

NB

NEW

SLIDE GUIDE

SEBS-BS type / SEBS-WBS type

New addition to the NB miniature guide SEBS series
Extra compact, short block series is lined up!

Six block types are available to be utilized in various applications!



short block
SEBS-BS type



standard block
SEBS-B type



long block
SEBS-BY type



short block•wide type
SEBS-WBS type



standard block•wide type
SEBS-WB type



long block•wide type
SEBS-WBY type

ISO9001 / ISO14001



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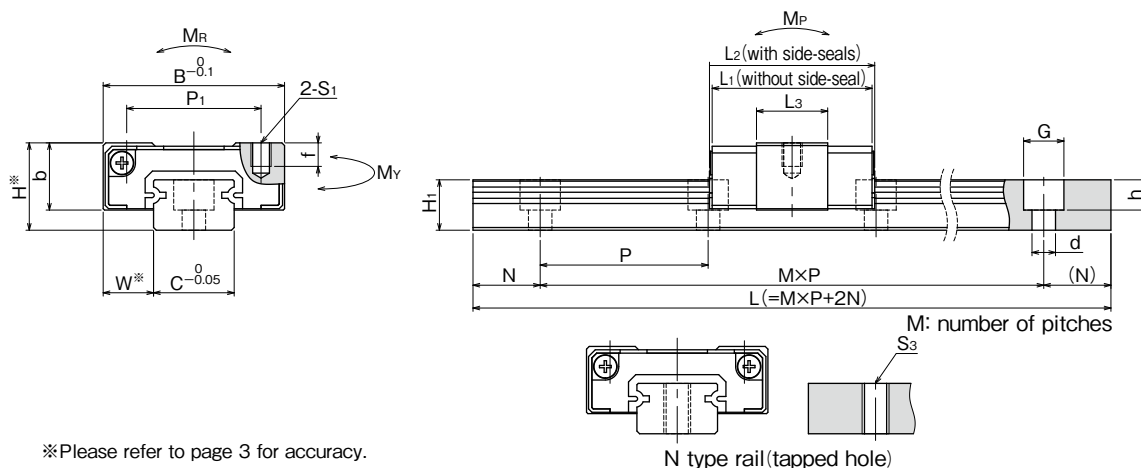
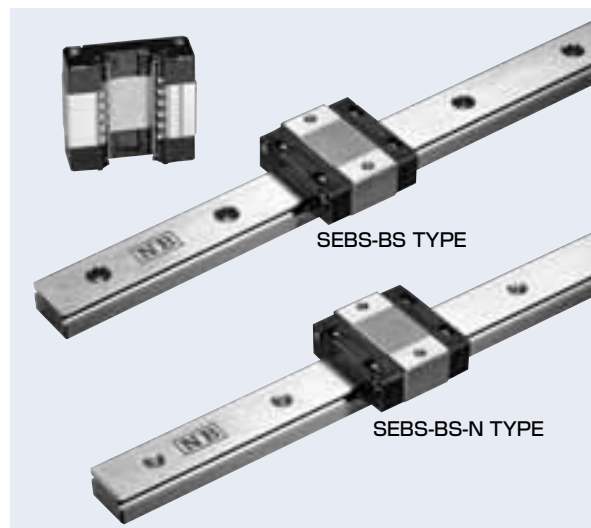
SEBS-BS/SEBS-BSM TYPE

— Retained Ball Type —

part number structure

example	SEBS	15B	S	M	UU	2	T1	-589	N	P	/W2
SEBS:											
anti-corrosion											
size											
block											
S: short											
return cap											
blank: resin											
M: stainless steel											
seal											
blank: without side-seal											
UU: with side-seals											
number of blocks attached to one rail											
preload symbol											
TO: clearance											
blank: standard											
T1: light											
symbol for number of axes*											
blank: single axis											
W2: 2 parallel axes											
W3: 3 parallel axes											
accuracy grade											
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.



