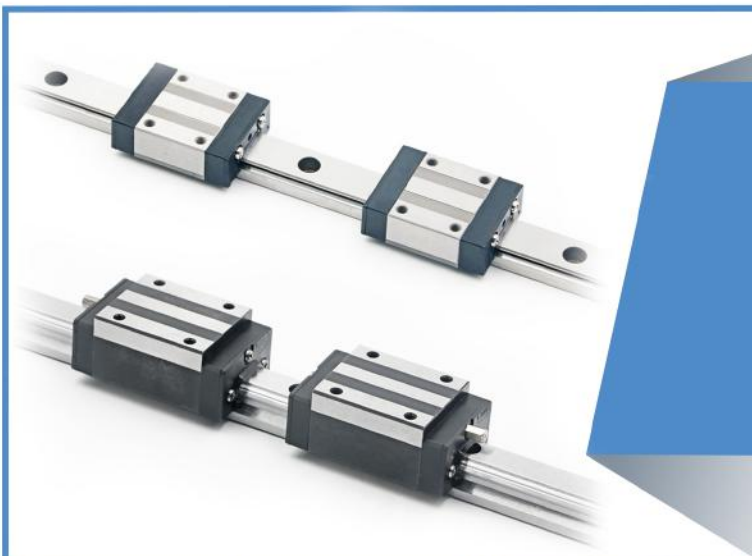




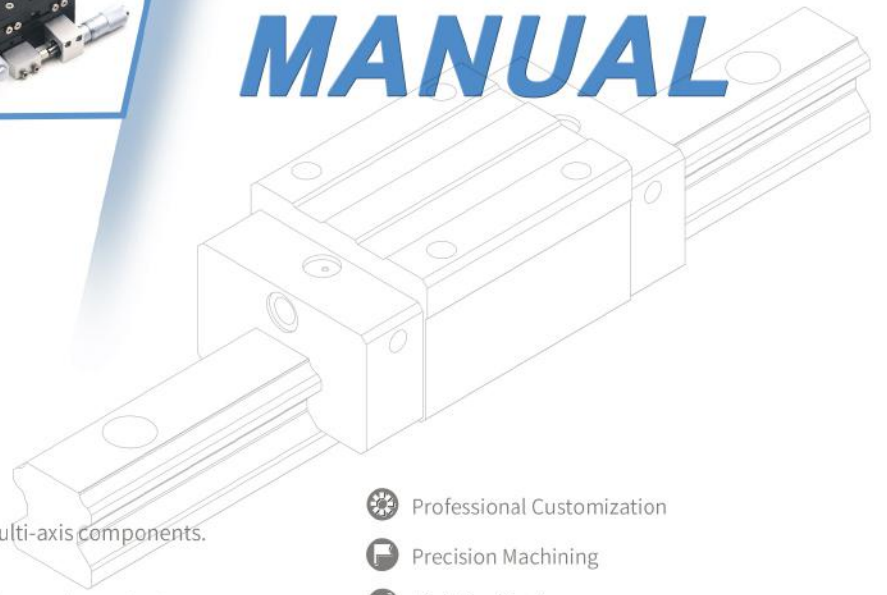
SCREWTECH®

LINEAR MOTION SYSTEMS & SOLUTIONS

## LGX SMALL LINEAR SLIDE & LGC MINIATURE LINEAR SLIDE



# PRODUCT MANUAL



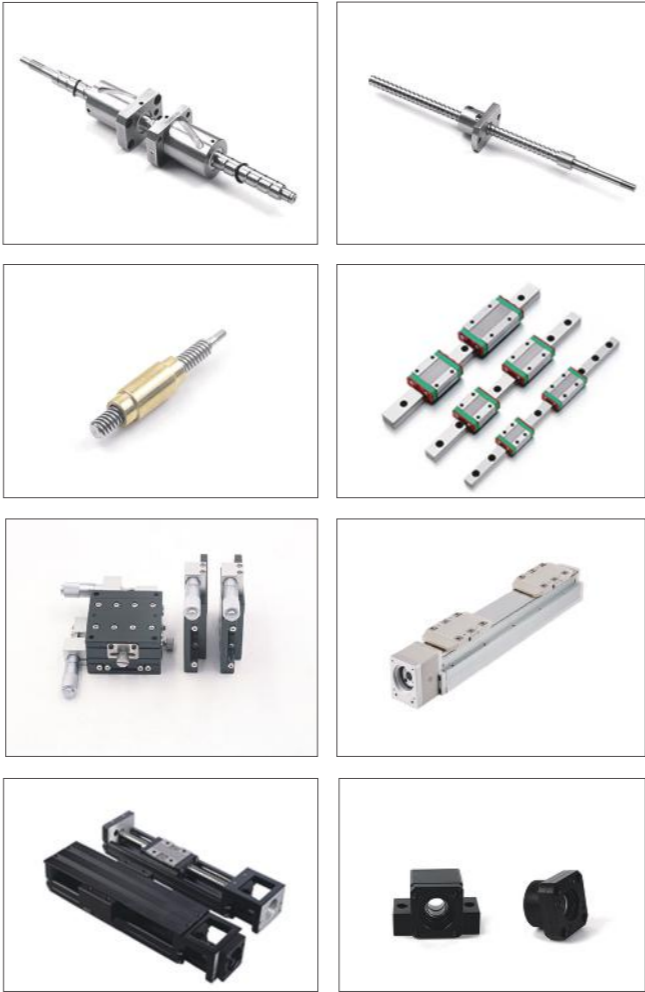
### SCREW TECHNOLOGY CO.,LTD.

