

# SLIDE GUIDE SGL TYPE

The NB slide guide SGL type is a linear motion bearing utilizing the rolling motion of ball elements along four rows of raceway grooves. It can be used in various applications due to its compactness and high load capacity.

## STRUCTURE AND ADVANTAGES

The NB slide guide SGL type consists of a rail with 4 rows of precisely machined raceway grooves and a block assembly. The block assembly consists of the main body, ball elements, retainers, and return caps.

### High Load Capacity and Long Life

The use of relatively large ball elements and raceway grooves machined to a radius close to that of the ball elements increases the contact area resulting in a high load capacity and a long travel life.

### Low Friction

Because a 4-row/2-point contact design is used, low friction and stable motion characteristics are achieved even under a preloaded conditions.

### Omni-Directional Load Capacity

The ball elements are positioned at 45° contact angle so that the load capacity is equal in four directions (above, below, right and left).

### Absorption of Mounting Dimensional Error

Because the ball elements are positioned to increase their self-aligning characteristics, the dimensional error caused during installation is absorbed.

### Anti-corrosion Specification

The rail and block assembly can be treated with low temperature black chrome treatment to increase the

corrosion resistance. This treatment is standardized with the symbol "LB". Stainless steel SGLS type is suitable for use in clean room application.

### Dust Prevention

Side-seals are provided as a standard. To improve the dust prevention characteristics, under-seals, double-seals, scrapers, bellows and special rail mounting caps are also available.

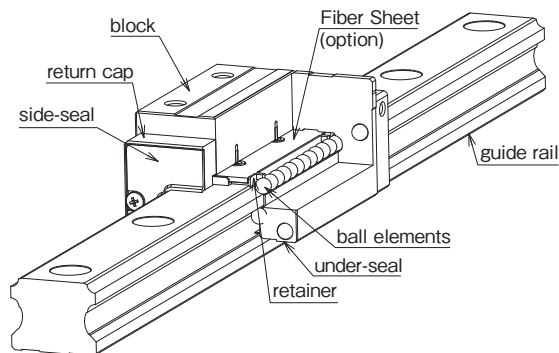
### Fiber Sheet Extends Lubricant Replenishment Intervals

A lubricant-containing Fiber Sheet incorporated in the block supplies appropriate amount of lubricant to the raceway grooves at appropriate intervals, which can significantly extend the lubricant replenishment interval. (refer to page A-18)

### REVERSE-SEAL

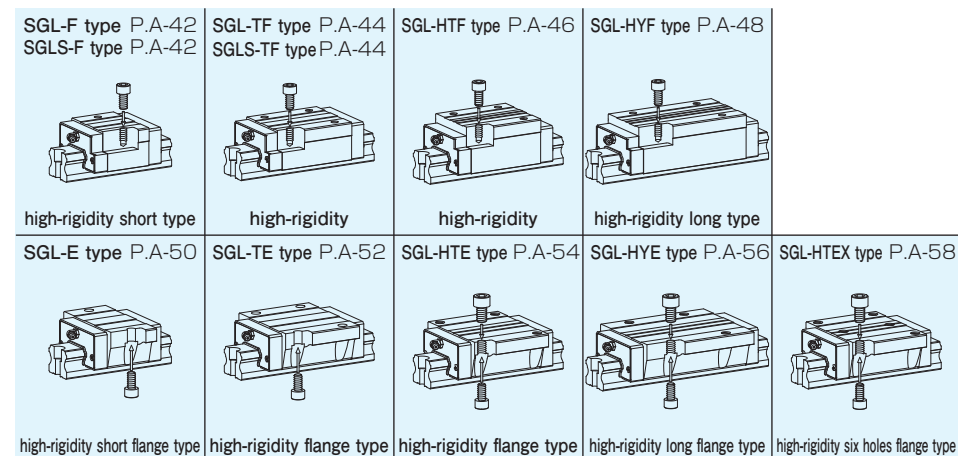
NB Reverse-seal realizes maintenance free by reducing grease leakage and loss. (refer to page A-19)

Figure A-48 Structure of SGL type Slide Guide



## BLOCK TYPES

Eleven SGL block types are available depending on the material and mounting method.



## ACCURACY

Three accuracy grades are available: standard grade (blank), high grade (H), and precision grade (P).

Table A-18 Accuracy

unit : mm

part number	SGL15,20			SGL25,30,35			SGL45		
	standard	high	precision	standard	high	precision	standard	high	precision
accuracy grade	standard	high	precision	standard	high	precision	standard	high	precision
accuracy symbol	blank	H	P	blank	H	P	blank	H	P
allowable dimensional tolerance for height H	±0.1	±0.03	-0.03~0	±0.1	±0.04	-0.04~0	±0.1	±0.05	-0.05~0
paired difference for height H	0.02	0.01	0.006	0.02	0.015	0.007	0.03	0.015	0.007
allowable dimensional tolerance for width W	±0.1	±0.03	-0.03~0	±0.1	±0.04	-0.04~0	±0.1	±0.05	-0.05~0
paired difference for width W	0.02	0.01	0.006	0.03	0.015	0.007	0.03	0.02	0.01
Running parallelism of surface C to surface A	refer to Figure A-49, 50								
Running parallelism of surface D to surface B									

Figure A-49 Motion Accuracy

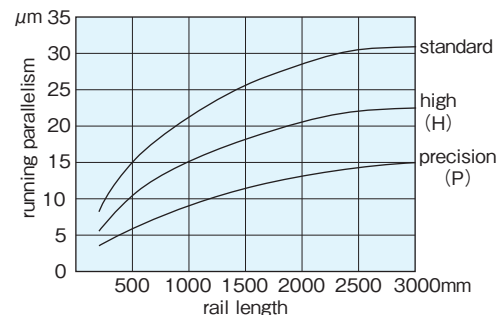
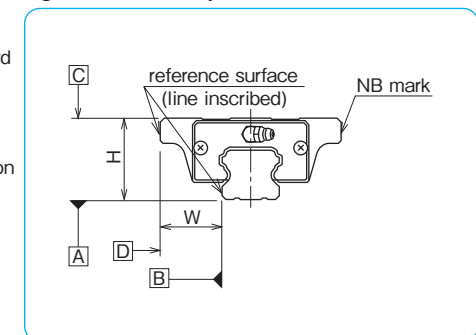


Figure A-50 Accuracy



## PRELOAD

SGL type slide guides are available with a standard preload (blank), light preload (T1), and medium preload (T2).

Table A-19 Preload Symbol and Radial Clearance unit :  $\mu\text{m}$

preload	standard	light	medium*
preload symbol	blank	T1	T2
SGL15	- 4~+2	-12~- 4	-
SGL20	- 5~+2	-14~- 5	-23~-14
SGL25	- 6~+3	-16~- 6	-26~-16
SGL30	- 7~+4	-19~- 7	-31~-19
SGL35	- 8~+4	-22~- 8	-35~-22
SGL45	-10~+5	-25~-10	-40~-25

Table A-20 Operating Conditions and Preload

preload	symbol	operating conditions
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.
medium*	T2	shock and vibration are applied. over-hang load is applied. torsional load is applied.

\* Frictional resistance may be affected by preload.

## 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.

Table A-21 N Dimension unit : mm

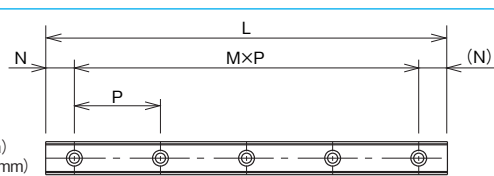
part number	N	
	and over	less than
SGL15	6	36
SGL20	10	40
SGL25	11	41
SGL30	12	52
SGL35	16	56
SGL45	20	72.5

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

**SGL 15 TF 1 T1 -330 D (N=15)** [N · (N) =15]

**SGL 35 HTE B 2 -700 (N=25/35) P** [N=25, (N) =35]

Figure A-51 Rail



## MOUNTING

Slide guides are generally mounted by pushing the reference surface of the rail and block against the shoulder of the mounting surface. An undercut should be provided at the corner of the shoulder in order to avoid interference with the corner of the rail or block. The recommended shoulder height values are shown in Table A-30.

The screws to fasten the rail should be tightened equally using a torque wrench in order to secure the motion accuracy. The recommended torque values are listed in Table A-29. Please adjust the torque depending on the operating conditions.

