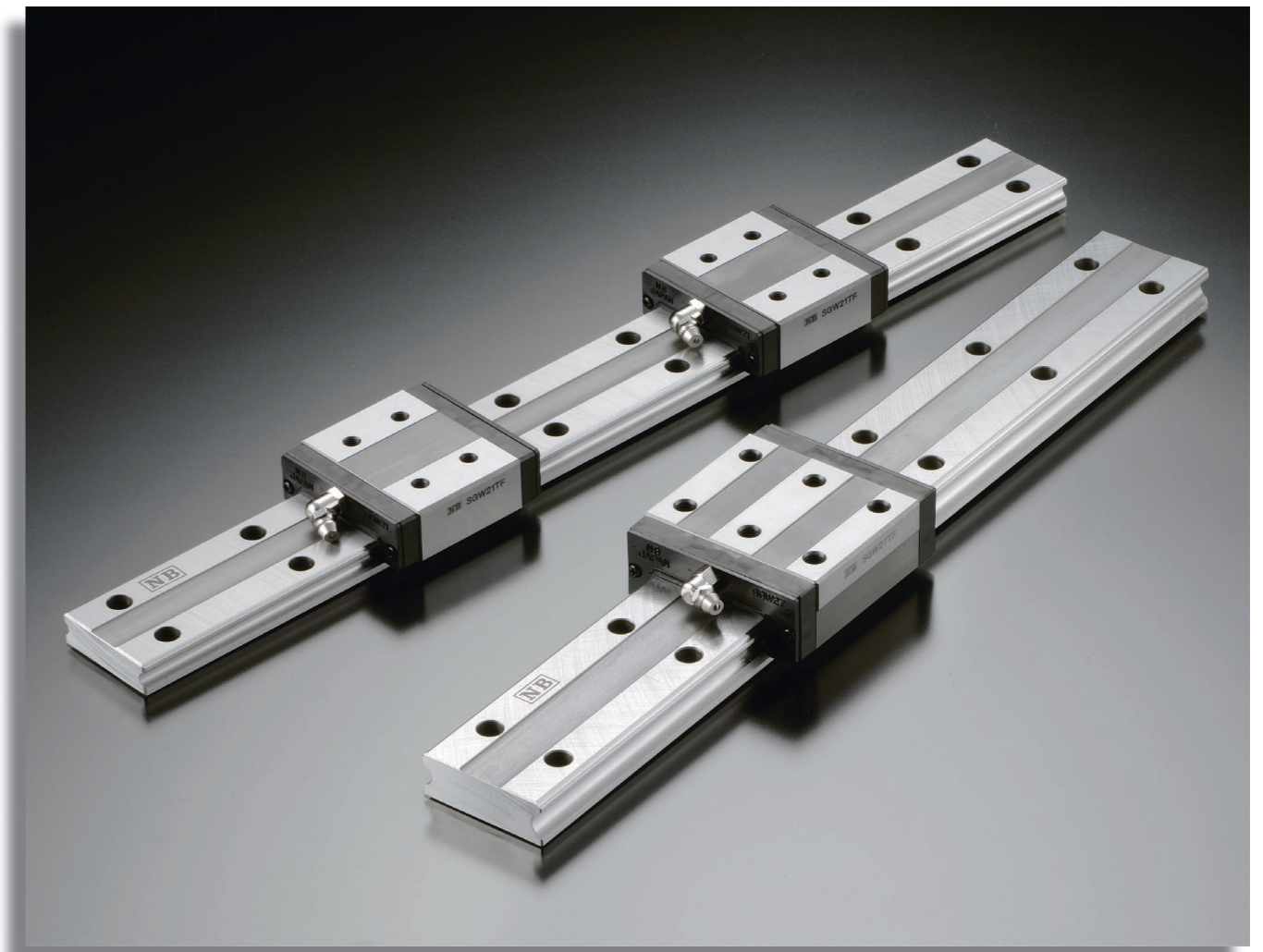


**SGW-TF type**

**SLIDE GUIDE**  
 SLIDE GUIDE

**Extreme Rigidity, High Moment Load Capability**  
**Low-Wide Profile Optimal in Single Axis Use**



**ACCURACY**

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

Table 1 Accuracy unit/mm

part number	SGW17,21			SGW27,35		
	normal	high	precision	normal	high	precision
accuracy grade	normal	high	precision	normal	high	precision
accuracy symbol	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
paired difference for height H	0.02	0.01	0.006	0.02	0.015	0.007
allowable dimensional tolerance for width W	±0.1	±0.03	-0.03~0	±0.1	±0.04	-0.04~0
paired difference for width W	0.02	0.01	0.006	0.03	0.015	0.007
Running parallelism of surface C to surface A Running parallelism of surface D to surface B	refer to Figure 1					

