

ACCURACY

Three accuracy grades are available: normal-grade (no suffix), high-grade (H), and precision-grade (P).

Table 1 Accuracy unit/mm

part number	SGL15,20			SGL25,30,35			SGL45		
	normal	high	precision	normal	high	precision	normal	high	precision
accuracy grade	normal	high	precision	normal	high	precision	normal	high	precision
accuracy symbol	none	H	P	none	H	P	none	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 Running parallelism of surface D to surface B	refer to Figure 1								

Figure 1 Motion Accuracy

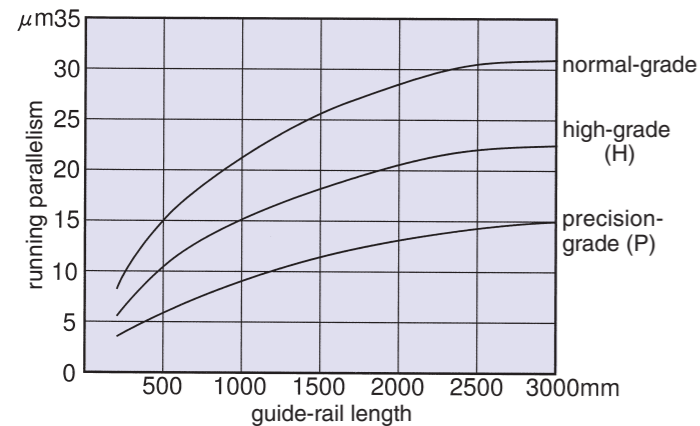
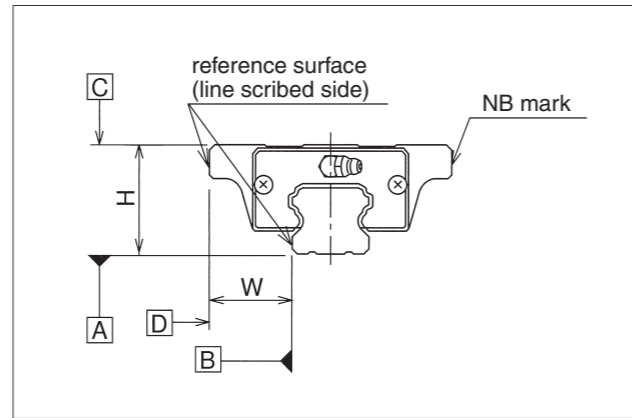


Figure 2 Accuracy



PRE-LOAD

SGL slide guides are available with a standard pre-load(no suffix), light pre-load(T1), and medium pre-load(T2).

Table 2 Pre-Load Symbol and Radial Clearance unit/μm

pre-load category	standard	light	medium
pre-load symbol	none	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 3 Operating Condition and Pre-Load

category	symbol	operating condition
standard	none	Minute vibration is applied. Precision motion is required. Moment in a given direction is applied.
light	T1	Light vibration is applied. Light moment is applied. Moment is applied.
medium	T2	Shock/vibration is applied. Over-hang load is applied. Torsional load is applied.



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NEW ITEM
SGL 6-Hole type

SLIDE GUIDE

SGL-HTEX type

BETTER HOLD for BETTER PRECISION



ISO9001/ISO14001



NIPPON BEARING CO., LTD.