Figure A-52 Mounting Reference Surface Profile

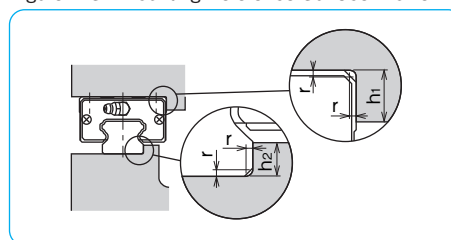


Table A-23 Shoulder Height Dimensions unit : mm

part number	h <sub>1</sub>	h <sub>2</sub>	r <sub>max.</sub>
SGL15	4	3.5	0.5
SGL20	5	5	0.5
SGL25	5	5.5	1
SGL30	6	7.5	1
SGL35	6	8	1
SGL45	8	8	1

Table A-22 Recommended Torque unit : N · m

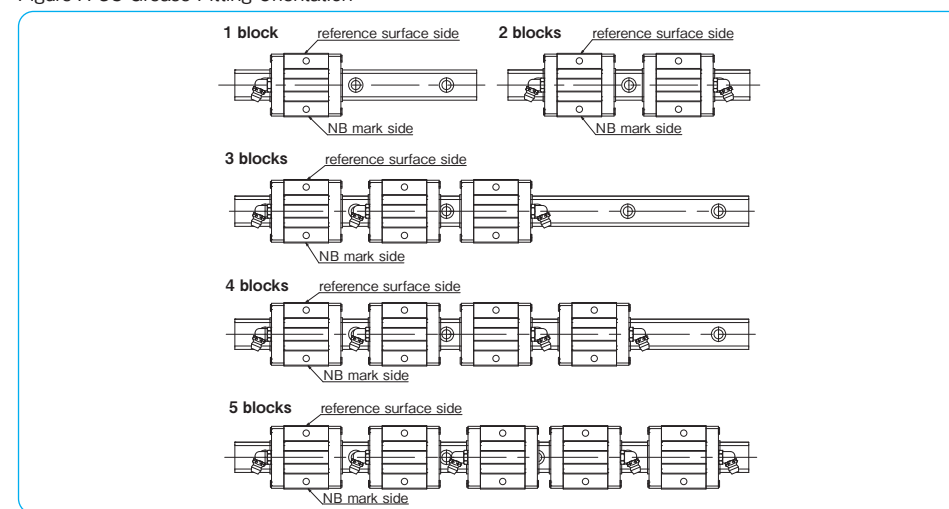
size	M3	M4	M5	M6	M8	M12
recommended torque	1.4	3.2	6.6	11.2	27.6	96.4

(for steel alloy screws)

## GREASE FITTING

A grease fitting is attached to the return cap of SGL type guide blocks for lubrication purposes. Unless otherwise specified, the orientation of the grease fitting is as shown in Figure A-59. When more than 6 blocks are used on one rail, the orientation of the grease fitting is same as the orientation of 3 to 5 block used on one rail.

Figure A-53 Grease Fitting Orientation

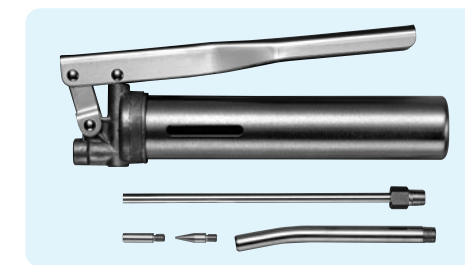


## LUBRICATION

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.

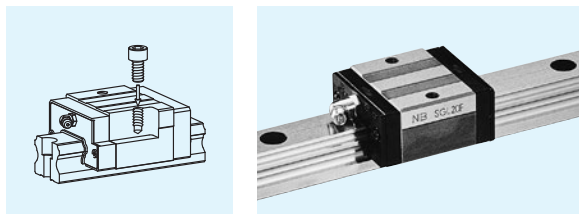
Please refer to page Eng-41 for details on the low dust generation grease.

A Grease Gun Set is available as a maintenance kit (refer to page Eng-44).



# SGL-F TYPE

– High Rigidity Short Type –



## part number structure

example specification **SGL 15 F B 2 T1 -580 D P/W2/FS LB F J -KGLA**

**SGL**: standard  
**SGLS**: anti-corrosion  
**size**  
**block style**  
**seal** (refer to page A-14)  
**blank**: with side-seals  
**B**: with side-seals + under-seals  
**BW**: with double-seals + under-seals  
**BS**: B + scraper  
**BR**: B + reverse-seals  
**BWS**: BW + scraper  
**number of blocks attached to one rail**  
**preload symbol** (refer to page A-40)  
**blank**: standard  
**T1**: light  
**T2**: medium  
**total length of rail**  
**size of rail installation hole** (D type rail is available only for SGL 15 and 30)

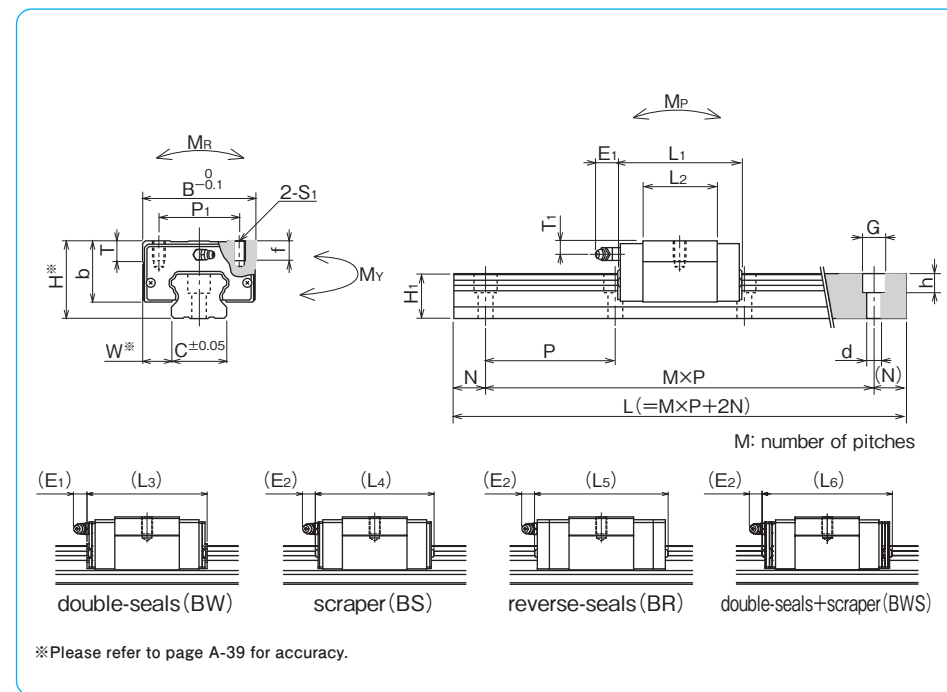
**symbol for grease** (refer to page Eng-40~)  
**blank**: standard grease  
**KGLA**: lithium-based grease  
**KGU**: urea-based grease  
**KGF**: anti-fretting grease  
**with bellows** (refer to page A-20)  
**with rail mounting hole caps** (refer to page A-17)  
**with low temperature black chrome treatment**  
**with Fiber Sheet** (refer to page A-18)  
**symbol for number of axes\***  
**blank**: single axis  
**W2**: 2 parallel axes  
**W3**: 3 parallel axes  
**accuracy grade** (refer to page A-39)  
**blank**: standard  
**H**: high  
**P**: precision

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

part number		assembly dimensions		block dimensions												
standard	anti-corrosion	H	W	B	L1	L2	L3	L4	L5	L6	P1	S1	f	T	b	E1
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15F</b>	<b>SGLS15F</b>	24	9.5	34	40.7	22.7	46.9	47.3	54.3	53.5	26	M4	7	6	19.5	6
<b>SGL20F</b>	<b>SGLS20F</b>	28	11	42	47.9	29.5	54.1	54.5	65.5	60.7	32	M5	8	7.5	22	12
<b>SGL25F</b>	<b>SGLS25F</b>	33	12.5	48	58.7	37.7	65.1	65.9	76.9	72.1	35	M6	9	8	26	12
<b>SGL30F</b>	—	42	16	60	68	40	76.6	75.6	86.2	84.2	40	M8	12	9	32.5	12
<b>SGL35F</b>	—	48	18	70	77	46	85.6	84.6	95.2	93.2	50			13	38	12

part number		standard rail length														
standard	anti-corrosion	L mm														
<b>SGL15</b>	<b>SGLS15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000
<b>SGL20</b>	<b>SGLS20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL25</b>	<b>SGLS25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL30</b>	—	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400
<b>SGL35</b>	—	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400

