

SLIDE GUIDE Miniature SEBS Type

The NB slide guide SEBS type is a linear motion bearing in which the ball elements roll along two raceway grooves. This is the smallest and lightest slide guide series offered by Nippon Bearing. The compact design allows for the size and weight of machinery and other equipment to be reduced.

STRUCTURE AND ADVANTAGES

The SEBS type slide guide consists of a rail with precisely machined raceway grooves and a block assembly consisting of the main body, return caps and ball elements.

Retained Ball

Because of the ball retainers, the SEBS-B type is able to be removed from the guide rail, simplifying its installation and resulting in lower assembly costs.

All Stainless Steel Type

By using stainless steel for the return caps, the SEBS-BM type is made from all stainless steel components, making it the ideal choice for special environments such as high temperature, clean room, or vacuum applications.

Moment Resistant

A wide block type, a long block type, and a wide/long block type are moment resistant slide guide types. The most suitable type can be selected for any demanding operating condition.

Tapped Hole Rail Type

For the SEBS rails, counterbore (standard) and optional tapped hole (N) types are available enabling various installation methods.

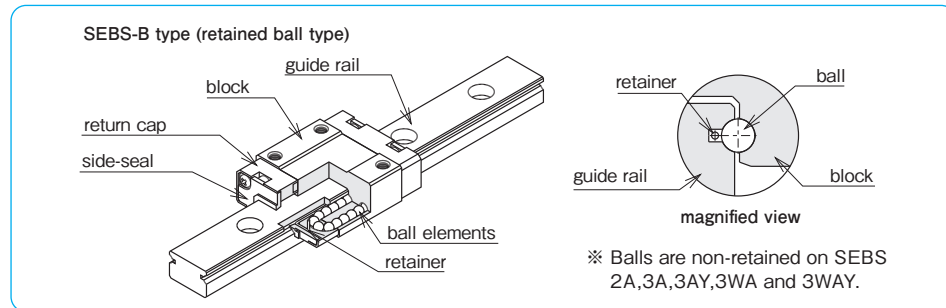
Compact Design

SEBS type has a 2-row, 4-point contact structure. This structure minimizes the installation height, which contributes to light-weight and miniaturization of machinery and equipment.

AD Profile

AD profile dissipates guide block deformation caused by installation. (refer to page A-21)

Figure A-39 Structure of SEBS type Slide Guide



SEBS-A type (non-retained ball type)



TYPES

The SEBS type slide guides are categorized according to their block shape and the rail installation method.

	short block standard type rail(counterbore) N type rail(tapped hole)	standard block standard type rail(counterbore) N type rail(tapped hole)	long block standard type rail(counterbore) N type rail(tapped hole)
	SEBS-BS type P.A-28~	SEBS-A type SEBS-B type P.A-28~	SEBS-AY type SEBS-BY type P.A-28~
all stainless steel	SEBS-BSM type P.A-28~	SEBS-BM type P.A-28~	SEBS-BYM type P.A-28~
wide type	SEBS-WBS type P.A-34~	SEBS-WA type SEBS-WB type P.A-34~	SEBS-WAY type SEBS-WBY type P.A-34~

ACCURACY

The SEBS slide guides are available in two grades of accuracy: high grade and precision grade (P).

Table A-8 Accuracy unit : mm

accuracy grade	high	precision
accuracy symbol	blank	P
allowable dimensional difference in height H	±0.020	±0.010
paired difference for height H	0.015	0.007
allowable dimensional difference in width W	±0.025	±0.015
paired difference for width W	0.020	0.010
running parallelism of surface C to surface A	refer to figure A-40,41	
running parallelism of surface D to surface B		

Figure A-40 Accuracy

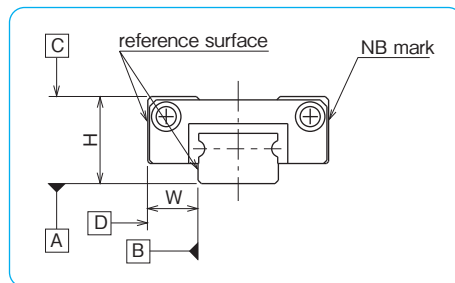
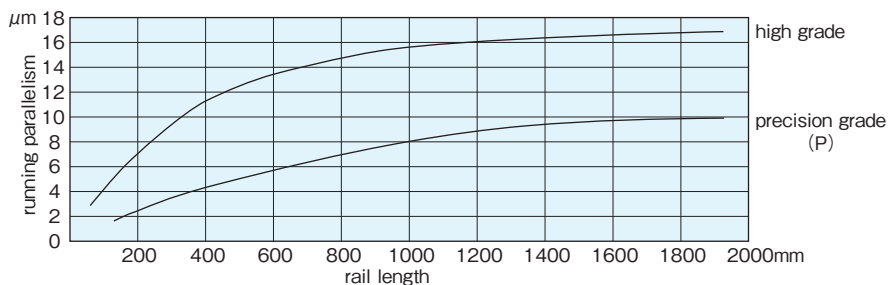


Figure A-41 Motion Accuracy



PRELOAD

SEBS slide guides are available with a standard preload (blank), light preload (T1), and a positive-clearance (T0).

