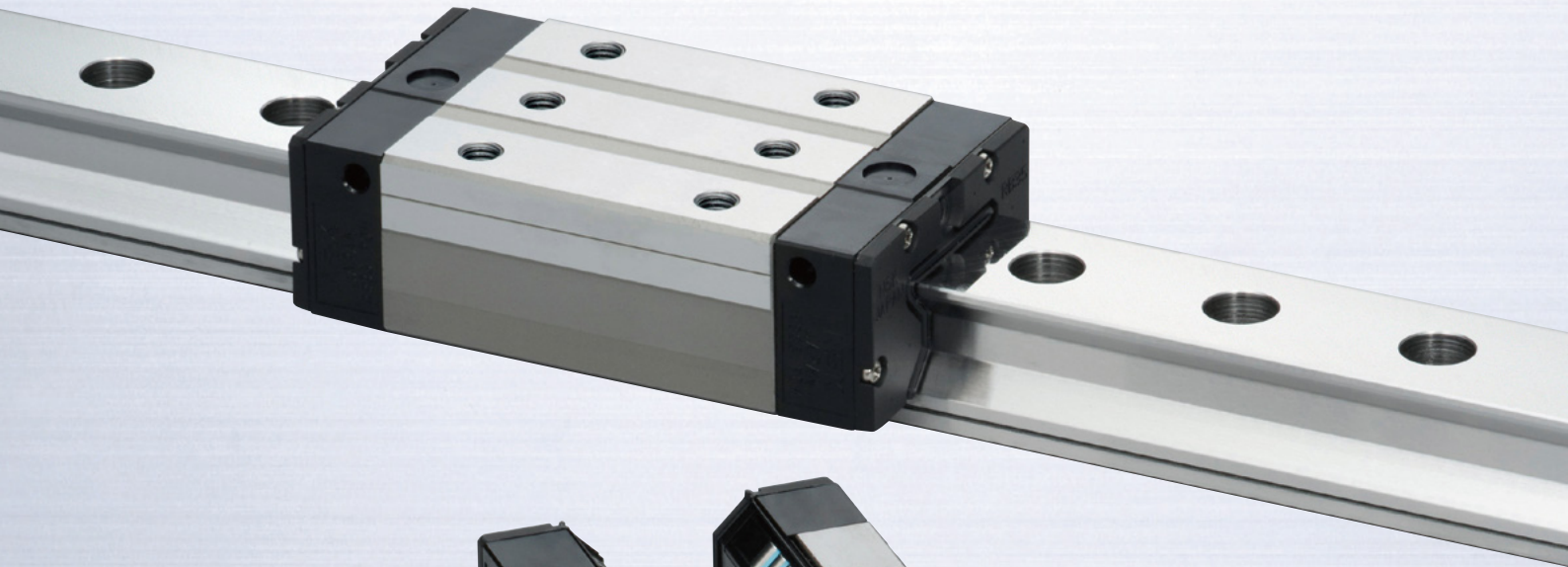


# NSK Linear Guides™ Roller Guide RB Series

Super low-profile series enables compact design for machines



## ■ Features

### 1. Super low-profile roller guides

Effective in enabling compact machine design due to its low mounting height.

### 2. Load capacity of some of the highest levels in the world

Low center of gravity is achieved while maintaining the load capacity of roller guide RA series.

### 3. Smooth motion by use of retaining pieces

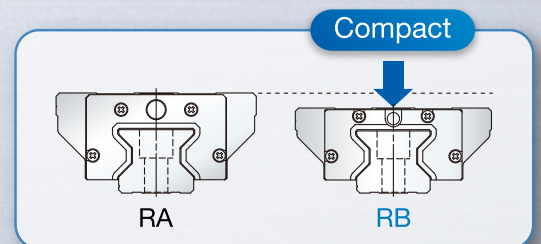
Installation of a retaining piece between rollers restrains the roller skew peculiar to roller slides, thereby achieving smooth motion.

### 4. Interchangeable mounting dimensions against conventional super low-profile ball guides

Roller guide RB series can be used without having to alter machine design.

### 5. Maintenance free

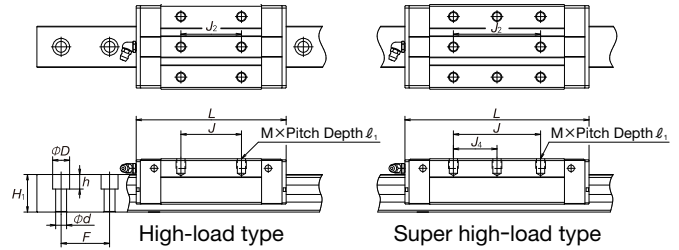
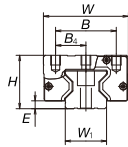
Installing an NSK K1 lubrication unit assures long-term, maintenance free operation.



