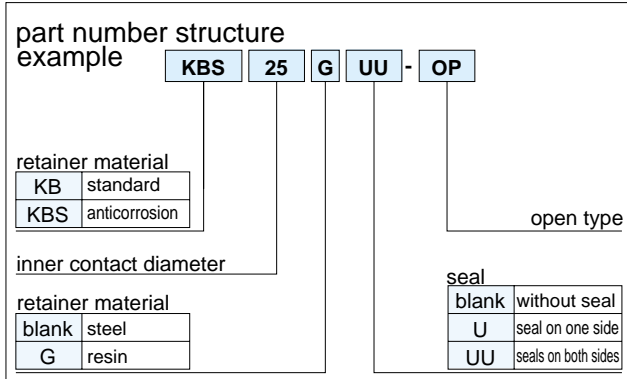
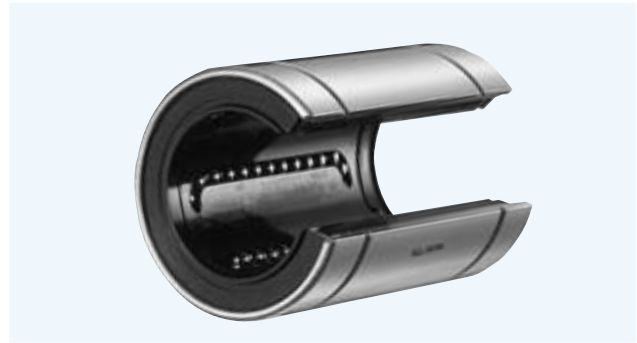
major dimensions							eccentricity*	basic load rating		mass g	shaft diameter mm
mm	L	mm	B	mm	D ₁	h		dynamic	static		
	tolerance mm		tolerance mm					C	C ₀		
22		14.5		1.1	11.5	1	12	206	265	10	5
25		16.5		1.1	15.2	1		265	402	19.5	8
29	0	22	0	1.3	18	1		372	549	29	10
32	-0.2	22.9	-0.2	1.3	21	1.5		510	784	44	12
36		24.9		1.3	24.9	1.5		578	892	59	16
45		31.5		1.6	30.3	2	15	862	1,370	100	20
58		44.1		1.85	37.5	2		980	1,570	230	25
68	0	52.1	0	1.85	44.5	2	17	1,570	2,740	355	30
80	-0.3	60.6	-0.3	2.15	59	3		2,160	4,020	758	40
100		77.6		2.65	72	3		3,820	7,940	1,230	50
125	0	101.7	0	3.15	86.5	3	20	4,700	9,800	2,170	60
165	-0.4	133.7	-0.4	4.15	116	3		7,350	16,000	5,000	80