Table A-9 Preload Symbol and Radial Clearance unit : µm

size	preload and symbol		
	clearance T0	standard blank	light* T1
2	+1~+3	-	-
3			
5			
7	+3~+6	-3~0	-4~-2
9			
12			
15	+4~+8	-3~0	-7~-3
20			
3W			+1~+3
5W			
7W			
9W	+3~+6	-3~0	-4~-2
12W			
15W			+4~+8

Table A-10 Operating Conditions and Preload

preload	symbol	operating conditions
clearance	T0	light motion is required. installation errors to be absorbed.
standard	blank	minute vibration is applied. accurate motion is required. moment is applied in a given direction.
light*	T1	light vibration is applied. light torsional load is applied. moment is applied.

* Frictional resistance may be affected by preload.

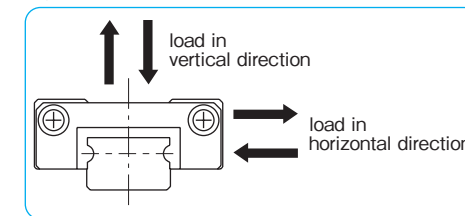
LOAD RATING

The load rating for SEBS slide guides depends on the direction of load.

Table A-11 Load Rating

		retained ball type	non-retained ball type
basic dynamic load rating	vertical	1.00×C	1.00×C
	horizontal	0.84×C	1.19×C
basic static load rating	vertical	1.00×C ₀	1.00×C ₀
	horizontal	0.84×C ₀	1.19×C ₀

Figure A-42 Direction of Load



EQUIVALENT LOAD

For a guide to which vertical load and horizontal load are applied at the same time, calculate its static equivalent load using the following equation.

$$P = Pa + X \cdot Ps$$

P: equivalent load Pa: vertical load Ps: horizontal load
X: 0.84 for SEBS-A type; 1.19 for SEBS-B type

RAIL LENGTH

NB offers a variety of commonly used rails as standard rail lengths (described in each dimension table). Other than the standard rail length can also be offered.

In this case, if the N · (N) dimension is different from the value in each dimension table, please indicate as shown in the example. Please inquire us about changing the P dimension.

Please refer to the table values for the manufacturing range of N · (N) dimensions.

Although the rail length can be offered out of the recommended range, please be careful not to interfere with the mounting hole or affect the assembly accuracy.

part number structure (Indicate after the overall rail length or rail mounting hole symbol)

SEBS 9B UU 1 T1 -200 (N=10) [N · (N) =10]

SEBS 15B 2 -345 N (N=5/20) P [N=5, (N) =20]

Figure A-43 Rail

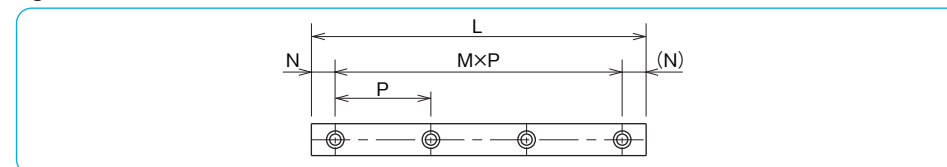


Table A-12 N Dimension (standard type) unit : mm

size	N	
	and over	less than
2	3	7
3		8
5		10.5
7		14
9	4	16.5
12		24
15		36
20		36

Table A-13 N Dimension (wide type) unit : mm

size	N	
	and over	less than
3W	3	10.5
5W		14
7W	4	19
9W		19
12W	5	25
15W		25

MOUNTING

Mounting Surface Profile

Slide guides are mounted by pushing the reference surface of the rail and the block against the shoulder provided on the mounting surface. An undercut or a radius corner should be provided at the corner of the shoulder to prevent interference. The recommended shoulder height values on the mounting reference surface are shown in Table A-14. (Table A-15 for corner radius)

Figure A-44 Mounting Surface Profile-1

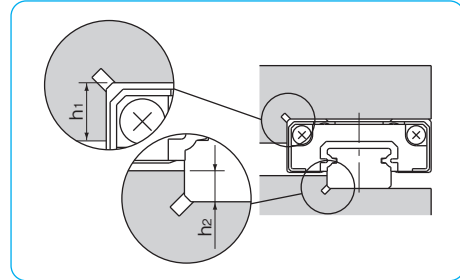


Figure A-45 Mounting Surface Profile-2

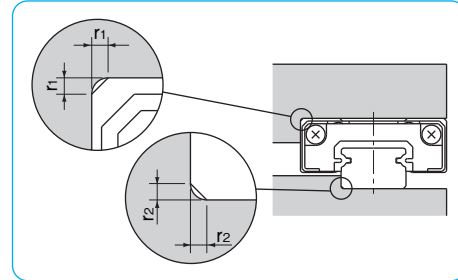


Table A-14 Shoulder Height on the Mounting Reference Surface unit : mm

size	shoulder height on the block side h ₁	shoulder height on the rail side h ₂
2	1	0.5
3	1.2	0.8
5	2	1
7	2.5	1
9	3	1.5
12	4	2
15	5	3.5
20	5	5
3W	1.5	0.8
5W	2	1
7W	3	1.5
9W	3	1.5
12W	4	2.5
15W	5	2.5

Table A-15 Maximum Corner Radius Values unit : mm

size	block mounting part r ₁	rail mounting part r ₂
2	0.1	0.1
3	0.15	0.1
5	0.3	0.3
7	0.3	0.3
9	0.3	0.3
12	0.3	0.3
15	0.3	0.5
20	0.3	0.5
3W	0.15	0.1
5W	0.3	0.3
7W	0.3	0.3
9W	0.3	0.3
12W	0.3	0.3
15W	0.3	0.3

Recommended Torque Values (Rail)

The screws to fasten the rail should be tightened to an equal torque using a torque wrench in order to secure the motion accuracy. The recommended torque values are given in Table A-16. Please adjust the torque depending on the operating conditions.