Transmission parts and supporting mechanical parts.  
Linear transmission components, such as single-axis and multi-axis components.  
Motors, controllers, sensors, encoders, etc.  
Design, assembly and debugging of non-standard automation equipment, etc.

-  Professional Customization
-  Precision Machining
-  High Quality Assurance



## MAIN PRODUCTS



## ABOUT US

We SCREWTECHNOLOGYCO.,LIMITED is established in 2011, is a manufacturer of linear motion systems. We committed to providing customers with linear motion solutions. Adhering to the business philosophy of "professional, integrity, and efficiency", we look forward to contributing to the world's automated manufacturing.

Our products include:

- ▶ Transmission parts and supporting mechanical parts, such as: ball screw and lead screw, guide rail, ball spline, coupling, support unit, nut seat, motor house, adapter plate, bearing, etc.;
- ▶ Linear transmission components, such as: single axis robot, multi-axis linear modules, electric cylinders, and linear platforms;
- ▶ Motors, controllers, sensors, encoders, etc., such as: stepper motors, servo motors, drivers, etc.;
- ▶ Design, assembly and debugging of nonstandard automation equipment.



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## Our strengths:

### ✓High Efficiency:

Products in stock will be shipped the next day after receiving the order, to meet your most urgent delivery needs in the development and production process.

### ✓High Quality:

All products are made of high quality raw materials and imported steel balls. After the product assembly is finalized, it passes the reliability test, and the dimension accuracy is 100% full inspection, to ensure the stable and reliable product quality.

### ✓Excellent service:

Professional engineers can come to the site to understand the demand, and help solve the installation and use of the process of various problems. In addition, we can provide 24-hour telephone consulting service, at any time for you to answer all kinds of problems.

Professional equipment + Professional talents + Professional services, to provide you with high quality linear motion products. At present, the linear motion products we produce are as follows:

### Rolling linear guideways series summary

Series	The existing models	Combined Altitudes		Type of block		
				Standard load	NS	NF
LGX(four row circular arc)	No15、 No20	High type	LGXH	Standard load	NS	NF
	No15、 No20	Low type	LGXL	Light load	NS	NF
	No15	Low type	LGXL	Light load	SS	
LGC(Gothic)	No5、 No7、 No9、 No12、 No15			Standard load	NS	
	No7、 No9、 No12、 No15			Standard load locating hole	NSD	
	No7、 No9、 No12、 No15			Light load	SS	
	No7、 No9、 No12、 No15			Light load locating hole	SSD	
	No7、 No9、 No12、 No15			Heavy load	HS	
	No7、 No9、 No12、 No15			Heavy load locating hole	HSD	

### 01. Production equipment overview



Imported precision slide rail processing equipment



Imported precision slide block processing equipment



contact-based third dimension

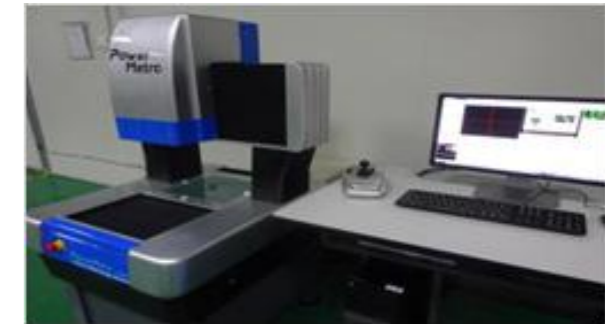


Image third dimension



Life testing machine



Heat treatment equipment



Slide rail manufacturing



Slide block manufacturing



Slide block assembly



Accuracy inspection

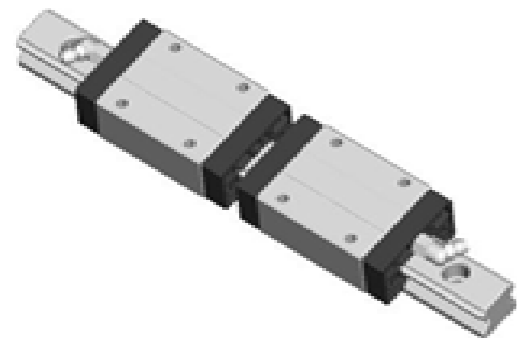
## 02.Rolling linear guideways series summary

Linear guide is mainly used for linear reciprocating motion, can bear a certain torque, can achieve high precision linear motion under high load.  
At present, we have the following types of rolling linear guideways for customers to choose, and more models are under development.