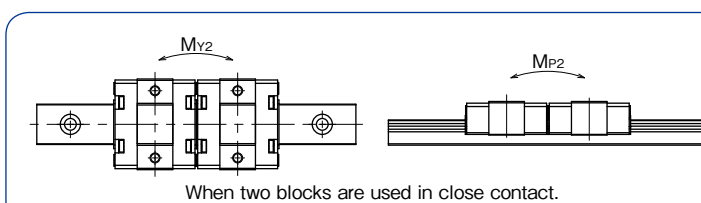
※Please refer to page 3 for accuracy.

part number		assembly dimensions		block dimensions								guide rail dimensions						basic load rating		allowable static moment			mass			block size
		H	W	B	L ₁	L ₂	P ₁	S ₁	f	L ₃	b	H ₁	C	d×G×h	S ₃	N	P	dynamic	static	M _P	M _Y	M _R	resin	stainless	guide	
resin return cap	stainless return cap	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	kN	kN	M _{P2}	M _{Y2}	N·m	return cap	return cap	g/100mm	
SEBS 7BS	SEBS 7BSM	8	5	17	18.2	19	12	M2	2.5	8.8	6.5	4.7	7	2.4×4.2×2.3	M3	5	15	0.92	1.05	1.57 13.6	1.32 11.4	3.86	7	10	21	7BS
SEBS 9BS	SEBS 9BSM	10	5.5	20	20.5	21.3	15	M3	3	10.1	7.8	5.5	9	3.5×6×3.5	M4	7.5	20	1.05	1.26	2.17 18.2	1.82 15.2	5.90	11	15	31	9BS
SEBS12BS	SEBS12BSM	13	7.5	27	24.2	24.6	20		3.5	10.6	10	7.5	12	3.5×6×4.5		10	25	1.90	1.91	3.63 32.4	3.04 27.2	11.9	21	30	59	12BS
SEBS15BS	SEBS15BSM	16	8.5	32	30	30.4	25		4	15	12	9.5	15		M5	15	40	3.49	3.38	8.56 67.5	7.18 56.6	26.2	40	53	97	15BS

part number	standard rail length																				maximum length mm			
	L mm																				counterbore	tapped hole (N type)		
SEBS 7B	40	55	70	85	100	115	130	145	160	175	190	205	220	235	250	265	280	295	310	1,000	700			
SEBS 9B	55	75	95	115	135	155	175	195	215	235	255	275	295	315	335	355	375	395	415	435	455	475	1,300	1,000
SEBS12B	70	95	120	145	170	195	220	245	270	295	320	345	370	395	420	445	470	495						
SEBS15B	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630	670								

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

part number	equivalent coefficient				
	Ep1	Ep2	Ey1	Ey2	Er
SEBS 7BS	6.70×10 ⁻¹	7.76×10 ⁻²	7.98×10 ⁻¹	9.25×10 ⁻²	2.74×10 ⁻¹
SEBS 9BS	5.83×10 ⁻¹	6.96×10 ⁻²	6.95×10 ⁻¹	8.30×10 ⁻²	2.15×10 ⁻¹
SEBS12BS	5.27×10 ⁻¹	5.90×10 ⁻²	6.28×10 ⁻¹	7.03×10 ⁻²	1.60×10 ⁻¹
SEBS15BS	3.95×10 ⁻¹	5.01×10 ⁻²	4.71×10 ⁻¹	5.97×10 ⁻²	1.30×10 ⁻¹



When two blocks are used in close contact.