Table A-16 Recommended Torque unit : N · m

size	M1	M1.4	M1.6	M2	M2.6	M3	M4	M5	M6
recommended torque	0.03	0.10	0.15	0.3	0.65	1.0	2.3	4.7	8.0

(when using stainless steel screw A2-70)

MOUNTING SCREW

Extremely small custom screws are available from NB.

Figure A-46 Mounting Screw (stainless steel)

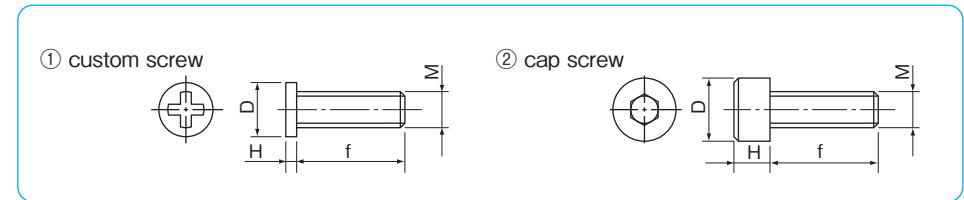


Table A-17 Mounting Screw (stainless steel)

type	shape	size	D mm	H mm	pitch mm	f mm
custom screw	Figure A-46①	M1	1.8	0.45	0.25	3, 4, 5
		M1.4	2.5	0.8	0.3	2.5, 3, 4
		M1.6	2.3	0.5	0.35	4, 5, 6
		M2	3	0.6	0.4	6
cap screw	Figure A-46②	M2	3.8	2	0.4	4, 5, 6, 8, 10
		M2.6	4.5	2.6	0.45	4, 5, 6, 8, 10

LUBRICATION

A high grade lithium soap based grease is applied to the NB slide guides prior to shipment for immediate use.

Please relubricate with a similar type of grease periodically depending on the operating conditions. For use in clean rooms or vacuum environments, NB slide guides without grease are available upon request.

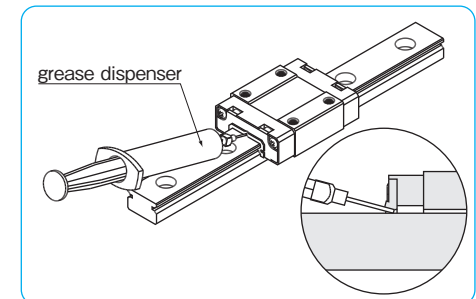
Please contact NB for customer specified grease types.

A special syringe lubricant dispenser (refer to Figure A-47) is available from NB as an option. In particular, the SEBS-B retained ball type has a special structure that allows the user to replenish lubricant easily (refer to page Eng-44), as the magnified view of Figure A-47 shows.

Please refer to page Eng-41 for details on the low dust generation grease.

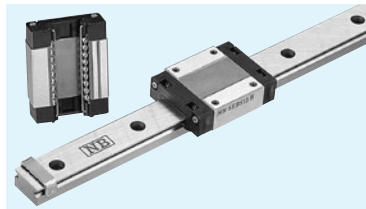


Figure A-47 Greasing Method



SEBS TYPE

-2/3/5/7-



※ Balls are non-retained for size 2A,3A and 3AY

part number structure

example **SEBS 7B Y M UU 2 T1 -280 N P/W2**

SEBS : anti-corrosion

size

block

S: short

blank: standard

Y: long

return cap

blank: resin

M: stainless steel

seal (refer to page A-14)

blank: without side-seal

UU: with side-seals

number of blocks attached to one rail

preload symbol (refer to page A-24)

TO: clearance

blank: standard

T1: light

symbol for number of axes*

blank: single axis

W2: 2 parallel axes

W3: 3 parallel axes

accuracy grade

(refer to page A-24)

blank: high

P: precision

rail mounting hole

blank: counterbore

N: tapped hole

total length of rail

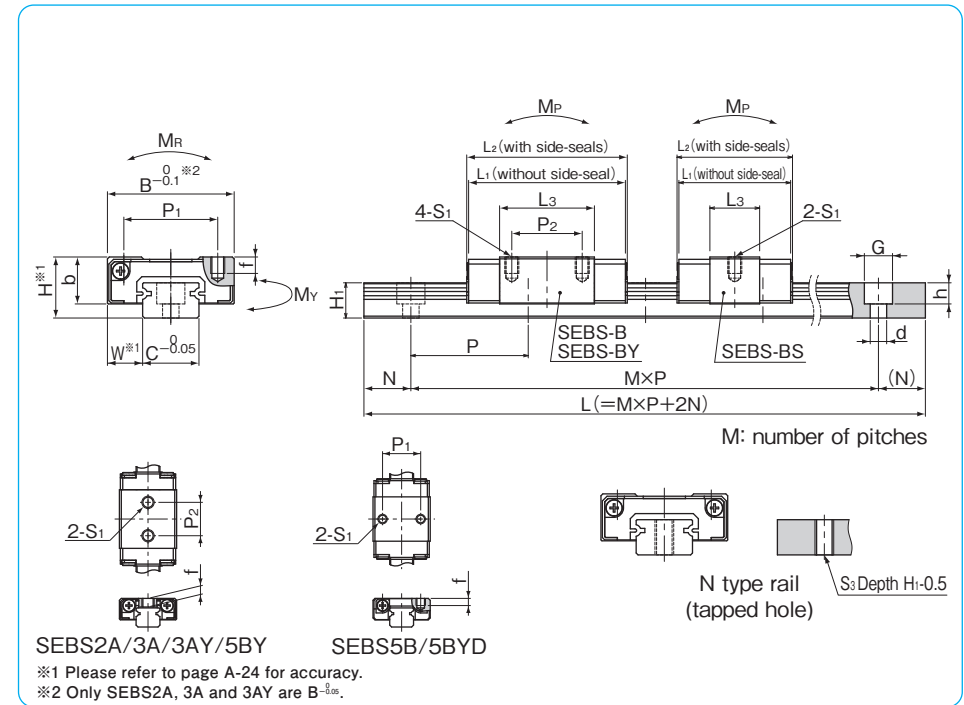
※ The symbol for the number of axes does not mean the number of rails ordered.