SGL-HTEX TYPE

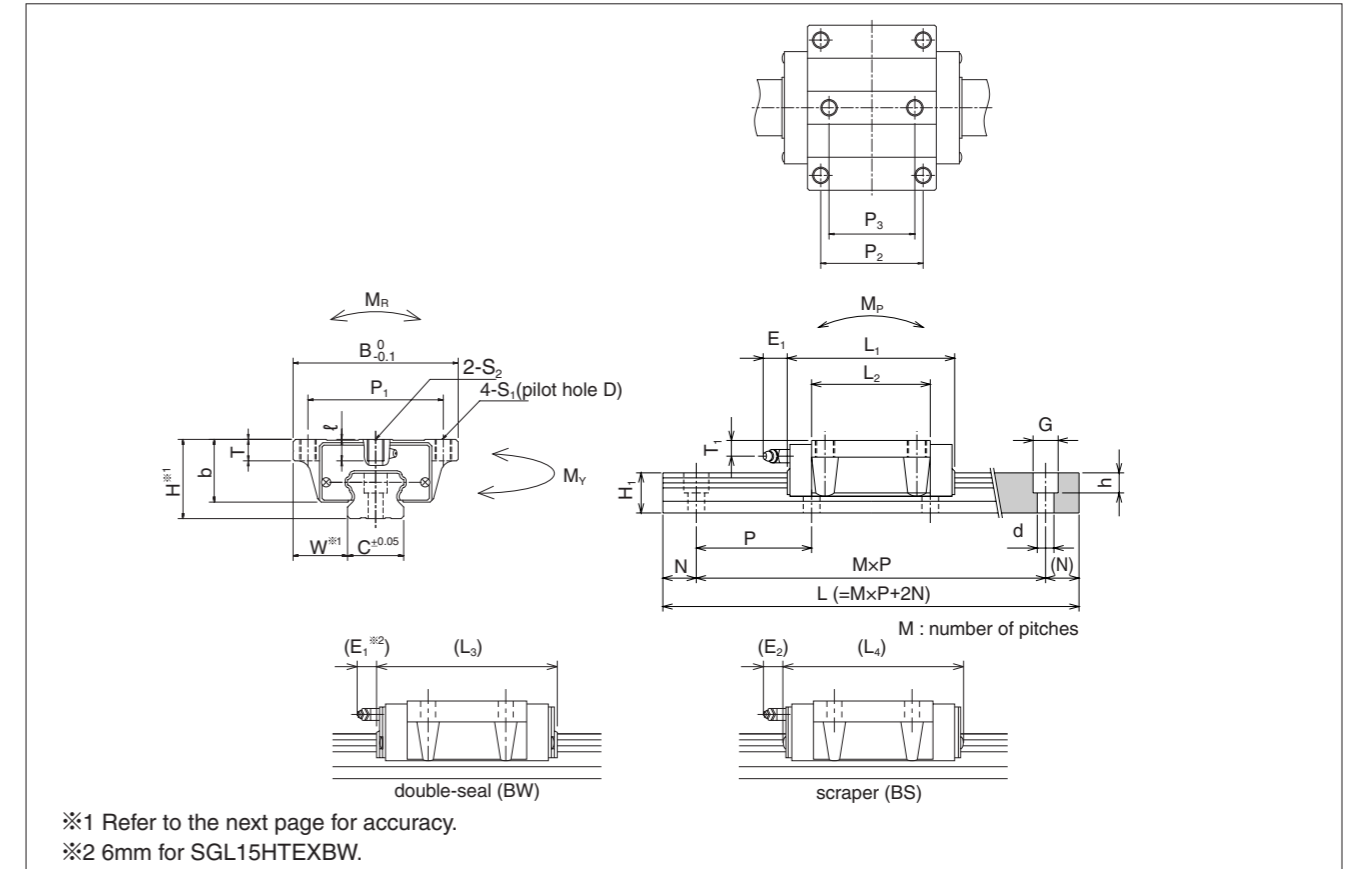


part number structure example **SGL 15 HTEX B 2 T1 - 589 P / W2 FS LB F J KGL**

SGL type
size
block style
seal
number of blocks per rail
symbol for pre-load
total length of rail
accuracy grade

symbol for grease
with bellows
with rail mounting hole caps
with low temperature black chrome treatment
with Fiber Sheet
Fiber sheet comes only with standard grease.
symbol for number of rails

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



part number	assembly dimensions		block dimensions													
	H	W	B	L ₁	L ₂	L ₃	L ₄	P ₁	P ₂	S ₁	D	T	P ₃	S ₂	ℓ	b
	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm
SGL15HTEX	24	16	47	56.5	38.5	62.7	63.1	38	30	M5	4.4	7.5	26	M5	6	19.7
SGL20HTEX	30	21.5	63	71.6	53.2	77.8	78.2	53	40	M6	5.4	10.5	35	M6	8	24
SGL25HTEX	36	23.5	70	80	59	86.4	87.2	57	45	M8	6.8	12.5	40	M8	10	29
SGL30HTEX	42	31	90	95.7	67.7	104.3	103.3	72	52	M10	8.5	10	44	M10	10	32.5
SGL35HTEX	48	33	100	109	78	117.6	116.6	82	62			13	52		13	38
SGL45HTEX	60	37.5	120	139	102	147.5	148	100	80	M12	10.5	15	60	M12	14	50

				guide-rail dimensions					basic load rating			allowable static moment		mass		size
E ₁	E ₂	T ₁	grease fitting	H ₁	C	dxGxh	N	P	dynamic C	static Co	M _p	M _y	M _r	block	guide rail	
mm	mm	mm		mm	mm	mm	mm	mm	kN	kN	N·m	N·m	N·m	kg	kg/m	
5	5.4	5	pressed fitting	13.5	15	4.5×7.5×5.3	20	60	10.6	16.2	100	100	127	0.2	1.3	15
14	13.3	8	B-M6F	16	20	6×9.5×8.5			18.4	27.5	227	227	296	0.4	2.1	20
	13.1	9.5		20	23	7×11×9			24.8	36.3	335	335	437	0.6	3.0	25
	14	9		24	28	9×14×12			33.6	49.2	529	529	716	1.0	4.6	30
		8.5		27.5	34		80	46.7	64.8	796	796	1,188	1.5	6.2	35	
16	16	10	B-PT1/8	36.5	45	14×20×17	22.5	105	74.8	101.2	1,553	1,553	2,312	3.1	10.5	45

1kN ≅ 102kgf 1N·m ≅ 0.102kgf·m

part number	standard rail length L														
	mm														
SGL15	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000
SGL20	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
SGL25	220	280	340	400	460	520	580	640	700	760	820	880	940	1,000	1,120
SGL30	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400
SGL35	280	360	440	520	600	680	760	840	920	1,000	1,080	1,160	1,240	1,320	1,400
SGL45	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

								maximum length mm	
1,120	1,240	1,360	1,480					2,000	
1,240	1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
1,240	1,360	1,480	1,600	1,660	1,720	1,840	1,960	3,000	
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	
2,145	2,250	2,355	2,460	2,565	2,670	2,775	2,880	2,985	3,000

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