1N ≙ 0.102kgf

KB-OP TYPE

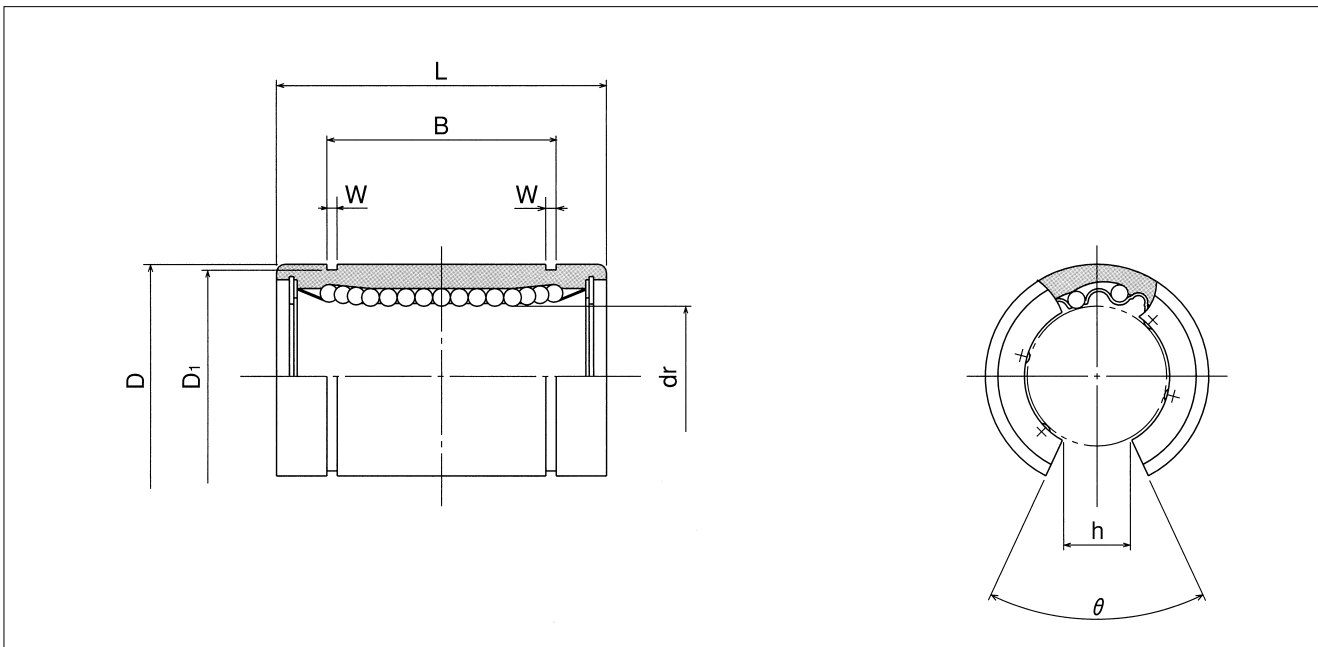
– Open Type –

This type is a metric dimension series generally used in Europe.



part number				number of ball circuits	D			
standard		anticorrosion			dr		D	
steel retainer	resin retainer	stainless retainer	resin retainer		mm	tolerance* μm	mm	tolerance* μm
–	KB10G-OP	–	KBS10G-OP	3	10	+ 8	19	0
KB12-OP	KB12G-OP	KBS12-OP	KBS12G-OP	3	12	0	22	– 9
KB16-OP	KB16G-OP	KBS16-OP	KBS16G-OP	3	16	+ 9	26	0
KB20-OP	KB20G-OP	KBS20-OP	KBS20G-OP	4	20	– 1	32	– 11
KB25-OP	KB25G-OP	KBS25-OP	KBS25G-OP	5	25	+11	40	0
KB30-OP	KB30G-OP	KBS30-OP	KBS30G-OP	5	30	– 1	47	– 11
KB40-OP	KB40G-OP	KBS40-OP	KBS40G-OP	5	40	+13	62	0
KB50-OP	KB50G-OP	KBS50-OP	KBS50G-OP	5	50	– 2	75	– 13
KB60-OP	KB60G-OP	KBS60-OP	KBS60G-OP	5	60		90	0
KB80-OP	–	–	–	5	80	+16/–4	120	– 15

* Accuracy is measured prior to machining open slot.



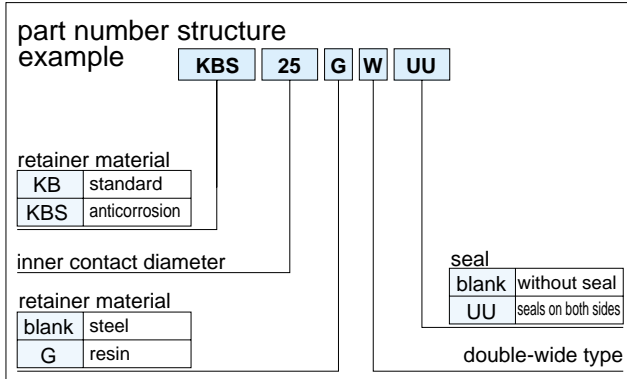
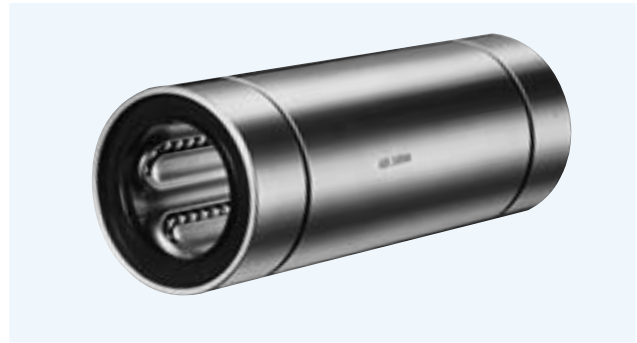
major dimensions								eccentricity μm	basic load rating		mass g	shaft diameter mm
mm	L	mm	B	mm	mm	mm	θ		dynamic	static		
	tolerance mm		tolerance mm						C N	Co N		
29		22		1.3	18	6.8	80°	12	372	549	23	10
32	0	22.9	0	1.3	21	7.5	78°		510	784	35	12
36	-0.2	24.9	-0.2	1.3	24.9	10	78°		578	892	48	16
45		31.5		1.6	30.3	10	60°	15	862	1,370	84	20
58		44.1		1.85	37.5	12.5	60°		980	1,570	195	25
68	0	52.1	0	1.85	44.5	12.5	50°		1,570	2,740	309	30
80	-0.3	60.6	-0.3	2.15	59	16.8	50°	17	2,160	4,020	665	40
100		77.6		2.65	72	21	50°		3,820	7,940	1,080	50
125	0	101.7	0	3.15	86.5	27.2	54°	20	4,700	9,800	1,900	60
165	-0.4	133.7	-0.4	4.15	116	36.3	54°		7,350	16,000	4,380	80