part number		assembly dimensions		block dimensions									
resin return cap	stainless return cap	H	W	B	L ₁	L ₂	P ₁	P ₂	S ₁	f	L ₃	b	
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
SEBS 2A	—	3.2	2	6	12.9	14.3	—	4	M1.4	1.05	9.3	2.5	
SEBS 3A	—	4	2.5	8	10.5	11.8	—	3.5	M1.6	1.3	6.5	3	
SEBS 3AY	—				14.5	15.8	—	5.5	M2		10.5		
SEBS 5B	SEBS 5BM	6	3.5	12	16.5	16.9	8	—	M2	1.5	9.3	4.5	
SEBS 5BY	SEBS 5BYM				19.5	19.9	—	7	M2.6		1.8		12.3
SEBS 5BYD	SEBS 5BYDM				8	—	M2	1.5	—		—		
SEBS 7BS	SEBS 7BSM	8	5	17	18.2	19	—	—	M2	2.5	8.8	6.5	
SEBS 7B	SEBS 7BM				22.2	23	12	8			12.8		
SEBS 7BY	SEBS 7BYM				31.7	32.5	—	13			22.3		

part number	standard rail length L mm															
SEBS 2A	32	40	56	80	104											
SEBS 3A	30	40	60	80	100											
SEBS 5B	40	55	70	85	100	115	130	145	160							
SEBS 7B	40	55	70	85	100	115	130	145	160	175	190	205	220	235	250	265

Rails exceeding the maximum specified length may be fabricated if joints are used. Please contact NB for assistance.

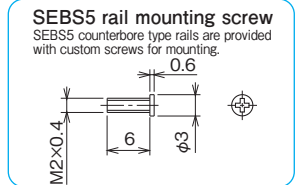
Only tapped hole rail is available for SEBS2A and 3A.



guide rail dimensions						basic load rating			allowable static moment			mass		guide rail	block size
H ₁	C	d×G×h	S ₃	N	P	dynamic C	static Co	M _P	M _Y	M _R	block g resin return cap	block g stainless return cap	guide rail g/100mm	block size	
mm	mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	mm	mm	mm		
2	2	—	M1	4	8	0.21	0.38	0.53 2.77	0.64 3.30	0.41	0.8	—	2.8	2A	
2.6	3	—	M1.6	—	10	0.25	0.36	0.39 2.42	0.46 2.88	0.57	1	—	5	3A	
						0.35	0.58	0.97 5.18	1.16 6.18	0.93	2	—	3AY		
4	5	2.4×3.5×0.8	M2.6	—	5	0.52	0.75	1.13 7.86	0.95 6.59	1.96	3	4	13	5B	
						0.64	1.00	1.94 12.0	1.63 10.0	2.62	4	5	5BY 5BYD		
4.7	7	2.4×4.2×2.3	M3	—	15	0.92	1.05	1.57 13.6	1.32 11.4	3.86	7	10	—	7BS	
						1.28	1.69	3.66 25.4	3.07 21.3	6.18	9	12	7B		
						1.90	2.95	10.4 59.1	8.74 49.6	10.8	15	18	7BY		

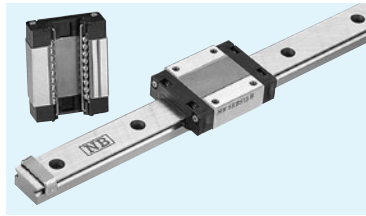
M_{P2} and M_{Y2} are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

	maximum length mm	
	counterbore	tapped hole (N type)
—	150	—
600	300	—
280 295 310	1,300	700