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



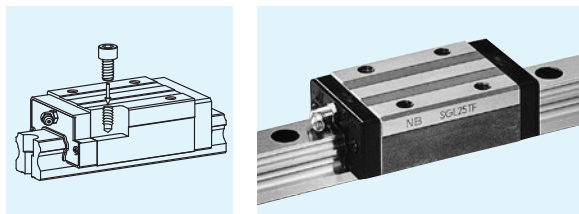
E2	T1	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass		block size	
			H1	C	d × G × h	N	P	dynamic C	static Co	Mp	My	Mr	block kg		guide rail kg/m
mm	mm		mm	mm	mm	mm	mm	kN	kN	N · m	N · m	N · m	kg	kg/m	
5.4	5	pressed fitting	13.5	15	3.5 × 6 × 4.5 4.5 × 7.5 × 5.3			7.29	9.45	36.7 252	36.7 252	73.9	0.1	1.3	<b>15</b>
11	6	B-M6F	16	20	6 × 9.5 × 8.5		60	11.9	14.8	71.9 447	71.9 447	159	0.2	2.1	<b>20</b>
	6.5		20	23	7 × 11 × 9	20	80	17.0	21.1	123 751	123 751	254	0.3	3.0	<b>25</b>
	9		24	28	7 × 11 × 9 9 × 14 × 12		80	23.0	28.7	195 1,260	195 1,260	417	0.5	4.6	<b>30</b>
	8.5		27.5	34	9 × 14 × 12		80	32.0	37.8	293 1,870	293 1,870	693	0.8	6.2	<b>35</b>

Mp2 and My2 are allowable static moments when two blocks are used in close contact. 1kN ≒ 102kgf 1N · m ≒ 0.102kgf · m

part number						maximum length	
standard	anti-corrosion	L mm				standard	anti-corrosion
1,120	1,240	1,360	1,480			2,000	1,480
1,240	1,360	1,480	1,600	1,660	1,720	1,840	1,960
1,240	1,360	1,480	1,600	1,660	1,720	1,840	1,960
1,480	1,640	1,720	1,800	1,880	1,960	3,000	—
1,480	1,640	1,720	1,800	1,880	1,960	3,000	—

# SGL-TF TYPE

– High Rigidity Type –



## part number structure

example **SGL 15 TF B 2 T1 -580 D P/W2 FS LB F J -KGLA**

specification  
**SGL:** standard  
**SGLS:** anti-corrosion

size

block style

seal (refer to page A-14)  
**blank:** with side-seals  
**B:** with side-seals + under-seals  
**BW:** with double-seals + under-seals  
**BS:** B + scraper  
**BR:** B + reverse-seals  
**BWS:** BW + scraper

number of blocks attached to one rail

preload symbol (refer to page A-40)  
**blank:** standard  
**T1:** light  
**T2:** medium

total length of rail

size of rail installation hole (D type rail is available only for SGL 15 and 30)

symbol for grease (refer to page Eng-40~)  
**blank:** standard grease  
**KGLA:** lithium-based grease  
**KGU:** urea-based grease  
**KGF:** anti-fretting grease

with bellows (refer to page A-20)  
 with rail mounting hole caps (refer to page A-17)  
 with low temperature black chrome treatment  
 with Fiber Sheet (refer to page A-18)

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

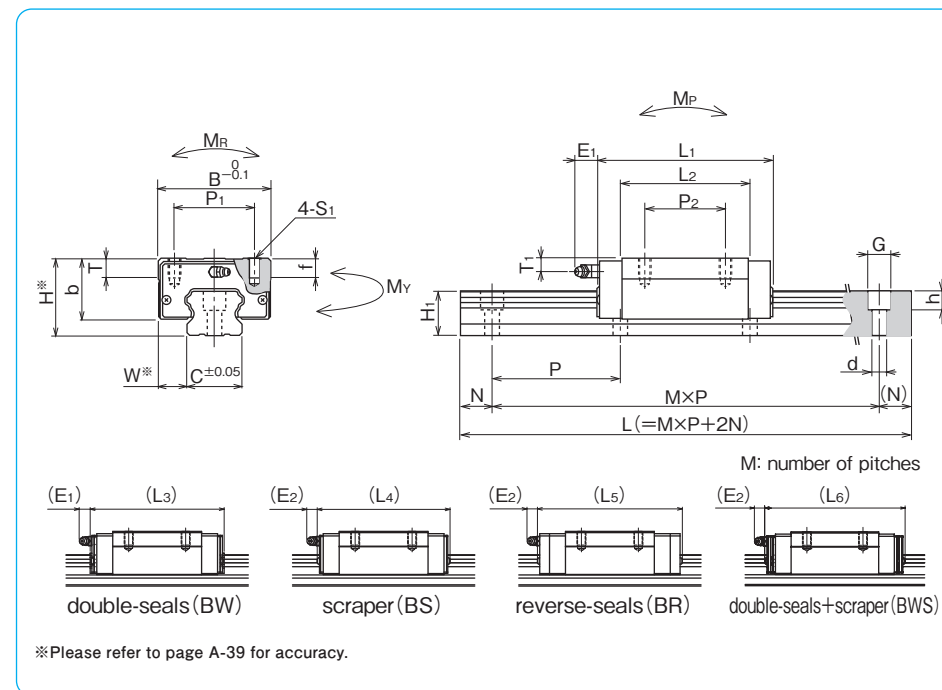
accuracy grade (refer to page A-39)  
**blank:** standard  
**H:** high  
**P:** precision

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

part number		assembly dimensions		block dimensions													
standard	anti-corrosion	H	W	B	L1	L2	L3	L4	L5	L6	P1	P2	S1	f	T	b	E1
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15TF</b>	<b>SGLS15TF</b>	24	9.5	34	56.5	38.5	62.7	63.1	70.1	69.3	26	26	M4	7	6	19.5	6
<b>SGL15TF-D</b>	<b>SGLS15TF-D</b>																
<b>SGL20TF</b>	<b>SGLS20TF</b>	28	11	42	65.8	47.4	72	72.4	83.4	78.6	32	32	M5	8	7.5	22	12
<b>SGL25TF</b>	<b>SGLS25TF</b>	33	12.5	48	80	59	86.4	87.2	98.2	93.4	35	35	M6	9	8	26	
<b>SGL30TF</b>	—	42	16	60	95.7	67.7	104.3	103.3	113.9	111.9	40	40	M8	12	9	32.5	12
<b>SGL30TF-D</b>	—																
<b>SGL35TF</b>	—	48	18	70	109	78	117.6	116.6	127.2	125.2	50	50			13	38	

part number		standard rail length														
standard	anti-corrosion	L mm														
<b>SGL15</b>	<b>SGLS15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000
<b>SGL20</b>	<b>SGLS20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL25</b>	<b>SGLS25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL30</b>	—	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400
<b>SGL35</b>	—	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400

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



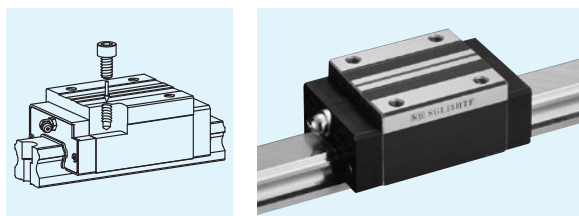
E2		T1	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass		block size
mm	mm	mm	H1	C	d x G x h	N	P	C	Co	MP	MY	MR	block	guide rail	block size
mm	mm	mm	mm	mm	mm	mm	mm	kN	kN	N · m	N · m	N · m	kg	kg/m	
5.4	5	pressed fitting	13.5	15	3.5 x 6 x 4.5	20	60	10.6	16.2	99.5	99.5	126	0.2	1.3	15
					4.5 x 7.5 x 5.3					565	565				
11	6	B-M6F	16	20	6 x 9.5 x 8.5	20	80	16.3	23.2	165	165	250	0.3	2.1	20
					7 x 11 x 9					897	897				
					7 x 11 x 9					334	334				
					9 x 14 x 12					1,740	1,740				
8.5	9	B-M6F	24	28	9 x 14 x 12	20	80	33.6	49.2	528	528	716	0.8	4.6	30
					7 x 11 x 9					2,880	2,880				
8.5	8.5	B-M6F	27.5	34	9 x 14 x 12	20	80	46.6	64.8	796	796	1,180	1.3	6.2	35
					9 x 14 x 12					4,290	4,290				

MP2 and MY2 are allowable static moments when two blocks are used in close contact. 1kN=102kgf 1N · m=0.102kgf · m

				maximum length	
				standard	anti-corrosion
1,120	1,240	1,360	1,480	2,000	1,480
1,240	1,360	1,480	1,600	1,660	1,720
1,240	1,360	1,480	1,600	1,660	1,720
1,480	1,640	1,720	1,800	1,880	1,960
1,480	1,640	1,720	1,800	1,880	1,960

