MOTION & CONTROL™
NSK

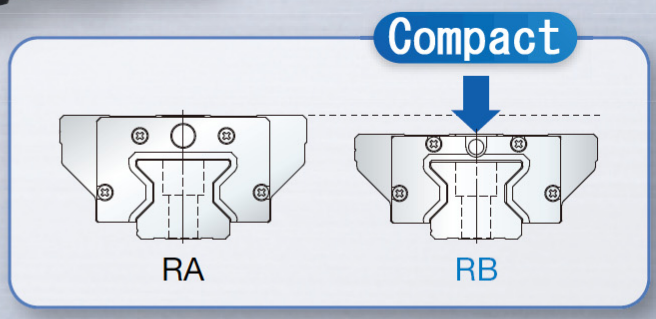
NSK Linear Guide

Roller Guide RB series

NEW

New low profile series for compact design of machines.

■ Features



1. Ultra-low profile Roller Guide

Low profile enables compact machine design.

2. Highest capacity roller guides available

Low center of mass design,
having the same load capacity as the RA series.

3. Smooth motion with retaining piece

The retaining piece prevents skew and achieves smooth motion.

4. Compatible mounting dimensions against conventional ball guides

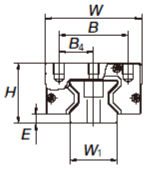
Easy to change design from ball into roller guide.

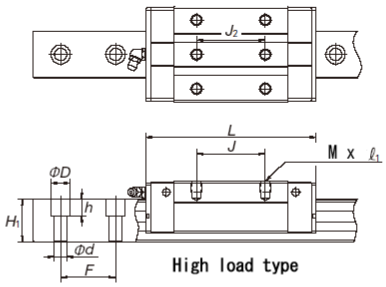
5. Maintenance free

NSK K1 allows long term maintenance free operation.

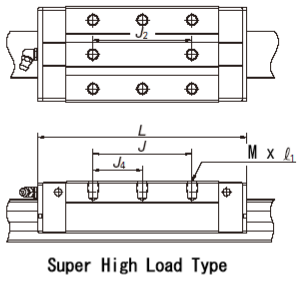
Square type (tapped mounting holes)

RB-AL, TL (High load type)
RB-BL, UL (Super high load type)





High load type



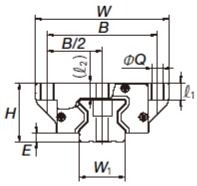
Super High Load Type

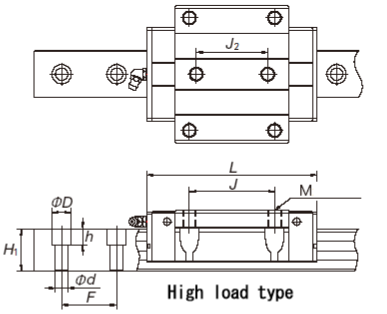
Unit:mm

Model No.	Assembly Height H	Assembly E	Slider dimensions Width W	Length L	Mounting holes B	B4	J	J2	J4	Number holes	M×ℓ1	Nipple Hole	Rail dimensions Width W1	Height H1	Pitch F	Holes d×D×h	Basic load rating Dynamic (N)	Static (N)	Static moment (N·m)	(N·m)	(N·m)
RB30AL	38	6.5	60	110.8	40	20	40	40	—	6	M8×7	Φ3	28	28	40	9×14×12	38 900	93 500	1 670	1 140	1 140
RB30BL				135.4			60	60	30	8							47 600	121 000	2 170	1 950	1 950
RB35AL	44	6.5	70	123.8	50	25	50	50	—	6	M8×8	M6×0.75	34	31	40	9×14×12	53 300	129 000	2 810	1 800	1 800
RB35BL				152			72	72	36	8							67 400	175 000	3 810	3 250	3 250
RB45AL	52	8	86	154	60	30	60	60	—	6	M10×10	M6×0.75	45	38	52.5	14×20×17	92 800	229 000	6 180	4 080	4 080
RB45BL				190			80	80	40	8							116 000	305 000	8 240	7 150	7 150
RB55AL	63	9	100	184	65	—	75	—	—	4	M12×12	Rc1/8	53	43.5	60	16×23×20	129 000	330 000	10 200	7 060	7 060
RB55TL					75	37.5		75		6											
RB55BL				234	65	—	95	95	47.5								168 000	462 000	14 300	13 600	13 600
RB55UL					75	37.5			—												
RB65AL	75	10	126	228.4	76	38	70	70	—	6	M16×16	Rc1/8	63	52	75	18×26×22	210 000	504 000	19 200	12 700	12 700
RB65BL				302.5		—	110	—	55								288 000	756 000	28 700	28 600	28 600
RB65UL						38	120	120	—												