SEBS TYPE

-9/12-



part number structure

example **SEBS 12B Y M UU 2 T1 -370 N P/W2**

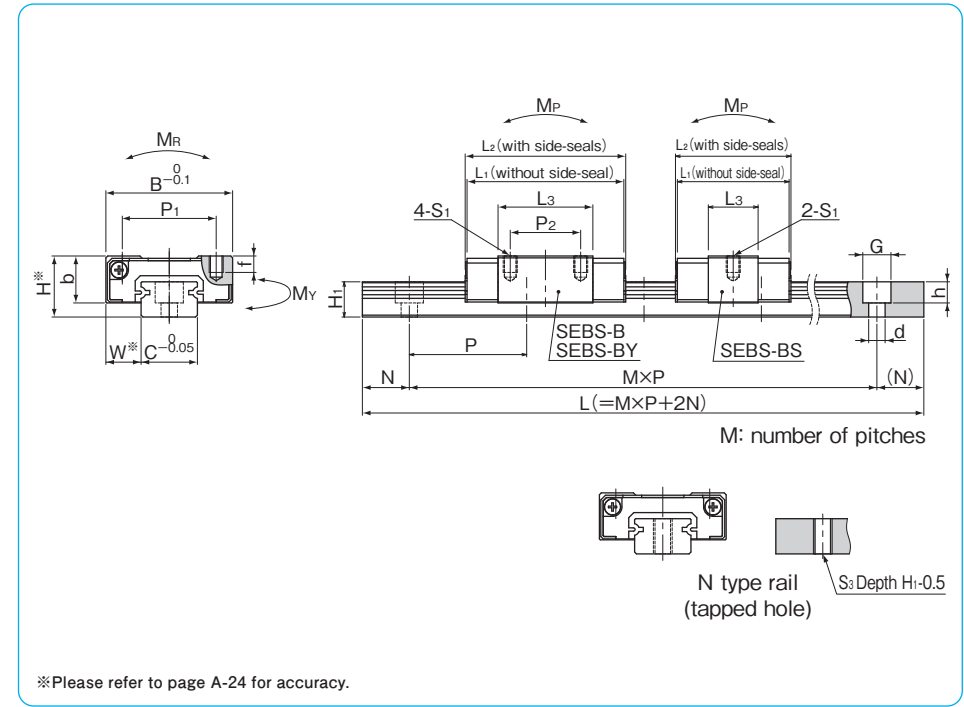
SEBS: anti-corrosion	size	block	S: short blank: standard Y: long	return cap	blank: resin M: stainless steel	seal (refer to page A-14)	blank: without side-seal UU: with side-seals	number of blocks attached to one rail	preload symbol (refer to page A-24)	blank: standard T1: light	symbol for number of axes*	blank: single axis W2: 2 parallel axes W3: 3 parallel axes	accuracy grade	(refer to page A-24)	blank: high P: precision	rail mounting hole	blank: counterbore N: tapped hole	total length of rail
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* The symbol for the number of axes does not mean the number of rails ordered.

part number		assembly dimensions		block dimensions								
resin	stainless	H	W	B	L ₁	L ₂	P ₁	P ₂	S ₁	f	L ₃	b
return cap	return cap	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SEBS 9BS	SEBS 9BSM	10	5.5	20	20.5	21.3	15	10	M3	3	10.1	7.8
SEBS 9B	SEBS 9BM				30	30.8					19.6	
SEBS 9BY	SEBS 9BYM				39.5	40.3					16	
SEBS12BS	SEBS12BSM	13	7.5	27	24.2	24.6	20	15	M3	3.5	10.6	10
SEBS12B	SEBS12BM				33.8	34.2					20.2	
SEBS12BY	SEBS12BYM				45.7	46.1					20	

part number	standard rail length L mm															
SEBS 9B	55	75	95	115	135	155	175	195	215	235	255	275	295	315	335	355
SEBS12B	70	95	120	145	170	195	220	245	270	295	320	345	370	395	420	445

Rails exceeding the maximum specified length may be fabricated if joints are used. Please contact NB for assistance.



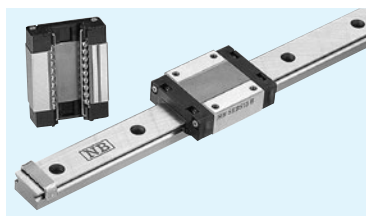
guide rail dimensions						basic load rating		allowable static moment			mass		guide rail	block size	
H ₁	C	d×G×h		S ₃	N	P	dynamic C	static Co	M _P	M _Y	M _R	block g resin return cap	block g stainless return cap	guide rail	block size
mm	mm	mm		mm	mm	mm	kN	kN	N·m	N·m	N·m	mm	mm	mm	mm
5.5	9	3.5×6×3.5		M4	7.5	20	1.05	1.26	2.17	1.82	5.90	11	15	31	9BS
							1.70	2.53	7.78	6.53	11.8	18	22		
							2.26	3.80	16.8	14.1	17.7	27	31		
7.5	12	3.5×6×4.5		M4	10	25	1.90	1.91	3.63	3.04	11.9	21	30	59	12BS
							3.09	3.82	12.4	10.4	23.9	35	44		
							4.34	6.21	30.7	25.7	38.8	53	62		
									170	143					12BY

M_{P2} and M_{Y2} are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

						maximum length mm
						counterbore
						tapped hole (N type)
375	395	415	435	455	475	1,480
470	495					1,000