# NSK Linear Guides™ Roller Guide RB Series

## ■ Square type (Tapped mounting holes)

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



Unit: mm

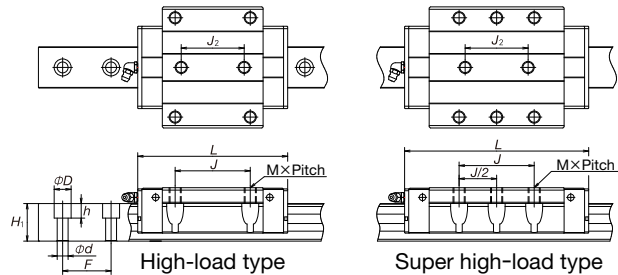
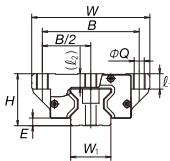
Model No.	Assembly		Roller slide dimensions										Rail				Basic load rating				
	Height H	E	Width W	Length L	Mounting hole						Hole size of grease fitting	Width W <sub>1</sub>	Height H <sub>1</sub>	Pitch F	Mounting bolt hole d x D x h	Dynamic	Static	Static moment (N·m)			
					B	B <sub>2</sub>	J	J <sub>2</sub>	J <sub>3</sub>	Number of holes								M x l <sub>1</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>VO</sub>
RB30AL	38	6.5	60	110.8	40	20	40	40	-	6	M8x7	phi 3	28	28	40	9x14x12	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	M8x8	M6x0.75	34	31	40	9x14x12	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	M10x10	M6x0.75	45	38	52.5	14x20x17	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	M12x12	Rc1/8	53	43.5	60	16x23x20	129 000	330 000	10 200	7 060	7 060
RB55TL				75	37.5	75	-	-	6	168 000							462 000	14 300	13 600	13 600	
RB55BL				65	-	95	95	47.5	-	6							168 000	462 000	14 300	13 600	13 600
RB55UL				75	37.5	-	-	-	6	168 000							462 000	14 300	13 600	13 600	
RB65AL	75	10	126	228.4	38	70	70	-	-	6	M16x16	Rc1/8	63	52	75	18x26x22	210 000	504 000	19 200	12 700	12 700
RB65BL				-	110	-	55	6	288 000	756 000							28 700	28 600	28 600		
RB65UL				38	120	120	-	6	288 000	756 000							28 700	28 600	28 600		

\*The arrangement of roller slide mounting holes of RB55AL and TL differs from that of BL and UL.

\*The arrangement of roller slide mounting holes of RB65BL and UL differs from that of others.

## ■ Flange type (for both tapped and bolt mounting holes)

High-load type : RB-EM  
Super high-load type : RB-GM



Unit: mm

Model No.	Assembly		Roller slide dimensions										Rail				Basic load rating				
	Height H	E	Width W	Length L	Mounting hole						Hole size of grease fitting	Width W <sub>1</sub>	Height H <sub>1</sub>	Pitch F	Mounting bolt hole d x D x h	Dynamic	Static	Static moment (N·m)			
					B	J	J <sub>2</sub>	Number of holes	M x l <sub>1</sub> (l <sub>2</sub> )	Q x l <sub>1</sub> (l <sub>2</sub> )								M <sub>RO</sub>	M <sub>PO</sub>	M <sub>VO</sub>	
RB30EM	38	6.5	90	110.8	72	52	44	6	M10x12(8.5)	8.6x12(8.5)	phi 3	28	28	40	9x14x12	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)	M6x0.75	34	31	40	9x14x12	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)	M6x0.75	45	38	52.5	14x20x17	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	16x23x20	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	18x26x22	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 No.  
See dimensions table

② Rail length (mm)

④ Material and surface treatment code  
C Special high carbon steel  
D Special high carbon steel with surface treatment

⑤ Number of roller slides  
Number of roller slides per rail

⑥ Design number  
Add to reference number

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

With NSK K1  
K3 Ultra precision grade  
K4 Super precision grade  
K5 High precision grade  
K6 Precision grade

⑧ Preload  
3 Medium preload (Z3)

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

For more information about NSK products, please contact:

[www.nsk.com](http://www.nsk.com)