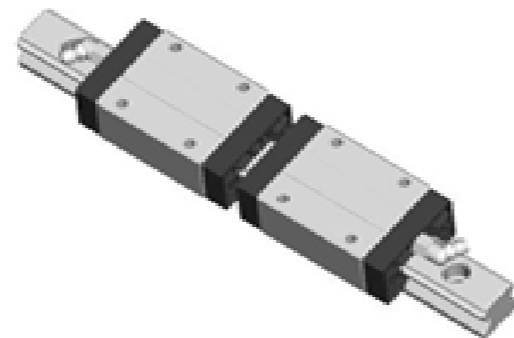
Series	The existing models	Combined Altitudes		Type of block		
				Standard load	NS	NF
LGX(four row circular arc)	No15、 No20	High type	LGXH	Standard load	NS	NF
	No15、 No20	Low type	LGXL	Light load	NS	NF
	No15	Low type	LGXL	Light load	SS	
LGC(Gothic)	No5、 No7、 No9、 No12、 No15			Standard load	NS	
	No7、 No9、 No12、 No15			Standard load locating hole	NSD	
	No7、 No9、 No12、 No15			Light load	SS	
	No7、 No9、 No12、 No15			Light load locating hole	SSD	
	No7、 No9、 No12、 No15			Heavy load	HS	
	No7、 No9、 No12、 No15			Heavy load locating hole	HSD	

### 2-1 LGX series - The features of rolling linear guideways

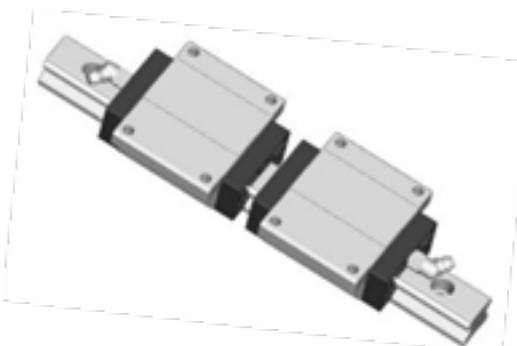
- ◆ LGX series linear guideway adopts 4 columns of circular arc contact type and 45° contact Angle steel ball line design, providing the same rated load capacity in radial, anti-radial and transverse directions.
- ◆ The front combination of circular channel design, so that it has automatic centering ability, but also can absorb the installation error, and maintain smooth, stable, high precision linear motion.
- ◆ Under strict control of manufacturing accuracy, the dimensions can be maintained within stable tolerances. Therefore, for the interchangeability linear guideway, the slider can be arbitrarily assembled on the guide rail of the same model during assembly, and the same smoothness, preloading and precision can be maintained to make assembly and maintenance easier.



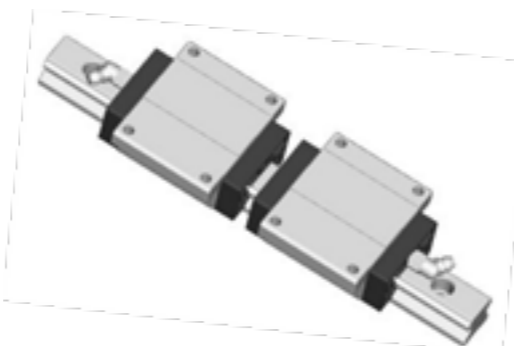
Standard quadrangle for low assembly



Standard quadrangle for high assembly



Flange type for low assembly



Flange type for high assembly

### 2-1-1 LGX series - The label description of rolling linear guideways

LGX series guideways can be classified into non-interchangeable and interchangeable types, customers can purchase according to the actual demand.