SEBS TYPE

-15/20-



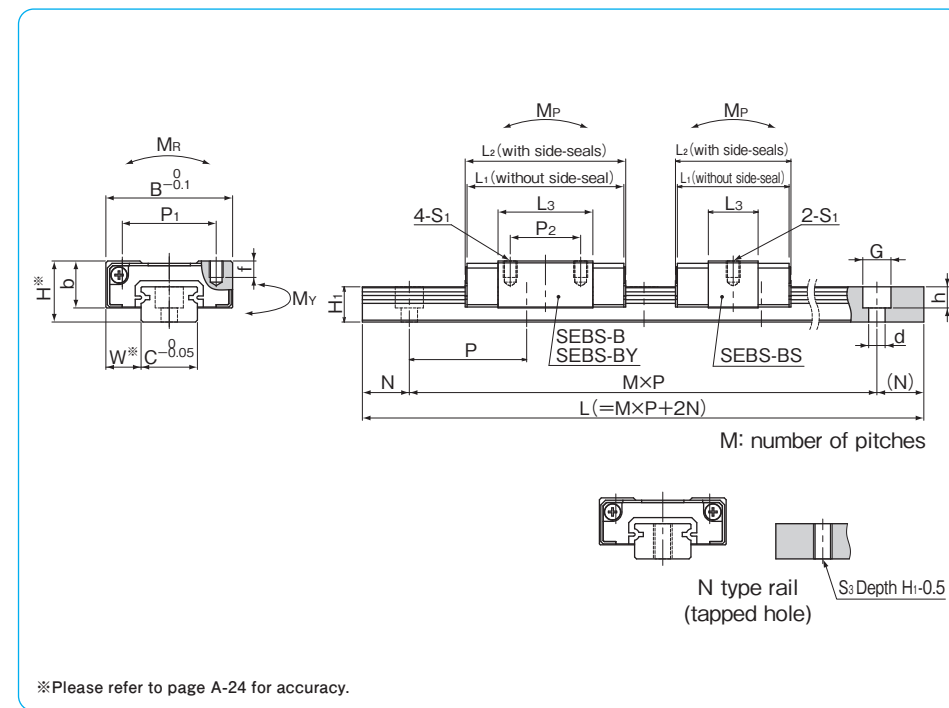
part number structure

example **SEBS 15B Y M UU 2 T1 - 510 N P / W2**

SEBS: anti-corrosion	size	block	S: short blank: standard Y: long	return cap	blank: resin M: stainless steel	seal (refer to page A-14)	blank: without side-seal UU: with side-seals	number of blocks attached to one rail	preload symbol (refer to page A-24)	blank: standard T1: light	symbol for number of axes*	blank: single axis W2: 2 parallel axes W3: 3 parallel axes	accuracy grade	(refer to page A-24)	blank: high P: precision	rail mounting hole	blank: counterbore N: tapped hole	total length of rail
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* The symbol for the number of axes does not mean the number of rails ordered.

part number		assembly dimensions		block dimensions								
resin	stainless	H	W	B	L ₁	L ₂	P ₁	P ₂	S ₁	f	L ₃	b
return cap	return cap	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SEBS15BS	SEBS15BSM	16	8.5	32	30	30.4	25	20	M3	4	15	12
SEBS15B	SEBS15BM				42.6	43					27.6	
SEBS15BY	SEBS15BYM				58.6	59					43.6	
SEBS20B	SEBS20BM	25	13	46	65.9	65.9	38	38	M4	6	44.7	17.5
SEBS20BY	SEBS20BYM				85.7	85.7					64.5	



guide rail dimensions						basic load rating		allowable static moment			mass		guide rail	block size	
H ₁	C	d×G×h	S ₃	N	P	dynamic C	static Co	M _P	M _Y	M _R	block resin return cap	block stainless return cap	g rail	block size	
mm	mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	mm	mm	g/100mm	mm	
9.5	15	3.5×6×4.5	M5	15	40	3.49	3.38	8.56	7.18	26.2	40	53	97	15BS	
						5.65	6.76	29.2	24.5	52.4	64	77			15BY
						7.93	10.9	72.4	60.7	85.1	98	110			
15	20	6×9.5×8.5	M6	20	60	11.4	14.5	103	87.0	149	228	266	205	20B	
						14.8	21.2	210	176	217	323	360			20BY

M_{P2} and M_{Y2} are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

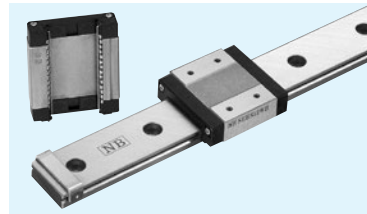
part number	standard rail length L mm															
SEBS15B	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630	670
SEBS20B	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000		

Rails exceeding the maximum specified length may be fabricated if joints are used. Please contact NB for assistance.

maximum counterbore	length mm
1,480	1,000

SEBS-W TYPE

- Wide Type -
- 3/5/7 -



※ Balls are non-retained for SEBS 3WA and 3WAY.

part number structure

example **SEBS 7WB Y UU 2 T1 - 230 N P / W2**

SEBS: anti-corrosion

size

block
S: short
blank: standard
Y: long

seal (refer to page A-14)
blank: without side-seal
UU: with side-seals

number of blocks attached to one rail

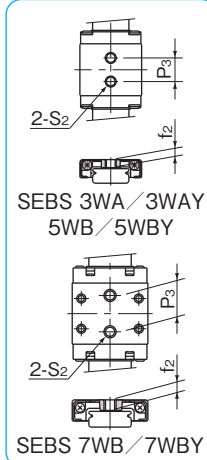
preload symbol (refer to page A-24)
TO: clearance
blank: standard
T1: light

symbol for number of axes*
blank: single axis
W2: 2 parallel axes
W3: 3 parallel axes