# SGL-HTF TYPE

– High Rigidity Type –



## part number structure

example **SGL 15 HTF B 2 T1 -580 P/W2 FS LB F J -KGLA**

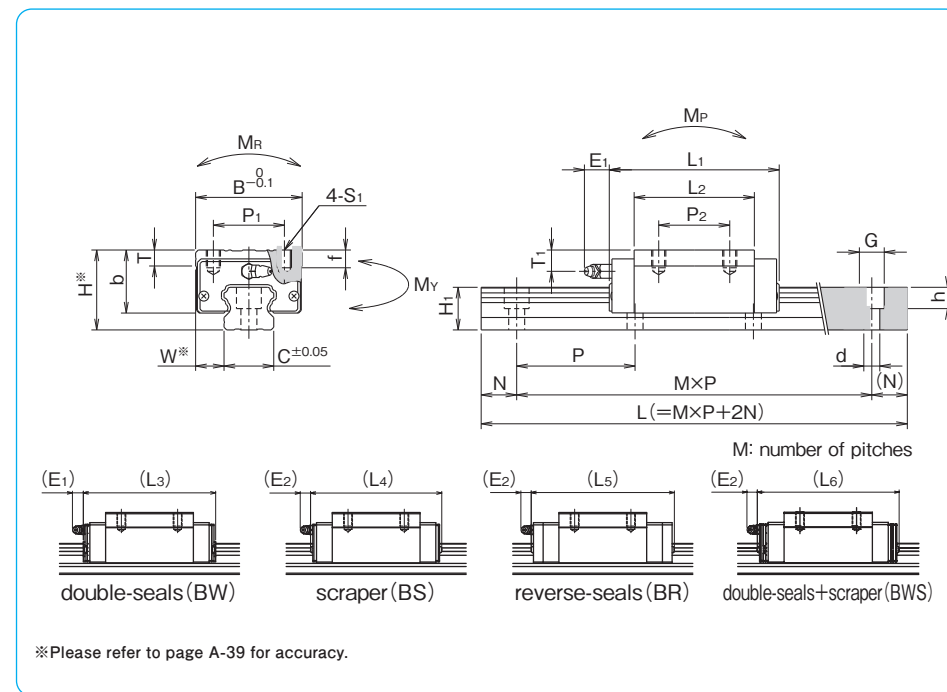
<p>example</p> <p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p>blank: with side-seals</p> <p>B: with side-seals + under-seals</p> <p>BW: with double-seals + under-seals</p> <p>BS: B + scraper</p> <p>BR: B + reverse-seals</p> <p>BWS: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p>blank: standard</p> <p>T1: light</p> <p>T2: medium</p> <p>total length of rail</p>	<p>symbol for grease (refer to page Eng-40--)</p> <p>blank: standard grease</p> <p>KGLA: lithium-based grease</p> <p>KGU: urea-based grease</p> <p>KGF: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes*</p> <p>blank: single axis</p> <p>W2: 2 parallel axes</p> <p>W3: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p>blank: standard</p> <p>H: high</p> <p>P: precision</p>
--	---

\*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 <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	L <sub>6</sub>	P <sub>1</sub>	P <sub>2</sub>	S <sub>1</sub>	f	T	b	E <sub>1</sub>	E <sub>2</sub>	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15HTF</b>	28	9.5	34	56.5	38.5	62.7	63.1	70.1	69.3	26	26	M4	5	6	23.7	6	5.4	
<b>SGL20HTF</b>	30	12	44	71.6	53.2	77.8	78.2	89.2	84.4	32	36	M5	6	9.5	24			
<b>SGL25HTF</b>	40	12.5	48	80	59	86.4	87.2	98.2	93.4	35	35	M6	8	9	33	12	11	
<b>SGL30HTF</b>	45	16	60	95.7	67.7	104.3	103.3	113.9	111.9	40	40	M8	10		35.5			
<b>SGL35HTF</b>	55	18	70	109	78	117.6	116.6	127.2	125.2	50	50	M8	12	13	45			
<b>SGL45HTF</b>	70	20.5	86	139	102	147.5	148	158.7	156.6	60	60	M10	17	15	60	15	15	

part number	standard rail length															
	L mm															
<b>SGL15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL45</b>	570	675	780	885	990	1,095	1,200	1,305	1,410	1,515	1,620	1,725	1,830	1,935	2,040	2,145

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



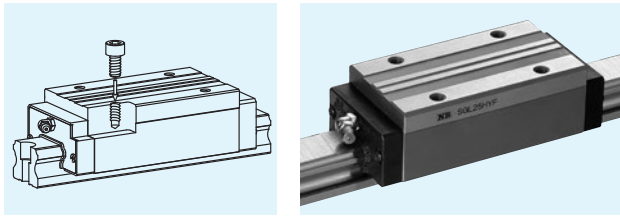
T <sub>1</sub>	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass		block size	
		H <sub>1</sub>	C	d×G×h	N	P	dynamic C	static Co	M <sub>P</sub>	M <sub>Y</sub>	M <sub>R</sub>	block		guide rail
mm		mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	kg	kg/m	
9	pressed fitting	13.5	15	4.5×7.5×5.3			10.6	16.2	99.5/565	99.5/565	126	0.2	1.3	<b>15</b>
8	B-M6F	16	20	6×9.5×8.5		60	18.3	27.5	226/1,180	226/1,180	296	0.4	2.1	<b>20</b>
13.5		20	23	7×11×9	20	24.7	36.3	334/1,740	334/1,740	437	0.6	3.0	<b>25</b>	
12		24	28	9×14×12		80	33.6	49.2	528/2,880	528/2,880	716	0.9	4.6	<b>30</b>
15.5		27.5	34		46.6	64.8	796/4,290	796/4,290	1,180	1.5	6.2	<b>35</b>		
20	B-PT1/8	36.5	45	14×20×17	22.5	105	74.7	101	1,550/8,250	1,550/8,250	2,310	3.1	10.5	<b>45</b>

M<sub>P2</sub> and M<sub>Y2</sub> are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

											maximum length
											mm
1,240	1,360	1,480									2,000
1,360	1,480	1,600	1,660	1,720	1,840	1,960					3,000
1,360	1,480	1,600	1,660	1,720	1,840	1,960					3,000
1,640	1,720	1,800	1,880	1,960							3,000
1,640	1,720	1,800	1,880	1,960							3,000
2,250	2,355	2,460	2,565	2,670	2,775	2,880	2,985				3,000

# SGL-HYF TYPE

— High Rigidity Long Type —



## part number structure

example **SGL 15 HYF B 2 T1 -580 P/W2 FS LB F J -KGLA**

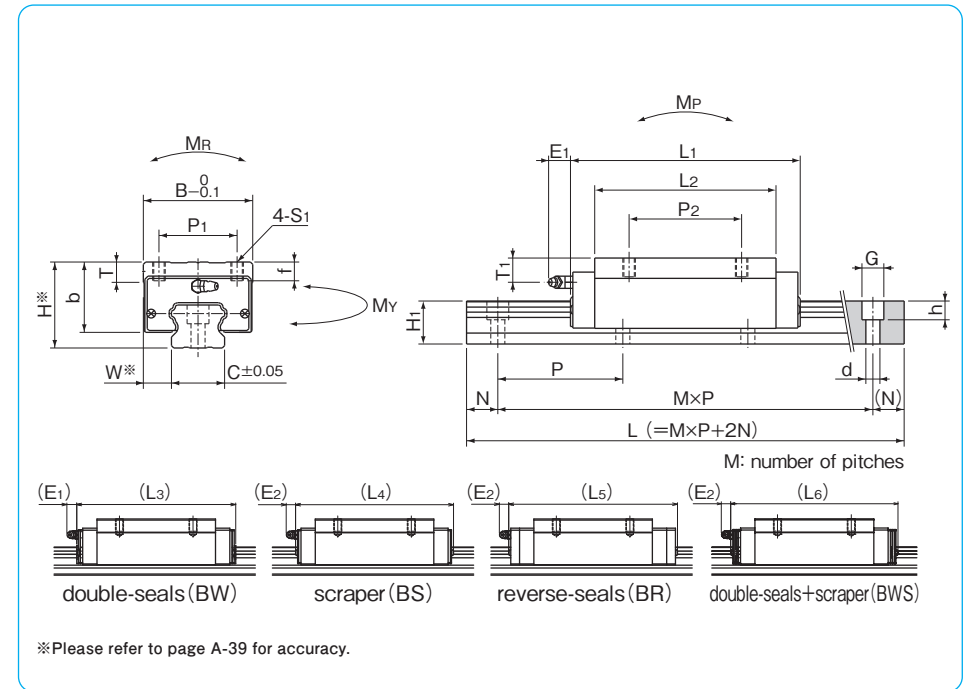
<p>example</p> <p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p>blank: with side-seals</p> <p>B: with side-seals + under-seals</p> <p>BW: with double-seals + under-seals</p> <p>BS: B + scraper</p> <p>BR: B + reverse-seals</p> <p>BWS: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p>blank: standard</p> <p>T1: light</p> <p>T2: medium</p> <p>total length of rail</p>	<p>symbol for grease (refer to page Eng-40--)</p> <p>blank: standard grease</p> <p>KGLA: lithium-based grease</p> <p>KGU: urea-based grease</p> <p>KGF: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes*</p> <p>blank: single axis</p> <p>W2: 2 parallel axes</p> <p>W3: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p>blank: standard</p> <p>H: high</p> <p>P: precision</p>
--	---