#### A. Non-interchangeable type

**LGX L 20 N S 2 UU ZA R520 - 20/20 P II**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

No.	Representative name	Labeling method	Meaning
①	Type	LGX	Four row circular arc
②	Combined altitudes	L	Low type
		H	High type
③	Specification	Value	
④	Load type	H	Heavy loading
		N	Standard loading
		S	Slight loading
⑤	Block type	S	Square
		F	Flange type
⑥	Number of slider	Value	
⑦	Dust-proof mode	UU	Two-way oil scraping on the end face
⑧	Preload level	Z0	No preload
		ZA	Light preload
		ZB	Medium preload
⑨	Fixed way of guideway	No label	Countersink
		M	Thread hole
⑩	Length of guideways	Value	mm
⑪	Starting/end hole distance of rail	Value	Starting/end hole distance of rail Note:the reference arrow faces up with the left as the starting point and the right as the end
⑫	Precision Code	C	General
		H	High
		P	Precision
		SP	High-precision
		UP	Ultra high precision
⑬	No.of rails per matched set	No label	one piece
		II	Two (and so on)

B. Interchangeable types

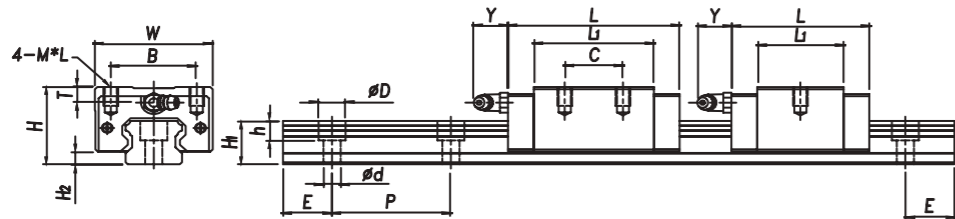
B-1 The label of interchangeable block (choose the block label separately)

**LGX L 20 N S UU ZA H**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

No.	Representative name	Labeling method	Meaning
①	Type	LGX	Four raw circular arc
②	Combined altitudes	L	Low type
		H	High type
③	Specification	Value	
④	Load type	H	Heavy loading
		N	Standard loading
		S	Slight loading
⑤	Block type	S	Square type
		F	Flange type
⑥	Dust-proof mode	UU	Two-way oil scraping on the end face
⑦	Preload Code	Z0	None
		ZA	Light preload
		ZB	Medium preload
⑧	Precision Code	C	General
		H	High
		P	Precision
		SP	High-precision
		UP	Ultra high precision

2-1-2 LGX series - The combination size of rolling linear guideways

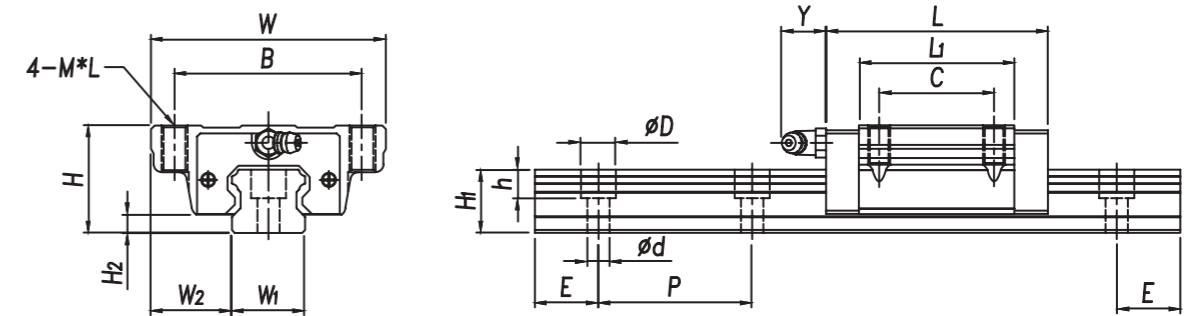


B-2 the label of interchangeable rail (choose the rail label separately)

**LGX 20 R 520 - 20/20 P II**

① ② ③ ④ ⑤ ⑥ ⑦

No.	Representative name	Labeling method	Meaning
①	Type	LGX	Four raw circular arc
②	Specification	Value	
③	Fixed way of guideway	R	Countersink
		M	Thread hole
④	Rail length	Value	mm
⑤	Starting/end hole distance of rail	Value/Value	
		Starting/end hole distance of rail Note: the reference arrow faces up with the left as the starting point and the right as the end	
⑥	Precision Code	C	General
		H	High
		P	Precision
		SP	High-precision
		UP	ultra high precision
⑦	No. of rails per matched set	No label	one piece
		II	Two (and so on)