accuracy grade (refer to page A-24)
blank: high
P: precision

rail mounting hole
blank: counterbore
N: tapped hole

total length of rail

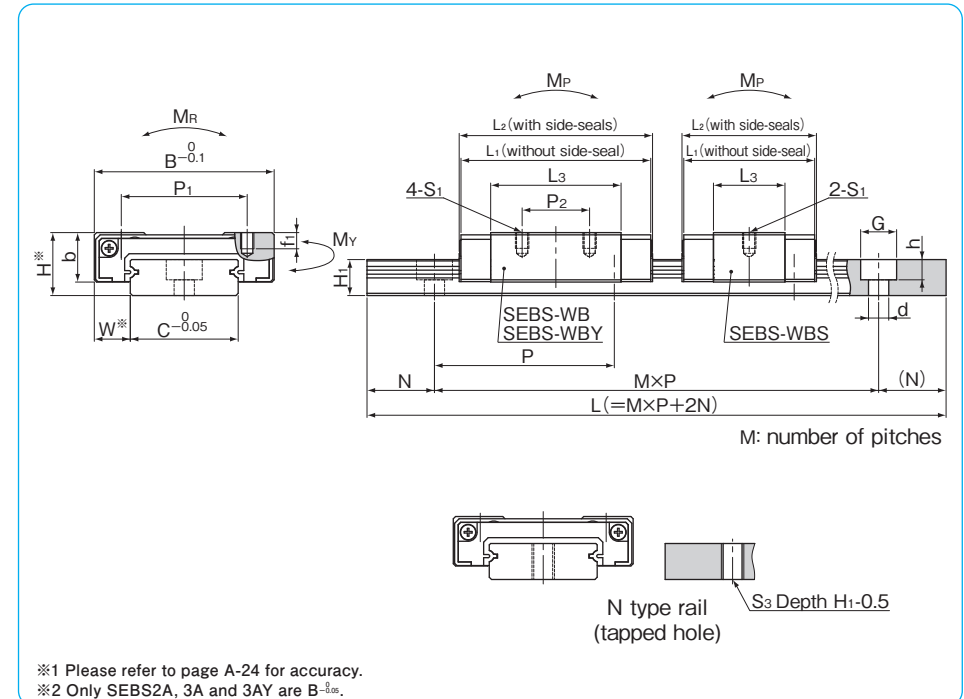


※ The symbol for the number of axes does not mean the number of rails ordered.

part number	assembly dimensions			block dimensions										
	H	W	B	L ₁	L ₂	P ₁	P ₂	S ₁	f ₁	L ₃	P ₃	S ₂	f ₂	b
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SEBS 3WA	4.5	3	12	14.2	15	—	—	—	—	9.7	4.5	M2	1.7	3.5
SEBS 3WAY				19	19.8					14.5	8			
SEBS 5WB	6.5	3.5	17	21.5	21.9	—	—	—	—	14.3	6.5	M3	2.3	5
SEBS 5WBY				27.5	27.9					20.3	11			
SEBS 7WBS	9	5.5	25	21.1	21.9	19	10	M3	2.8	10.7	—	M4	3.5	7
SEBS 7WB				30.6	31.4					20.2	12			
SEBS 7WBY				39.3	40.1					28.9	18			

part number	standard rail length L mm														
SEBS 3WA	40	55	70	85	100										
SEBS 5WB	50	70	90	110	130	150	170	190							
SEBS 7WB	50	80	110	140	170	200	230	260	290	320	350	380	410	440	470

Rails exceeding the maximum specified length may be fabricated if joints are used. Please contact NB for assistance.

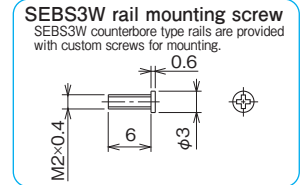


※1 Please refer to page A-24 for accuracy.
※2 Only SEBS2A, 3A and 3AY are B-0.1s.

guide rail dimensions										basic load rating			allowable static moment			mass		block size
H ₁	C	B ₁	d×G×h	S ₃	N	P	dynamic C	static C ₀	M _P	M _Y	M _R	block	guide rail	block size				
mm	mm	mm	mm		mm	mm	kN	kN	N·m	N·m	N·m	g	g/100mm					
2.6	6	—	2.4×4×1.5	M3	5	15	0.33	0.54	0.83	0.99	1.67	3	10	3WA				
							0.44	0.81	1.81	2.15	2.51	4			3WAY			
4	10	—	3×5.5×3	M3	5	20	0.71	1.17	2.60	2.18	5.99	7	26	5WB				
							0.91	1.68	5.16	4.33	8.56	10			5WBY			
5.2	14	—	3.5×6×3.2	M4	10	30	1.05	1.26	2.17	1.82	9.07	12	51	7WBS				
							1.71	2.53	7.78	6.53	18.1	20			7WB			
							2.26	3.80	16.8	14.1	27.2	28			7WBY			

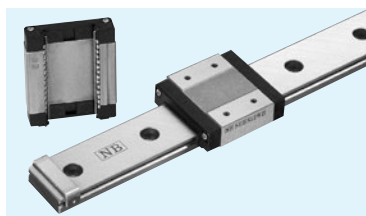
M_{P2} and M_{Y2} are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

part number	maximum counterbore	length mm (tapped hole (N type))
SEBS 3WA	500	150
SEBS 5WB	600	500
SEBS 7WB	1,300	700