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

part number	assembly dimensions		block dimensions														
	H	W	B	L1	L2	L3	L4	L5	L6	P1	P2	S1	f	T	b	E1	E2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15HYF</b>	28	9.5	34	79	61	85.2	85.6	92.6	91.8	26	26	M4	5	6	23.7	6	5.4
<b>SGL20HYF</b>	30	12	44	96	77.6	102.2	102.6	113.6	108.8	50	M5	6	9.5	24	12	11	11
<b>SGL25HYF</b>	40	12.5	48	109	88	115.4	116.2	127.2	122.4								
<b>SGL30HYF</b>	45	16	60	129	101	137.6	136.6	147.2	145.2	40	60	M8	10	13	45	15	15
<b>SGL35HYF</b>	55	18	70	147	116	155.6	154.6	165.2	163.2	50	72		12	13	45		
<b>SGL45HYF</b>	70	20.5	86	171	134	179.5	180	190.7	188.6	60	80	M10	17	15	60	15	15

part number	standard rail length															
	L mm															
<b>SGL15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL45</b>	570	675	780	885	990	1,095	1,200	1,305	1,410	1,515	1,620	1,725	1,830	1,935	2,040	2,145

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



\*Please refer to page A-39 for accuracy.

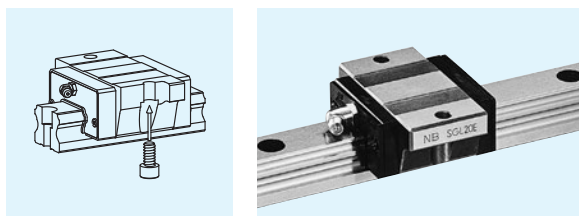
T1	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass			
		H1	C	d×G×h	N	P	dynamic C	static Co	Mp	My	Mr	block	guide rail	block size
mm		mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	kg	kg/m	
9	pressed fitting	13.5	15	4.5×7.5×5.3	20	60	14.6	25.6	238 1,200	238 1,200	200	0.3	1.3	<b>15</b>
8	B-M6F	16	20	6×9.5×8.5			23.9	40.2	467 2,250	467 2,250	432	0.5	2.1	<b>20</b>
13.5		20	23	7×11×9	32.8	54.5	723 3,480	723 3,480	655	0.9	3.0	<b>25</b>		
12		24	28	9×14×12	44.6	73.8	1,140 5,680	1,140 5,680	1,070	1.3	4.6	<b>30</b>		
15.5		27.5	34		61.9	97.2	1,720 8,480	1,720 8,480	1,780	2.2	6.2	<b>35</b>		
20	B-PT1/8	36.5	45	14×20×17	22.5	105	91.4	134	2,680 13,300	2,680 13,300	3,080	4.0	10.5	<b>45</b>

Mp2 and My2 are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

							maximum length	
							mm	
1,240	1,360	1,480					2,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
2,250	2,355	2,460	2,565	2,670	2,775	2,880	2,985	3,000

# SGL-E TYPE

— High Rigidity Short Flange Type —



## part number structure

example **SGL 15 E B 2 T1 -580 D P/W2 FS LB F J -KGLA**

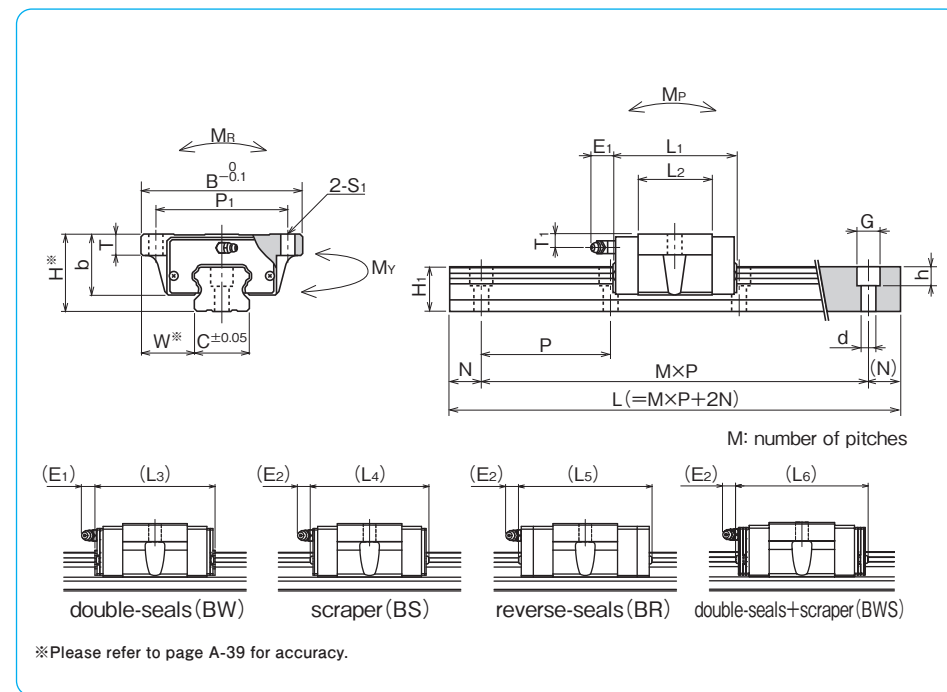
<p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p>blank: with side-seals</p> <p>B: with side-seals + under-seals</p> <p>BW: with double-seals + under-seals</p> <p>BS: B + scraper</p> <p>BR: B + reverse-seals</p> <p>BWS: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p>blank: standard</p> <p>T1: light</p> <p>T2: medium</p> <p>total length of rail</p> <p>size of rail installation hole (D type rail is available only for SGL 15 and 30)</p>	<p>symbol for grease (refer to page Eng-40~)</p> <p>blank: standard grease</p> <p>KGLA: lithium-based grease</p> <p>KGU: urea-based grease</p> <p>KGF: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes*</p> <p>blank: single axis</p> <p>W2: 2 parallel axes</p> <p>W3: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p>blank: standard</p> <p>H: high</p> <p>P: precision</p>
---	--

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

part number	assembly dimensions		block dimensions												
	H	W	B	L1	L2	L3	L4	L5	L6	P1	S1	T	b	E1	E2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15E</b> <b>SGL15E-D</b>	24	18.5	52	40.7	22.7	46.9	47.3	54.3	53.5	41	4.5	7	19.5	6	5.4
<b>SGL20E</b>	28	19.5	59	47.9	29.5	54.1	54.5	65.5	60.7	49	5.5	9	22		
<b>SGL25E</b>	33	25	73	58.7	37.7	65.1	65.9	76.9	72.1	60	7	10	26	12	11
<b>SGL30E</b> <b>SGL30E-D</b>	42	31	90	68	40	76.6	75.6	86.2	84.2	72	9		32.5		
<b>SGL35E</b>	48	33	100	77	46	85.6	84.6	95.2	93.2	82		13	38		

part number	standard rail length L mm															
<b>SGL 15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480

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



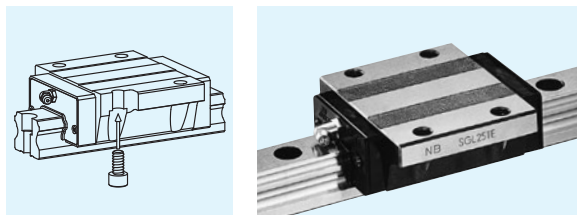
T1	grease fitting	guide rail dimensions				basic load rating			allowable static moment			mass		block size
		H1	C	d × G × h	N	P	dynamic C	static Co	Mp	My	Mr	block kg	guide rail kg/m	
mm		mm	mm	mm	mm	mm	kN	kN	N · m	N · m	N · m	kg	kg/m	
5	pressed fitting	13.5	15	3.5 × 6 × 4.5 4.5 × 7.5 × 5.3			7.29	9.45	36.7 252	36.7 252	73.9	0.1	1.3	<b>15</b>
6	B-M6F	16	20	6 × 9.5 × 8.5		60	11.9	14.8	71.9 447	71.9 447	159	0.2	2.1	<b>20</b>
6.5		20	23	7 × 11 × 9	20	17.0	21.1	123 751	123 751	254	0.4	3.0	<b>25</b>	
9		24	28	7 × 11 × 9 9 × 14 × 12		80	23.0	28.7	195 1,260	195 1,260	417	0.6	4.6	<b>30</b>
8.5		27.5	34	9 × 14 × 12		32.0	37.8	293 1,870	293 1,870	693	0.9	6.2	<b>35</b>	