Nominal model	Combination of size	Block size											Guideway size				Basic rated load		Allowable static torque kN. m			Weight			
		H	H2	W1	W	L	L1	B	C	M*L	T	Y	W1	H	E	P	D*d*h	Length	CO	B	MA	MB	MC	Slider	Slide
																		Max	kN	kN				kg	kg/m
LGXL15	SS	24	4.5	9.5	34	42	23	26	/	M4*5	3	5	15	24	4.5	9.5	34	42	23	26	/	M4*5	3	5	15
LGXL15	NS	24	4.5	9.5	34	58.5	39.5	26	26	M4*5	3	5	15	24	4.5	9.5	34	58.5	39.5	26	26	M4*5	3	5	15
LGXH15	NS	28	4.5	9.5	34	58.5	39.5	26	26	M4*5	7	5	15	28	4.5	9.5	34	58.5	39.5	26	26	M4*5	7	5	15
LGXH15	NF	24	4.5	16	47	58.5	39.5	38	30	M5	3	5	15	24	4.5	16	47	58.5	39.5	38	30	M5	3	5	15
LGXL15	NF	24	4.5	18.5	52	58.5	39.5	41	26	M5	3	5	15	24	4.5	18.5	52	58.5	39.5	41	26	M5	3	5	15
LGXL20	NS	28	4.5	11	42	73.4	50	32	32	M5*6	5.2	12	20	28	4.5	11	42	73.4	50	32	32	M5*6	5.2	12	20
LGXH20	NS	30	4.5	12	44	73.4	50	32	36	M5*6	5.2	12	20	30	4.5	12	44	73.4	50	32	36	M5*6	5.2	12	20
LGXH20	NF	30	4.5	21.5	63	73.4	50	53	40	M6	5.2	12	20	30	4.5	21.5	63	73.4	50	53	40	M6	5.2	12	20



### 2-1-3 LGX series - Accuracy specification of rolling linear guideways

LGX The precision of linear guideways can be divided into walking parallelism, combined height, width tolerance. When multiple blocks are used on the same guide rail or when multiple guide rails are installed on the same plane, the mutual tolerance of height, width and combination of each model is specified. Please refer to the precision specification of each model for details.

**A. Walking Parallelism** The parallelism error between the block and the datum plane when the block moves over the whole length of the orbit by fastening the rail to the datum plane.

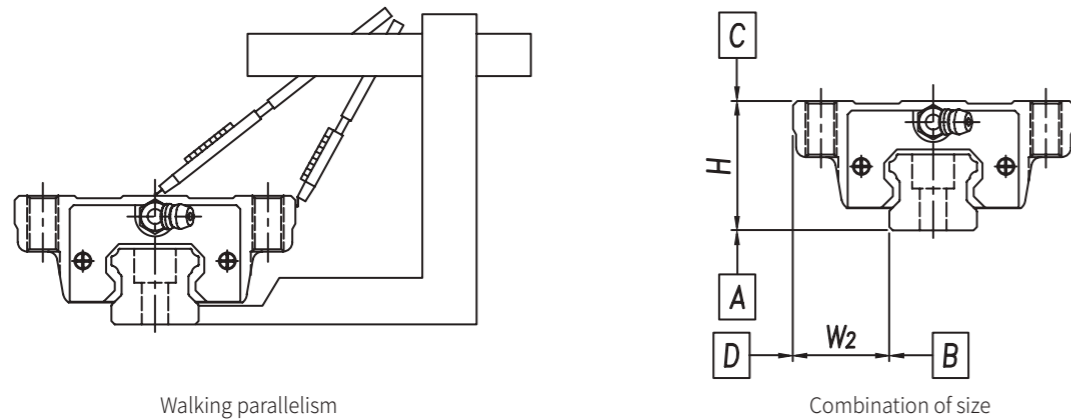


Table 2.2-LGX series walking parallel precision

Rail length (mm)	Precision Code				
	Common	High	Precision	High-precision	Ultra high precision
	C	H	P	SP	UP
0 ~ 100	12	7	3	2	2
100 ~ 200	14	9	4	2	2
200 ~ 300	15	10	5	3	2
300 ~ 500	17	12	6	3	2
500 ~ 700	20	13	7	4	2
700 ~ 900	22	15	8	5	3
900 ~ 1,100	24	16	9	6	3
1,100 ~ 1,500	26	18	11	7	4
1,500 ~ 1,900	28	20	13	8	4
1,900 ~ 2,000	31	22	15	10	5

### B. Dimensional tolerance is allowed for combined height and width

Table 2.3-LGX series non – interchangeable rail assembly precision table

Model	LGX 15/LGX 20				
	Common	High	Precision	Super precision	ultra high
Precision code (mm)	C	H	P	SP	UP
Allowable dimensional error of height H	± 0.1	± 0.03	0/-0.03	0/-0.015	0/-0.008
Allowable dimensional error of width W2	± 0.1	± 0.03	0/-0.03	0/-0.015	0/-0.008
The mutual error of the paired height H	0.02	0.01	0.006	0.004	0.003
Mutual error of paired width W2	0.02	0.01	0.006	0.004	0.003
Block C In the face of the rail A .The parallelism of the surface.	Walking parallelism (table 2.2 LGX series walking parallelism precision)				
Block D In the face of the rail B . The parallelism of the surface.	Walking parallelism (table 2.2 LGX series walking parallelism precision)				