Figure 1 Motion Accuracy

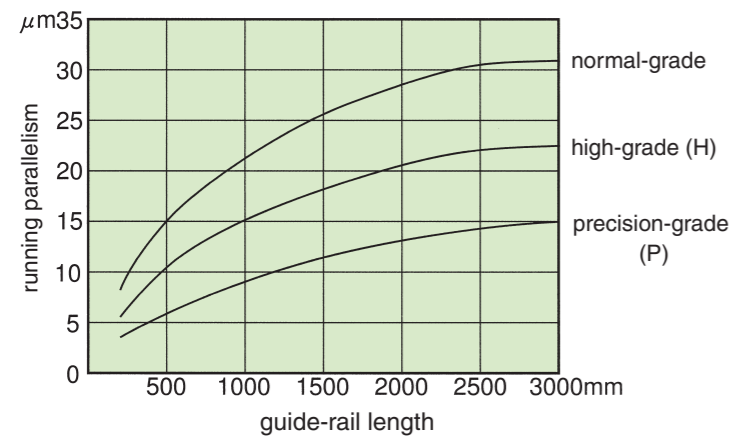
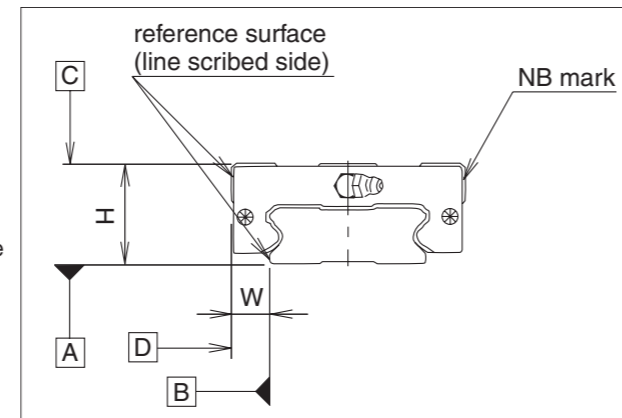


Figure 2 Accuracy



**PRE-LOAD**

Three levels of pre-load are available for SGW slide guides: standard, light (T1), and medium (T2).

Table 2 Pre-Load Call Out and Radial Clearance unit/µm

category	standard	light	medium
symbol	blank	T1	T2
SGW17	-3~+2	-7~-3	-
SGW21	-4~+2	-8~-4	-
SGW27	-5~+2	-11~-5	-
SGW35	-8~+4	-18~-8	-28~-18

Table 3 Operating Conditions and Pre-Load

pre-load category	symbol	operating condition
standard	blank	Minute vibration is applied. Precision motion is required. Moment in a given direction is applied.
light	T1	Light vibration is applied. Light torsion is applied. Moment is applied.
medium	T2	Shock/vibration is applied. Over-hang load is applied. Torsional load is applied.



**NIPPON BEARING CO., LTD.**

2833 Chiya, Ojiya-city, Niigata-pref., 947-8503 JAPAN  
 Phone: +81-258-82-0011 Fax: +81-258-81-1135  
<http://www.nb-linear.co.jp>

**NB Corporation of America**

930 Muirfield Drive, Hanover Park, IL 60133  
 Phone:(630)295-8880 Fax:(630)295-8881  
 Toll Free:(800)521-2045

<http://www.nbcorporation.com>  
 info@nbcorporation.com

**Western Regional Office**

2157 O'Toole Ave., Suite D, San Jose, CA 95131  
 Phone:(408)435-1800 Fax:(408)435-1850  
 Toll Free:(888)562-4175

**Eastern Regional Office**

52 First Street, Hackensack, NJ 07601  
 Phone:(201)487-1441 Fax:(201)487-7107  
 Toll Free:(800)981-8190

**NB Europe B.V.**

Boekweitstraat 21, 2153 GK Nieuw-Vennep, The Netherlands  
 Phone:+31(0)252 463 200 Fax:+31(0)252 463 209  
<http://www.nbeurope.com>  
 info@nbeurope.com