Mp2 and My2 are allowable static moments when two blocks are used in close contact. 1kN=102kgf 1N · m=0.102kgf · m

	maximum length mm
1,240 1,360 1,480	2,000
1,360 1,480 1,600 1,660 1,720 1,840 1,960	3,000
1,360 1,480 1,600 1,660 1,720 1,840 1,960	3,000
1,640 1,720 1,800 1,880 1,960	3,000
1,640 1,720 1,800 1,880 1,960	3,000

# SGL-TE TYPE

– High Rigidity Flange Type –



## part number structure

example **SGL 15 TE B 2 T1 -580 D P/W2 FS LB F J -KGLA**

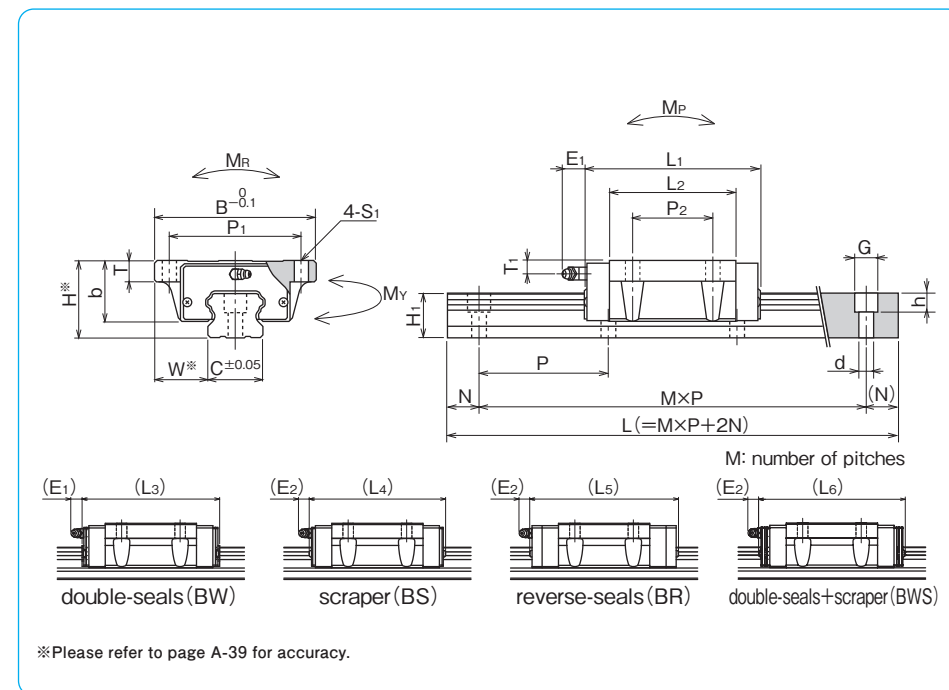
<p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p>blank: with side-seals</p> <p>B: with side-seals + under-seals</p> <p>BW: with double-seals + under-seals</p> <p>BS: B + scraper</p> <p>BR: B + reverse-seals</p> <p>BWS: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p>blank: standard</p> <p>T1: light</p> <p>T2: medium</p> <p>total length of rail</p> <p>size of rail installation hole (D type rail is available only for SGL 15 and 30)</p>	<p>symbol for grease (refer to page Eng-40~)</p> <p>blank: standard grease</p> <p>KGLA: lithium-based grease</p> <p>KGU: urea-based grease</p> <p>KGF: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes*</p> <p>blank: single axis</p> <p>W2: 2 parallel axes</p> <p>W3: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p>blank: standard</p> <p>H: high</p> <p>P: precision</p>
---	--

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

part number	assembly dimensions		block dimensions													
	H	W	B	L1	L2	L3	L4	L5	L6	P1	P2	S1	T	b	E1	E2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
SGL15TE SGL15TE-D	24	18.5	52	56.5	38.5	62.7	63.1	70.1	69.3	41	26	4.5	7	19.5	6	5.4
SGL20TE	28	19.5	59	65.8	47.4	72	72.4	83.4	78.6	49	32	5.5	9	22		
SGL25TE	33	25	73	80	59	86.4	87.2	98.2	93.4	60	35	7	10	26	12	11
SGL30TE SGL30TE-D	42	31	90	95.7	67.7	104.3	103.3	113.9	111.9	72	40	9	10	32.5		
SGL35TE	48	33	100	109	78	117.6	116.6	127.2	125.2	82	50	9	13	38		

part number	standard rail length L mm															
SGL15	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
SGL20	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
SGL25	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
SGL30	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
SGL35	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480

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



T1	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass		block size	
		H1	C	d × G × h	N	P	dynamic C	static Co	M <sub>P</sub>	M <sub>Y</sub>	M <sub>R</sub>	block kg		guide rail kg/m
mm		mm	mm	mm	mm	mm	kN	kN	N · m	N · m	N · m	kg	kg/m	
5	pressed fitting	13.5	15	3.5 × 6 × 4.5 4.5 × 7.5 × 5.3	20	60	10.6	16.2	99.5 565	99.5 565	126	0.2	1.3	15
6	B-M6F	16	20	6 × 9.5 × 8.5			16.3	23.2	165 897	165 897	250	0.3	2.1	20
6.5		20	23	7 × 11 × 9	24.7	36.3	334 1,740	334 1,740	437	0.6	3.0	25		
9		24	28	7 × 11 × 9 9 × 14 × 12	33.6	49.2	528 2,880	528 2,880	716	1.0	4.6	30		
8.5		27.5	34	9 × 14 × 12	46.6	64.8	796 4,290	796 4,290	1,180	1.5	6.2	35		

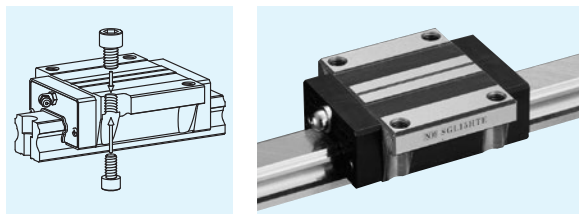
M<sub>P2</sub> and M<sub>Y2</sub> are allowable static moments when two blocks are used in close contact. 1kN = 102kgf 1N · m = 0.102kgf · m

				maximum length mm
1,240	1,360	1,480		2,000
1,360	1,480	1,600	1,660	3,000
1,360	1,480	1,600	1,660	3,000
1,640	1,720	1,800	1,880	3,000
1,640	1,720	1,800	1,880	3,000



# SGL-HTE TYPE

– High Rigidity Flange Type –



## part number structure

example **SGL 15 HTE B 2 T1 -580 P/W2 FS LB F J -KGLA**

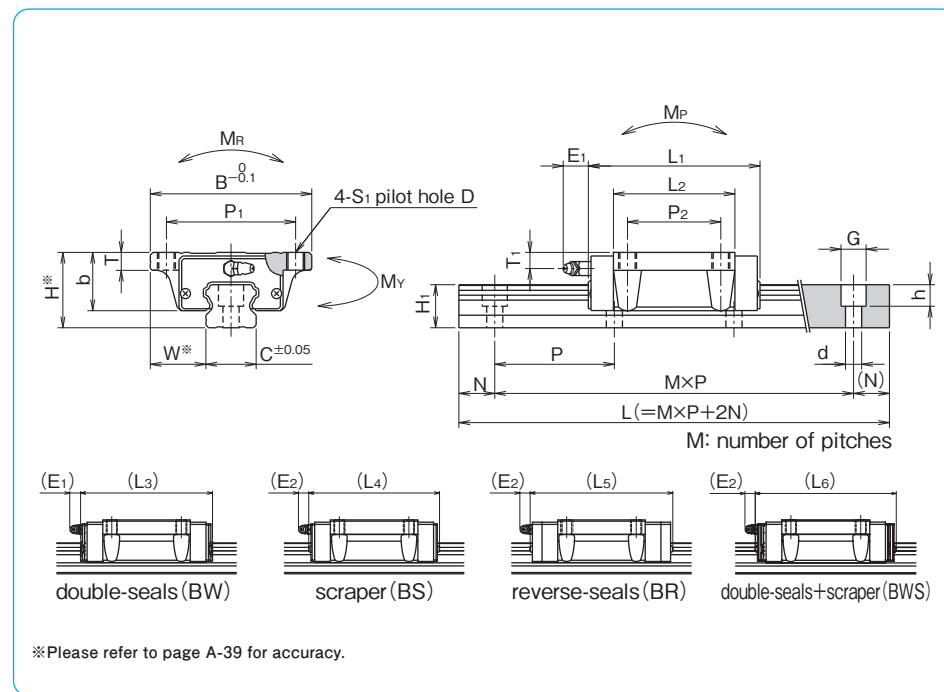
<p>example</p> <p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p>blank: with side-seals</p> <p>B: with side-seals + under-seals</p> <p>BW: with double-seals + under-seals</p> <p>BS: B + scraper</p> <p>BR: B + reverse-seals</p> <p>BWS: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p>blank: standard</p> <p>T1: light</p> <p>T2: medium</p> <p>total length of rail</p>	<p>symbol for grease (refer to page Eng-40--)</p> <p>blank: standard grease</p> <p>KGLA: lithium-based grease</p> <p>KGU: urea-based grease</p> <p>KGF: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps(refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes**</p> <p>blank: single axis</p> <p>W2: 2 parallel axes</p> <p>W3: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p>blank: standard</p> <p>H: high</p> <p>P: precision</p>
--	---