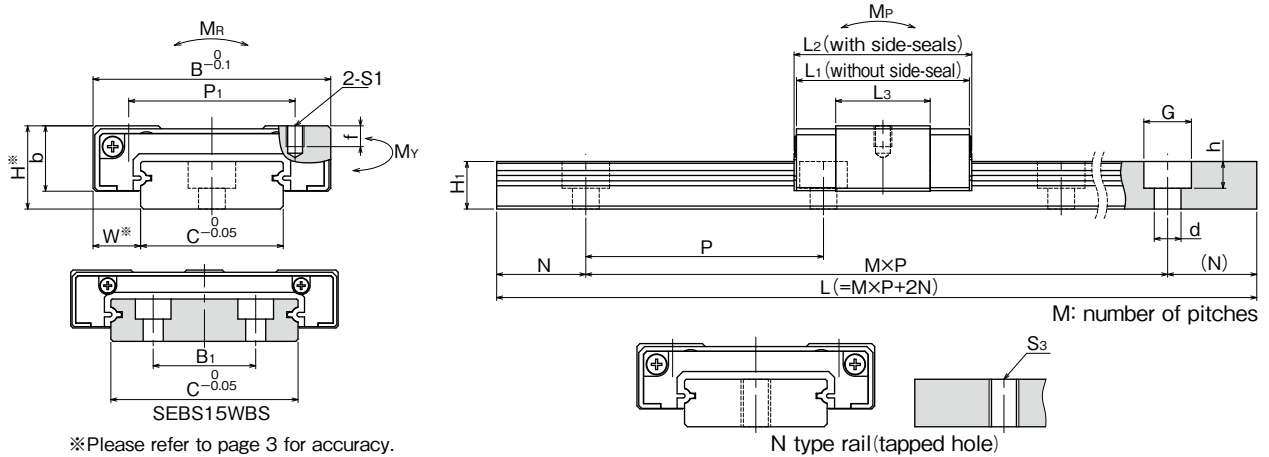
SEBS-WBS TYPE

— Retained Ball • Wide Type —

part number structure

example	SEBS	15WB	S	UU	2	T1	-589	N	P	/W2
SEBS:	anti-corrosion									
size										
block										
S:	short									
seal										
blank:	without side-seal									
UU:	with side-seals									
number of blocks attached to one rail										
preload symbol										
TO:	clearance									
blank:	standard									
T1:	light									
symbol for number of axes*										
blank:	single axis									
W2:	2 parallel axes									
W3:	3 parallel axes									
accuracy grade										
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.



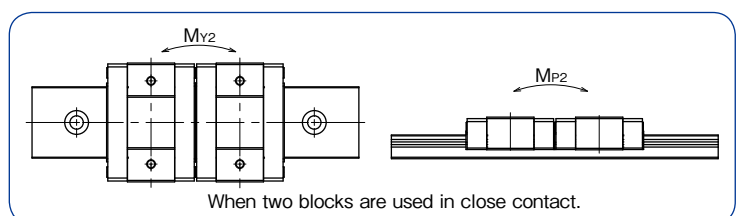
※Please refer to page 3 for accuracy.

part number	assembly dimensions		block dimensions								guide rail dimensions								basic load rating		allowable static moment			mass		block size
	H	W	B	L ₁	L ₂	P ₁	S ₁	f	L ₃	b	H ₁	C	B ₁	d×G×h	S ₃	N	P	dynamic	static	M _P	M _Y	M _R	block	guide rail		
	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm		mm	mm	C	Co	M _{P2}	M _{Y2}	N·m	g	g/100mm		
																			kN	kN	N·m	N·m	N·m			
SEBS 7WBS	9	5.5	25	21.1	21.9	19	M3	2.8	10.7	7	5.2	14	—	3.5×6×3.2	M4	10	30	1.05	1.26	2.17	1.82					
SEBS 9WBS	12	6	30	24.2	25	21			13	9	7.5	18	—	3.5×6×4.5				1.73	2.01	4.35	3.65	18.2	15.2	9.07	12	51
SEBS12WBS	14	8	40	29.7	30.1	28		3.5	15.9	11	8	24	—	4.5×8×4.5	M5	15	40	2.53	2.86	7.38	6.19					
SEBS15WBS	16	9	60	39.4	39.8	45		M4	4.5	24	13	9.5	42					23	5.15	5.91	22.9	19.2	146	122	125	98

part number	standard rail length															maximum length mm					
	L mm															counterbore	tapped hole (N type)				
SEBS 7WB	50	80	110	140	170	200	230	260	290	320	350	380	410	440	470	1,000	700				
SEBS 9WB	50	80	110	140	170	200	230	260	290	320	350	380	410	440	470	500	530	1,300	1,000		
SEBS12WB	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630	670	710				
SEBS15WB	70	110	150	190	230	270	310	350	390	430	470	510	550	590	630	670	710			750	790