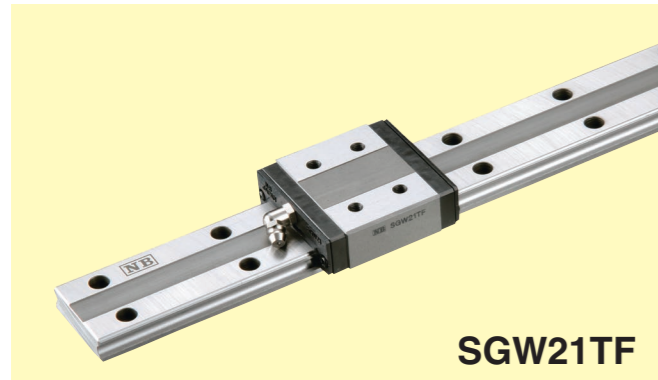
No. 5610  
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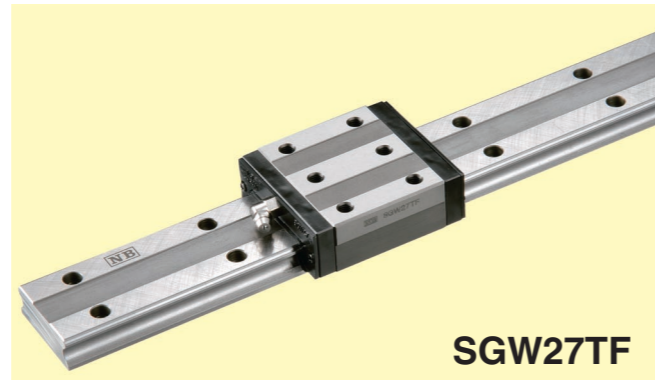
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SGW-TF TYPE