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

part number	block dimensions														E <sub>1</sub>	E <sub>2</sub>	
	H	W	B	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	L <sub>6</sub>	P <sub>1</sub>	P <sub>2</sub>	S <sub>1</sub>	D	T			b
<b>SGL15HTE</b>	24	16	47	56.5	38.5	62.7	63.1	70.1	69.3	38	30	M5	4.4	7.5	19.7	6	5.4
<b>SGL20HTE</b>	30	21.5	63	71.6	53.2	77.8	78.2	89.2	84.4	53	40	M6	5.4	10.5	24	12	11
<b>SGL25HTE</b>	36	23.5	70	80	59	86.4	87.2	98.2	93.4	57	45	M8	6.8	12.5	29		
<b>SGL30HTE</b>	42	31	90	95.7	67.7	104.3	103.3	113.9	111.9	72	52	M10	8.5	10	32.5		
<b>SGL35HTE</b>	48	33	100	109	78	117.6	116.6	127.2	125.2	82	62		8.5	13	38		
<b>SGL45HTE</b>	60	37.5	120	139	102	147.5	148	158.7	156.6	100	80	M12	10.5	15	50	15	15

part number	standard rail length															
	L mm															
<b>SGL15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL45</b>	570	675	780	885	990	1,095	1,200	1,305	1,410	1,515	1,620	1,725	1,830	1,935	2,040	2,145

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



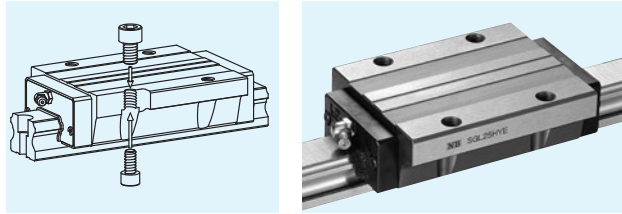
T <sub>1</sub>	grease fitting	guide rail dimensions				basic load rating		allowable static moment			mass		block size	
		H <sub>1</sub>	C	d×G×h	N	P	dynamic C	static Co	M <sub>P</sub>	M <sub>Y</sub>	M <sub>R</sub>	block		guide rail
5	pressed fitting	13.5	15	4.5×7.5×5.3	20	60	10.6	16.2	99.5	99.5	126	0.2	1.3	<b>15</b>
8	B-M6F	16	20	6×9.5×8.5			18.3	27.5	226	226	296	0.4	2.1	<b>20</b>
9.5		20	23	7×11×9			24.7	36.3	334	334	437	0.6	3.0	<b>25</b>
9		24	28	9×14×12			33.6	49.2	528	528	716	1.0	4.6	<b>30</b>
8.5		27.5	34				46.6	64.8	796	796	1,180	1.5	6.2	<b>35</b>
10	B-PT1/8	36.5	45	14×20×17			22.5	105	74.7	101	1,550	1,550	2,310	3.1

M<sub>P2</sub> and M<sub>Y2</sub> are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

							maximum length	
							mm	
1,240	1,360	1,480					2,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
2,250	2,355	2,460	2,565	2,670	2,775	2,880	2,985	3,000

# SGL-HYE TYPE

— High Rigidity Long Flange Type —



## part number structure

example **SGL 15 HYE B 2 T1 -580 P/W2 FS LB F J -KGLA**

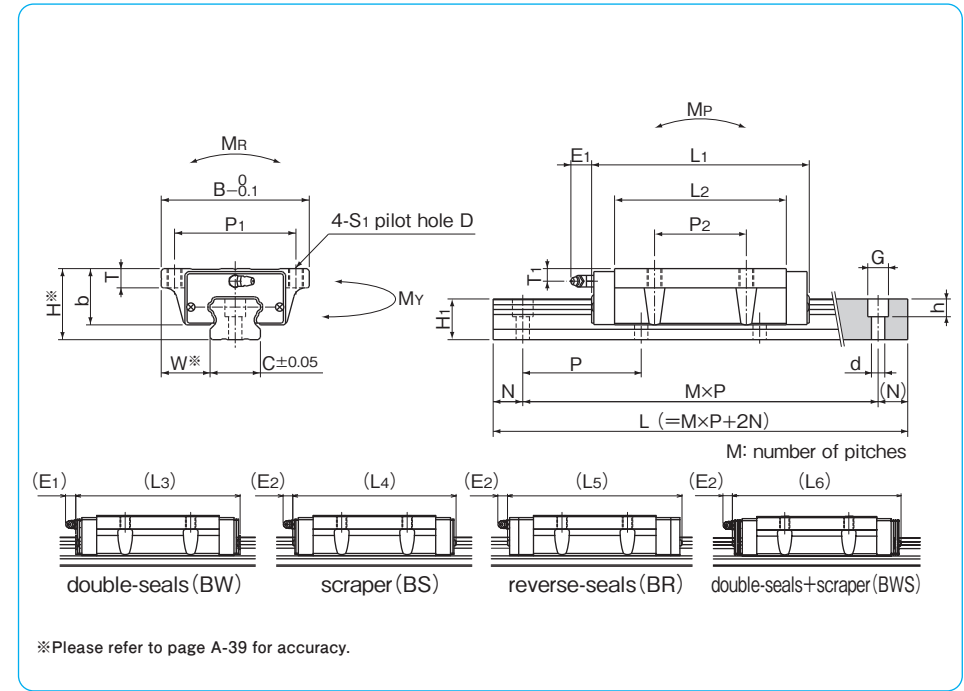
<p>example</p> <p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)</p> <p><b>blank</b>: with side-seals</p> <p><b>B</b>: with side-seals + under-seals</p> <p><b>BW</b>: with double-seals + under-seals</p> <p><b>BS</b>: B + scraper</p> <p><b>BR</b>: B + reverse-seals</p> <p><b>BWS</b>: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)</p> <p><b>blank</b>: standard</p> <p><b>T1</b>: light</p> <p><b>T2</b>: medium</p> <p>total length of rail</p>	<p>symbol for grease (refer to page Eng-40~)</p> <p><b>blank</b>: standard grease</p> <p><b>KGLA</b>: lithium-based grease</p> <p><b>KGU</b>: urea-based grease</p> <p><b>KGF</b>: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes**</p> <p><b>blank</b>: single axis</p> <p><b>W2</b>: 2 parallel axes</p> <p><b>W3</b>: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)</p> <p><b>blank</b>: standard</p> <p><b>H</b>: high</p> <p><b>P</b>: precision</p>
---	---

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

part number	assembly dimensions		block dimensions														
	H	W	B	L1	L2	L3	L4	L5	L6	P1	P2	S1	D	T	b	E1	E2
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15HYE</b>	24	16	47	79	61	85.2	85.6	92.6	91.8	38	30	M5	4.4	7.5	19.7	6	5.4
<b>SGL20HYE</b>	30	21.5	63	96	77.6	102.2	102.6	113.6	108.8	53	40	M6	5.4	10.5	24	12	11
<b>SGL25HYE</b>	36	23.5	70	109	88	115.4	116.2	127.2	122.4	57	45	M8	6.8	12.5	29		
<b>SGL30HYE</b>	42	31	90	129	101	137.6	136.6	147.2	145.2	72	52	M10	8.5	10	32.5	12	11
<b>SGL35HYE</b>	48	33	100	147	116	155.6	154.6	165.2	163.2	82	62						
<b>SGL45HYE</b>	60	37.5	120	171	134	179.5	180	190.7	188.6	100	80	M12	10.5	15	50	15	15

part number	standard rail length															
	L mm															
<b>SGL15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL45</b>	570	675	780	885	990	1,095	1,200	1,305	1,410	1,515	1,620	1,725	1,830	1,935	2,040	2,145