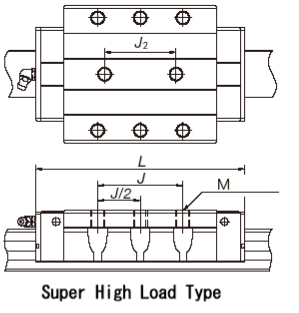
Flange type (for both tapped and bolt mounting holes)

RB-EM (High load type)
RB-GM (Super high load type)





High load type



Super High Load Type

Unit:mm

Model No.	Assembly Height H	Assembly E	Slider dimensions Width W	Length L	Mounting holes B	J	J2	Number holes	M×ℓ1(ℓ2)	Q×ℓ1(ℓ2)	Nipple Hole	Rail dimensions Width W1	Height H1	Pitch F	Holes d×D×h	Basic load rating Dynamic (N)	Static (N)	Static moment (N·m)	(N·m)	(N·m)
RB30EM	38	6.5	90	110.8	72	52	44	6	M10x12(8.5)	8.6x12(8.5)	Φ3	28	28	40	9×14×12	38 900	93 500	1 670	1 140	1 140
RB30GM				135.4				8								47 600	121 000	2 170	1 950	1 950
RB35EM	44	6.5	100	123.8	82	62	52	6	M10x13(11.5)	8.6x13(11.5)	M6×0.75	34	31	40	9×14×12	53 300	129 000	2 810	1 800	1 800
RB35GM				152				8								67 400	175 000	3 810	3 250	3 250
RB45EM	52	8	120	154	100	80	60	6	M12x15(12.5)	10.5x15(12.5)	M6×0.75	45	38	52.5	14×20×17	92 800	229 000	6 180	4 080	4 080
RB45GM				190				8								116 000	305 000	8 240	7 150	7 150
RB55EM	63	9	140	184	116	95	70	6	M14x18(18)	12.5x18(18)	Rc1/8	53	43.5	60	16×23×20	129 000	330 000	10 200	7 060	7 060
RB55GM				234				8								168 000	462 000	14 300	13 600	13 600
RB65EM	75	10	170	228.4	142	110	82	6	M16x24(21)	14.6x24(21)	Rc1/8	63	52	75	18×26×22	210 000	504 000	19 200	12 700	12 700
RB65GM				302.5				8								288 000	756 000	28 700	28 600	28 600

Reference number

Example : RB35 1000 AL C 2 - ** P5 3 - II

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①③ Model Number
See dimensions chart

② Max rail length
Max : 3500 mm

④ Material and surface treatment	
C	Carbon steel
D	Carbon steel with treatment

⑤ Number of sliders
Number of sliders per rail

⑥ Design number
Design number in series

⑦ Accuracy grade	
P3	Extreme precision
P4	Super precision
P5	Precision
P6	High

Accuracy grade with NSK K1

K3	Extreme precision
K4	Super precision
K5	Precision
K6	High

⑧ Preload	
3	Medium (Z3)

⑨ Configuration	
(None)	Single rail use
II	Use Two rails / axis