SEBS-W TYPE

— Wide Type —
— 9/12/15 —



part number structure

example **SEBS 15WB Y UU 2 T1 - 510 N P / W2**

- SEBS: anti-corrosion
- size
- block
- S: short
- blank: standard
- Y: long
- seal (refer to page A-14)
- blank: without side-seal
- UU: with side-seals
- number of blocks attached to one rail
- preload symbol (refer to page A-24)
- TO: clearance
- blank: standard
- T1: light
- symbol for number of axes*
 - blank: single axis
 - W2: 2 parallel axes
 - W3: 3 parallel axes
- accuracy grade (refer to page A-24)
- blank: high
- P: precision
- rail mounting hole
- blank: counterbore
- N: tapped hole
- total length of rail

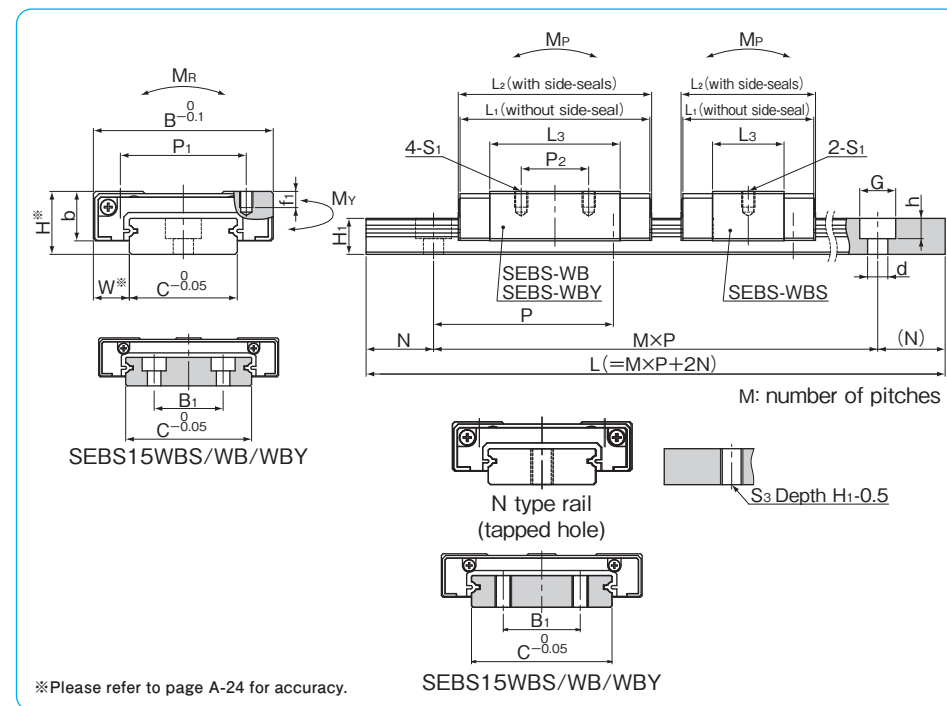
* The symbol for the number of axes does not mean the number of rails ordered.

part number	assembly dimensions		block dimensions												
	H	W	B	L ₁	L ₂	P ₁	P ₂	S ₁	f ₁	L ₃	P ₃	S ₂	f ₂	b	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SEBS 9WBS	12	6	30	24.2	25	21	—	M3	2.8	13	—	—	—	9	
SEBS 9WB				37.5	38.3		12			26.3					
SEBS 9WB Y				49.5	50.3		23			24					3
SEBS 12WBS	14	8	40	29.7	30.1	28	—	M3	3.5	15.9	—	—	—	11	
SEBS 12WB				42.8	43.2		15			29					
SEBS 12WB Y				58.3	58.7		28			28					44.5
SEBS 15WBS	16	9	60	39.4	39.8	45	—	M4	4.5	24	—	—	—	13	
SEBS 15WB				54.2	54.6		20			38.8					
SEBS 15WB Y				73.3	73.7		35			57.9					

part number	standard rail length L mm														
SEBS 9WB	50	80	110	140	170	200	230	260	290	320	350	380	410	440	470
SEBS 12WB	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630
SEBS 15WB	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630

Rails exceeding the maximum specified length may be fabricated if joints are used. Please contact NB for assistance.

The minimum standard rail can not be used for SEBS 9 WB Y, 15 WB Y.



guide rail dimensions										basic load rating			allowable static moment			mass		block size
H ₁	C	B ₁	d×G×h	S ₃	N	P	dynamic C	static C ₀	M _P	M _Y	M _R	block	guide rail	block size				
mm	mm	mm	mm		mm	mm	kN	kN	N·m	N·m	N·m	g	g/100mm					
7.5	18	—	3.5×6×4.5	M4	10	30	1.73	2.01	4.35	3.65	18.6	21	96	9WBS				
							2.96	4.36	18.1	15.2	40.4	37			9WB			
							3.87	6.38	37.4	31.4	59.0	52				9WB Y		
8	24	—	4.5×8×4.5	M5	15	40	2.53	2.86	7.38	6.19	35.1	43	137	12WBS				
							4.10	5.73	26.4	22.1	70.2	71			12WB			
							5.45	8.60	57.1	47.9	105	106				12WB Y		
9.5	42	23	4.5×8×4.5	M5	15	40	5.15	5.91	22.9	19.2	125	98	286	15WBS				
							7.49	10.1	62.2	52.2	215	148			15WB			
							9.95	15.2	134	113	323	216				15WB Y		

M_{P2} and M_{Y2} are allowable static moments when two blocks are used in close contact. 1kN≐102kgf 1N·m≐0.102kgf·m

		maximum length mm			
		counterbore	tapped hole (N type)		
500	530	1,480	1,000		
670	710				
670	710			750	790