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

part number	equivalent coefficient				
	Ep ₁	Ep ₂	Ey ₁	Ey ₂	Er
SEBS 7WBS	5.83×10 ⁻¹	6.96×10 ⁻²	6.95×10 ⁻¹	8.30×10 ⁻²	1.40×10 ⁻¹
SEBS 9WBS	4.63×10 ⁻¹	6.05×10 ⁻²	5.52×10 ⁻¹	7.21×10 ⁻²	1.09×10 ⁻¹
SEBS12WBS	3.89×10 ⁻¹	5.28×10 ⁻²	4.64×10 ⁻¹	6.29×10 ⁻²	8.17×10 ⁻²
SEBS15WBS	2.58×10 ⁻¹	4.06×10 ⁻²	3.07×10 ⁻¹	4.83×10 ⁻²	4.71×10 ⁻²



When two blocks are used in close contact.

ACCURACY

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

Table 1 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 1 and 2	
running parallelism of surface D to surface B		

Figure 1 Accuracy

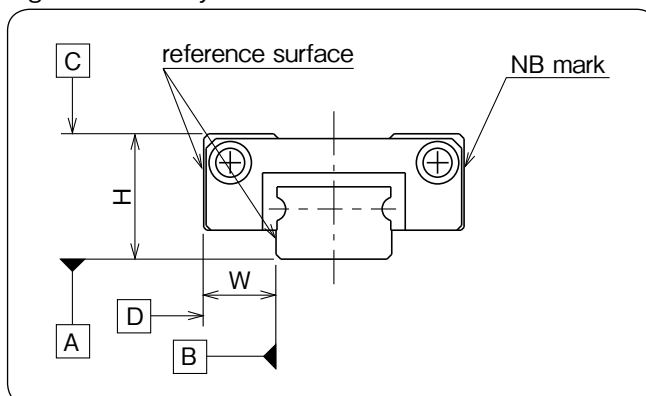
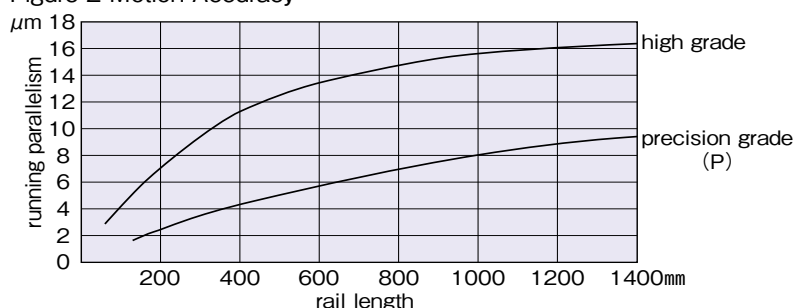


Figure 2 Motion Accuracy



PRELOAD

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

Table 2 Preload Symbol and Radial Clearance unit/μm

Table 2: Preload Symbol and Numerical Clearance				
size	preload and symbol			
	clearance T0	standard blank	light T1	
SEBS 7BS	+3~+6	-3~0	-4~-2	
SEBS 9BS				
SEBS12BS				
SEBS15BS	+4~+8	-3~0	-7~-3	
SEBS 7WBS	+3~+6		-4~-2	
SEBS 9WBS				
SEBS12WBS				
SEBS15WBS	+4~+8		-7~-3	

Table 3 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.

※Please refer to NB general catalog for standard block and long block.



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