Table 2.4-LGX series non – interchangeable rail assembly precision table

Model	LGX 15/LGX 20		
	Common	High	Precision
Precision code (mm)	C	H	P
Allowable dimensional error of height H	± 0.1	± 0.03	0/-0.03
Allowable dimensional error of width W2	± 0.1	± 0.03	0/-0.03
The mutual error of the paired height H	0.02	0.01	0.006
Mutual error of paired width W2	0.02	0.01	0.006
Block C In the face of the rail A .The parallelism of the surface.	Walking parallelism (table 2.2 LGX series walking parallelism precision)		
Block D In the face of the rail B . The parallelism of the surface.	Walking parallelism (table 2.2 LGX series walking parallelism precision)		

### 2-1-4 LGX series rolling linear guideways preloading instructions

A. The purpose of preloading: by increasing the diameter of the steel ball, the contact part of the track surface and the rolling object will generate the internal stress in advance, so that the load applied to the linear guideways from the outside will be absorbed by this internal stress, thus controlling the elastic displacement and improving the rigidity.

B. Preloading set: preloading amount should consider the size of the installation of machinery and equipment characteristics of linear guideways, and how the load is applied to linear guideways. When rolling objects for steel ball, linear guide of preloading for about a third of the load, but if by vibration load or changing load, especially need high rigidity, should set a larger preloading.

C. The selection of preloading grade

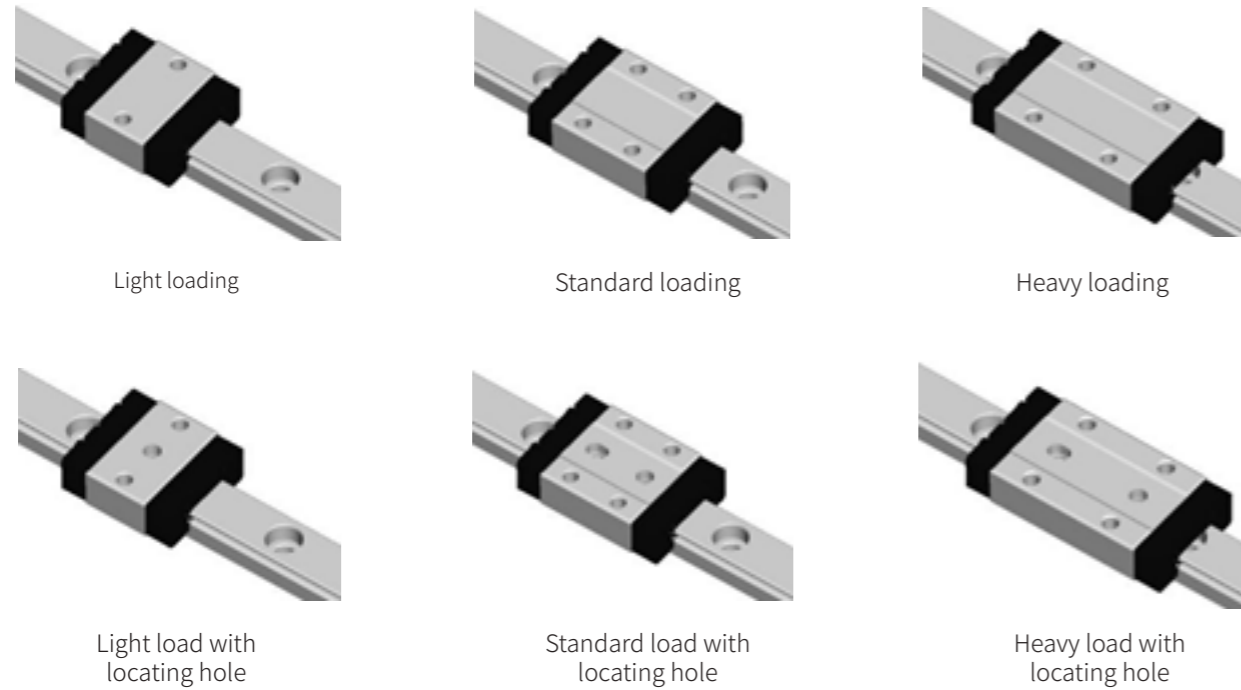
Table 2.5-LGX series preloading range and selection

Preload Code	Mark	Precompression	Suitable conditions
None	Z0	0	Fixed load direction, shock, small impact force, low precision requirements of the use of the environment.
Light preload	ZA	0.04 ~ 0.07C	Environment with light load, small impact and certain requirements for accuracy.
Medium Preload	ZB	0.08 ~ 0.12C	Requirements of high rigidity and vibration, large impact force, precision has certain requirements of the use of the environment.