1N \approx 0.102kgf

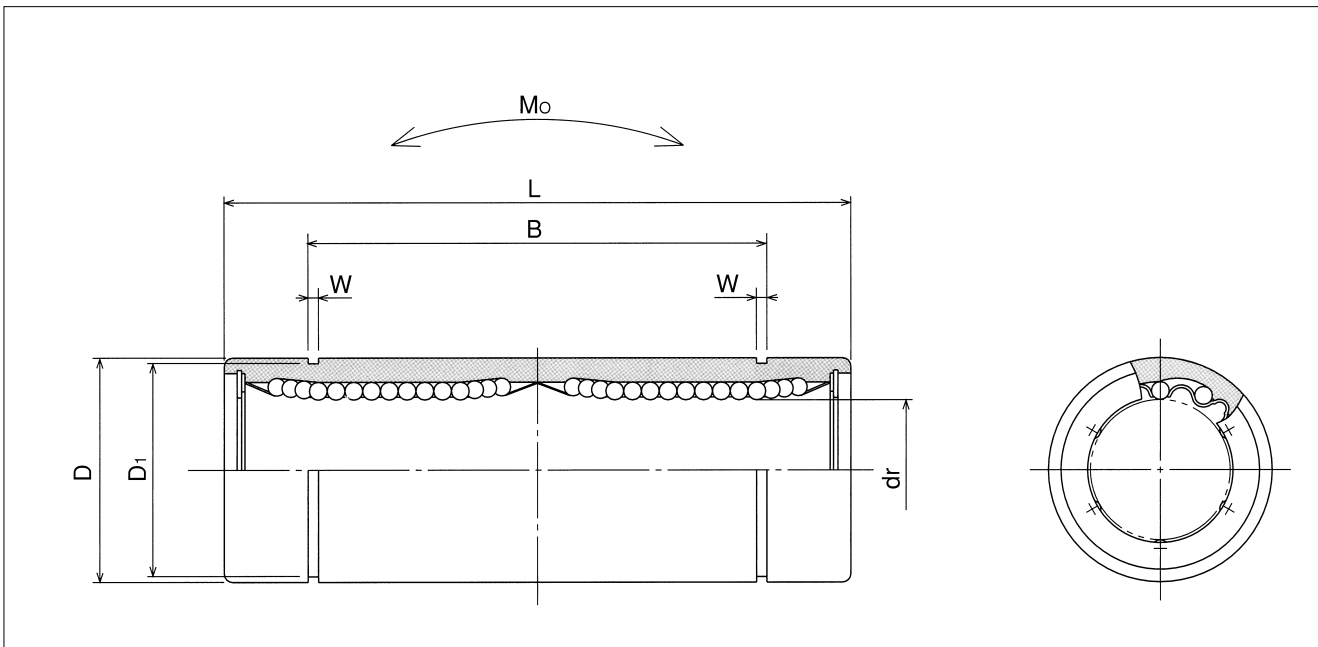
KB-W TYPE

– Double-Wide Type –

This type is a metric dimension series generally used in Europe.



part number				number of ball circuits				
standard		anticorrosion			dr		D	
steel retainer	resin retainer	stainless retainer	resin retainer		mm	tolerance μm	mm	tolerance μm
KB 8W	KB 8GW	KBS 8W	KBS 8GW	4	8	+ 9	16	0/-9
KB12W	KB12GW	KBS12W	KBS12GW	4	12	- 1	22	0
KB16W	KB16GW	KBS16W	KBS16GW	4	16	+11	26	-11
KB20W	KB20GW	KBS20W	KBS20GW	5	20	- 1	32	0
KB25W	KB25GW	KBS25W	KBS25GW	6	25	+13	40	-13
KB30W	KB30GW	KBS30W	KBS30GW	6	30	- 2	47	0
KB40W	KB40GW	KBS40W	KBS40GW	6	40	+16	62	-15
KB50W	KB50GW	KBS50W	KBS50GW	6	50	- 4	75	0/-20
KB60W	KB60GW	KBS60W	KBS60GW	6	60		90	



major dimensions						eccentricity	basic load rating		rated static moment M_o	mass	shaft diameter
	L	B		W	D_1		dynamic C	static C_o			
mm	tolerance mm	mm	tolerance mm	mm	mm	μm	N	N	$N \cdot m$	g	mm
46		33		1.1	15.2	15	421	804	4.3	40	8
61	0	45.8	0	1.3	21		813	1,570	11.7	80	12
68	-0.3	49.8	-0.3	1.3	24.9		921	1,780	14.2	115	16
80		61		1.6	30.5	17	1,370	2,740	25.0	180	20
112		82		1.85	38		1,570	3,140	44.0	430	25
123		104.2		1.85	44.5		2,500	5,490	78.9	615	30
151	0	121.2	0	2.15	59	20	3,430	8,040	147	1,400	40
192	-0.4	155.2	-0.4	2.65	72		6,080	15,900	396	2,320	50
209		170		3.15	86.5		7,550	20,000	487	3,920	60

1N \approx 0.102kgf 1N \cdot m \approx 0.102kgf \cdot m