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



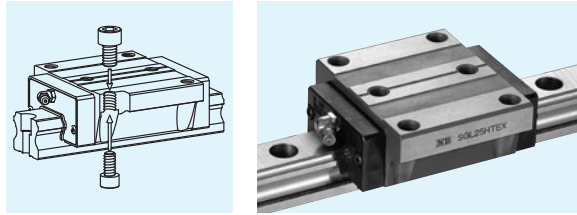
T1	grease fitting	guide rail dimensions				N	P	basic load rating		allowable static moment			mass		block size
		H1	C	d×G×h	C			Co	MP	MY	MR	block	guide rail		
mm		mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	kg	kg/m		
5	pressed fitting	13.5	15	4.5×7.5×5.3	20	60	14.6	25.6	238	238	200	0.3	1.3	<b>15</b>	
8	B-M6F	16	20	6×9.5×8.5			23.9	40.2	467	467	432	0.7	2.1	<b>20</b>	
9.5		20	23	7×11×9	32.8	54.5	723	723	655	1.0	3.0	<b>25</b>			
9		24	28	9×14×12	44.6	73.8	1,140	1,140	1,070	1.5	4.6	<b>30</b>			
8.5	27.5	34	61.9		97.2	1,720	1,720	1,780	2.2	6.2	<b>35</b>				
10	B-PT1/8	36.5	45	14×20×17	22.5	105	91.4	134	2,680	2,680	3,080	4.0	10.5	<b>45</b>	

MP2 and MY2 are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

							maximum length	
							mm	
1,240	1,360	1,480					2,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
1,640	1,720	1,800	1,880	1,960			3,000	
2,250	2,355	2,460	2,565	2,670	2,775	2,880	2,985	3,000

# SGL-HTEX TYPE

— High Rigidity Six hole Flange Type —



## part number structure

example **SGL 15 HTEX B 2 T1 -580 P/W2 FS LB F J -KGLA**

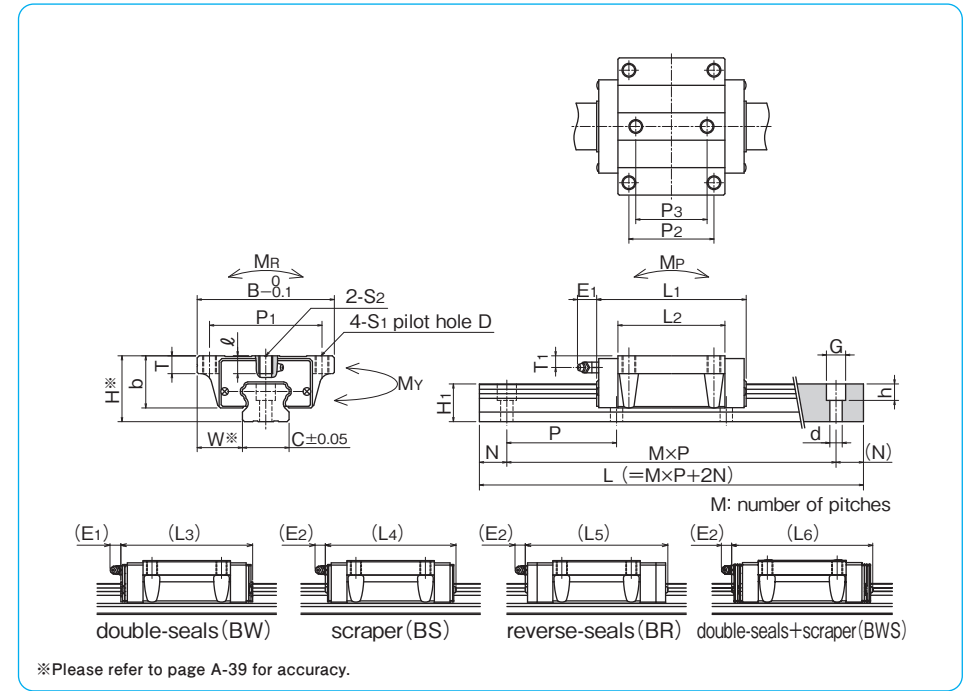
<p>example <b>SGL 15 HTEX B 2 T1 -580 P/W2 FS LB F J -KGLA</b></p> <p>SGL type</p> <p>size</p> <p>block style</p> <p>seal (refer to page A-14)  <b>blank</b>: with side-seals  <b>B</b>: with side-seals + under-seals  <b>BW</b>: with double-seals + under-seals  <b>BS</b>: B + scraper  <b>BR</b>: B + reverse-seals  <b>BWS</b>: BW + scraper</p> <p>number of blocks attached to one rail</p> <p>preload symbol (refer to page A-40)  <b>blank</b>: standard  <b>T1</b>: light  <b>T2</b>: medium</p> <p>total length of rail</p>	<p>symbol for grease (refer to page Eng-40~)  <b>blank</b>: standard grease  <b>KGLA</b>: lithium-based grease  <b>KGU</b>: urea-based grease  <b>KGF</b>: anti-fretting grease</p> <p>with bellows (refer to page A-20)</p> <p>with rail mounting hole caps (refer to page A-17)</p> <p>with low temperature black chrome treatment</p> <p>with Fiber Sheet (refer to page A-18)</p> <p>symbol for number of axes*  <b>blank</b>: single axis  <b>W2</b>: 2 parallel axes  <b>W3</b>: 3 parallel axes</p> <p>accuracy grade (refer to page A-39)  <b>blank</b>: standard  <b>H</b>: high  <b>P</b>: precision</p>
---	--

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

part number	assembly dimensions		block dimensions															
	H	W	B	L1	L2	L3	L4	L5	L6	P1	P2	S1	D	T	P3	S2	f	b
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SGL15HTEX</b>	24	16	47	56.5	38.5	62.7	63.1	70.1	69.3	38	30	M5	4.4	7.5	26	M5	6	19.7
<b>SGL20HTEX</b>	30	21.5	63	71.6	53.2	77.8	78.2	89.2	84.4	53	40	M6	5.4	10.5	35	M6	8	24
<b>SGL25HTEX</b>	36	23.5	70	80	59	86.4	87.2	98.2	93.4	57	45	M8	6.8	12.5	40	M8	10	29
<b>SGL30HTEX</b>	42	31	90	95.7	67.7	104.3	103.3	113.9	111.9	72	52	M10	8.5	10	44	M10	13	32.5
<b>SGL35HTEX</b>	48	33	100	109	78	117.6	116.6	127.2	125.2	82	62	M12	10.5	13	52	M12	13	38
<b>SGL45HTEX</b>	60	37.5	120	139	102	147.5	148	158.7	156.6	100	80	M12	10.5	15	60	M12	14	50

part number	standard rail length L mm															
<b>SGL15</b>	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
<b>SGL20</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL25</b>	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120	1,240
<b>SGL30</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL35</b>	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400	1,480
<b>SGL45</b>	570	675	780	885	990	1,095	1,200	1,305	1,410	1,515	1,620	1,725	1,830	1,935	2,040	2,145

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



E1	E2	T1	grease fitting	guide rail dimensions				N	P	basic load rating		allowable static moment		mass		block size
				H1	C	d x G x h	P			dynamic C	static Co	Mp	My	Mr	block	
mm	mm	mm		mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	kg	kg/m	
6	5.4	5	pressed fitting	13.5	15	4.5 x 7.5 x 5.3			10.6	16.2	99.5 565	99.5 565	126	0.2	1.3	<b>15</b>
12	11	8	B-M6F	16	20	6 x 9.5 x 8.5	20	60	18.3	27.5	226 1,180	226 1,180	296	0.4	2.1	<b>20</b>
		9.5		20	23	7 x 11 x 9			24.7	36.3	334 1,740	334 1,740	437	0.6	3.0	<b>25</b>
		9		24	28	9 x 14 x 12			33.6	49.2	528 2,880	528 2,880	716	1.0	4.6	<b>30</b>
		8.5		27.5	34											
15	15	10	B-PT1/8	36.5	45	14 x 20 x 17	22.5	105	74.7	101	1,550 8,250	1,550 8,250	2,310	3.1	10.5	<b>45</b>

Mp2 and My2 are allowable static moments when two blocks are used in close contact. 1kN≒102kgf 1N·m≒0.102kgf·m

				maximum length mm
1,240	1,360	1,480		2,000
1,360	1,480	1,600	1,660 1,720 1,840 1,960	3,000
1,360	1,480	1,600	1,660 1,720 1,840 1,960	3,000
1,640	1,720	1,800	1,880 1,960	3,000
1,640	1,720	1,800	1,880 1,960	3,000
2,250	2,355	2,460	2,565 2,670 2,775 2,880 2,985	3,000