Note: please contact the sales staff if you have any other special preloading requirements.

### 2-2 LGC series - The features of rolling linear guideways

- ◆ LGC series linear guide rail adopts 2 goethe-arc contact type and 45° contact Angle steel ball column design, providing the same rated load capacity in radial, anti-radial and transverse directions, suitable for various installation methods and applications.
- ◆ Subminiature design provides the best choice for miniaturization equipment and installation in limited space. Simple and round steel ball backflow path design ensures smooth operation and low noise.



### 2-2-1 LGC series - The label description of rolling linear guideways

#### A. non-interchangeable type

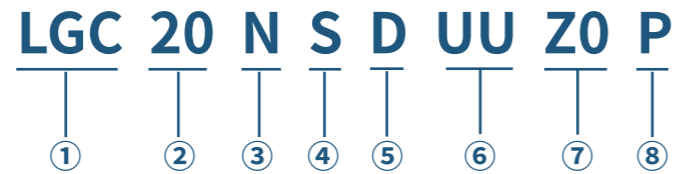
**LGC 12 N S D 2 UU ZA R 270 - 10/10 P II**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

No.	Representative name	Labeling method	Meaning
①	Type	LGC	Gothic
②	Combined altitudes	N	Standard loading
③	Load type	H	Heavy loading
		N	Standard loading
		S	Slight loading
④	Block type	S	Square type
⑤	Positioning hole	D	With positioning holes (no positioning holes are not marked)
⑥	Number of sliders	Value	
⑦	Dustproof method	UU	Two-way oil scraping on the end face
⑧	Preload Code	ZF	Micro gap
		ZO	No preload
		ZA	Light preload
⑨	Rail fixing method	R	Sink head
		M	Screw hole (customized)
⑩	Rail length	Value	mm
⑪	Starting/end hole distance of rail	Value / Value	Starting/end hole distance of rail Note:the reference arrow faces up with the left as the starting point and the right as the end
⑫	Precision Code	C	General
		H	High
		P	Precision
⑬	No.of rails per matched set	No label	one piece
		II	Two or more

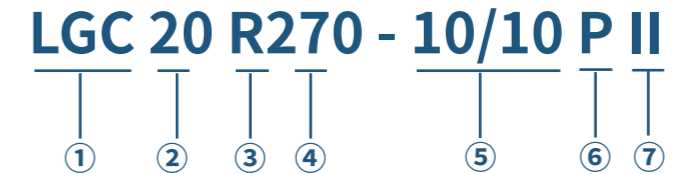
**B. Interchangeable types**

B-1 the label of interchangeable block (choose the block label separately)



No.	Representative name	Labeling method	Meaning
①	Type	LGC	Gothic
②	Combined height	N	Standard
③	Load type	H	Heavy loading
		N	Standard loading
		S	Slight loading
④	Block type	S	Square type
⑤	Positioning hole	D	With positioning holes (no positioning holes are not marked)
⑥	Dustproof method	UU	Two-way oil scraping on the end face
⑦	Preload Code	Z0	None
		ZA	Light preload
		ZB	Medium preload
⑧	Precision Code	C	General
		H	High
		P	Precision

B-2 the label of interchangeable rail (choose the rail label separately)



No.	Representative name	Labeling method	Meaning
①	Type	LGC	Gothic
②	Combined height	N	Standard
③	Rail fixing method	R	Sink head
		M	Screw hole (customized)
④	Rail length	Value	mm
⑤	Starting/end hole distance of rail	Value / Value	Starting/end hole distance of rail Note:the reference arrow faces up with the left as the starting point and the right as the end
⑥	Precision Code	C	General
		H	High
		P	Precision
⑦	No.of rails per matched set	No label	one piece
		II	Two or more