SGW21TF



SGW27TF

part number structure example **SGW 21 TF B 2 T1 - 589 P / W2 FS LB F - KGL**

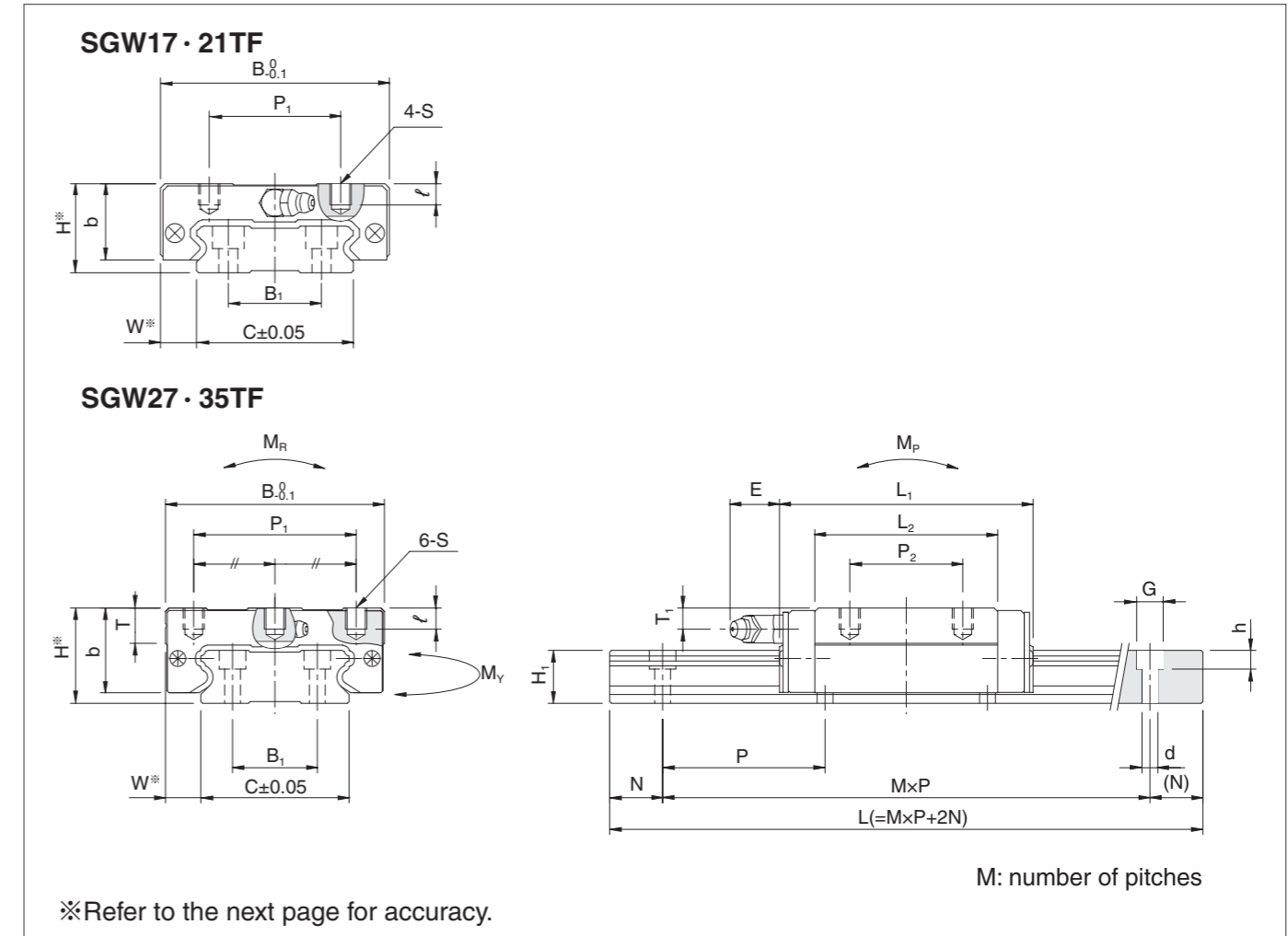
SGW type  
size  
block style  
seal  
number of blocks per rail  
symbol for pre-load  
total length of rail  
accuracy grade

symbol for grease  
blank standard grease  
KGL lithium-based grease  
KGU urea-based grease  
KGF anti-fretting grease  
GK K-grease

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  
blank single rail  
W2 double rails  
W3 triple rails

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



part number	assembly dimensions		block dimensions											grease fitting
	H	W	B	L <sub>1</sub>	L <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	S	ℓ	T	b	E	T <sub>1</sub>	
SGW17TF	17	8.5	50	51	33.6	29	15	M4	4	—	14.5	2.5	4	pressed fitting
SGW21TF	21	8.5	54	58	40	31	19	M5	5	—	18		4.5	B-M6F
SGW27TF	27	10	62	71.8	51.8	46	32	M6	6	10	24	14	6	
SGW35TF	35	15.5	100	106.6	77.6	76	50	M8	8	14	31		8	

guide-rail dimensions				basic load rating		allowable static moment			mass		size		
H <sub>1</sub>	C	B <sub>1</sub>	d×G×h	N	P	M <sub>p</sub>	M <sub>v</sub>	M <sub>R</sub>	block	guide rail			
9	33	18	4.5×7.5×5.3	15	40	4.8	8.6	43	43	161	0.13	2.05	17
11	37	22			50	7	12	72	72	253	0.20	2.84	21
15	42	24			60	13	22	172	172	496	0.38	4.43	27
19	69	40	7×11×9	20	80	31	49	579	579	1,855	1.16	9.32	35

1kN ≈ 102kgf 1N·m ≈ 0.102kgf·m

part number	standard rail length L mm										
SGW17	110	150	190	230	270	310	350	390	430	510	590
SGW21	130	180	230	280	330	380	430	480	530	630	730
SGW27	160	220	280	340	400	460	520	640	760	880	1,000
SGW35	280	360	440	520	600	680	760	920	1,080	1,240	1,400

							maximum length mm
670	750	830	950	1,070	1,190	1,310	2,000
830	930	1,030	1,180	1,330	1,480		2,000
1,180	1,360	1,540	1,720	1,900			3,000
1,640	1,880	2,120					3,000

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