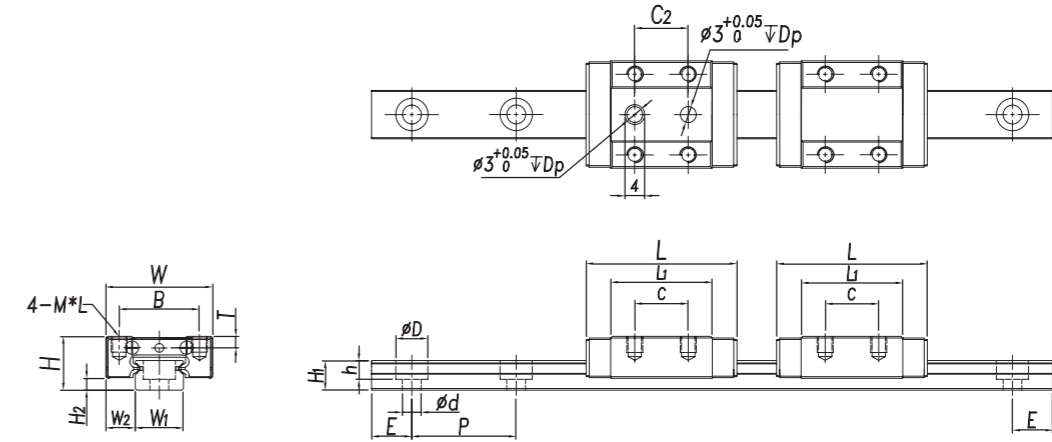
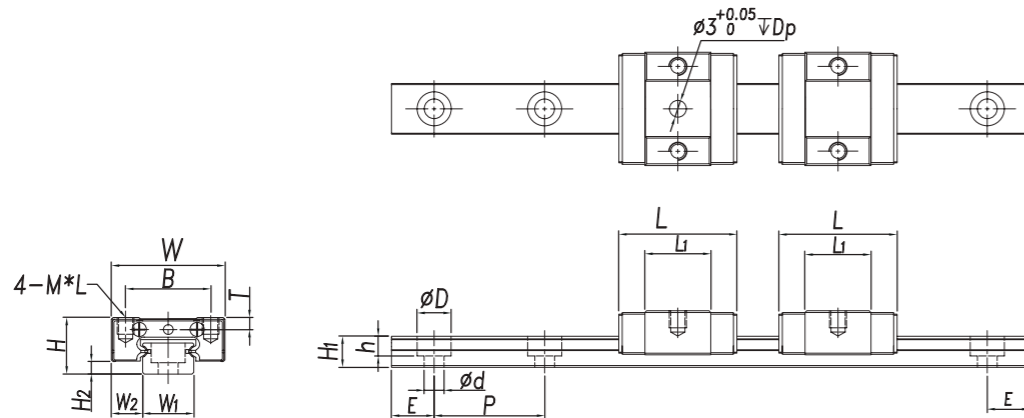
Note: SS and HS models are not available. Please select the model according to the combined size table.



**2-2-2 LGC series - The combination size of rolling linear guideways**

LGC5NS, LGC7SS, LGC7SSD, LGC9SS, LGC9SSD, LGC12SS, LGC12SSD, LGC15SS, LGC15SSD Series linear guide size diagram

LGC7NS, LGC7NSD, LGC7HS, LGC7HSD, LGC9NS, LGC9NSD, LGC9HS, LGC9HSD, LGC12NS, LGC12NSD, LGC12HS, LGC12HSD, LGC15NS, LGC15NSD, LGC15HS, LGC15HSD Series linear guide size diagram



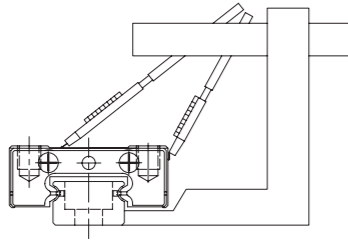
Nominal model	Combination of size				Block size									Rail size				Basic rated load			Statically permissible torque (N.m)			Quality	
	H	H2	W2	W	L	L1	B	C	M*L	T	C2	Dp	W1	H1	E	P	D*d*h	Length	C	CO	MA	MB	MC	Block	Rail
																		Max	kN	kN				kg	kg/m
LGC5 SS	6	1.5	3.5	12	16	9.6	8		M2*1.5	0.9	/	/	5	3.6	5	15	3.6*2.4*0.8	115	0.38	0.54	0.81	0.81	1.46	0.003	0.12
LGC7 SS	8	1.5	5	17	19	9.8	12		M2*2.5	1.5	/	/	7	4.8	5	15	4.2*2.4*2.3	295	0.73	0.88	2.03	2.03	3.45	0.007	0.22
LGC7 NS	8	1.5	5	17	22.8	13.6	12	8	M2*2.5	1.5	/	/	7	4.8	5	15	4.2*2.4*2.3	295	0.97	1.32	2.82	2.82	5.18	0.01	0.22
LGC7 HS	8	1.5	5	17	31.1	21.9	12	13	M2*2.5	1.5	/	/	7	4.8	5	15	4.2*2.4*2.3	295	1.33	2.05	4.53	4.53	8.05	0.015	0.22
LGC7 SSD	8	1.5	5	17	19	9.8	12		M2*2.5	1.5	/	2	7	4.8	5	15	4.2*2.4*2.3	295	0.73	0.88	2.03	2.03	3.45	0.007	0.22
LGC7 NSD	8	1.5	5	17	22.8	13.6	12	8	M2*2.5	1.5	8	2	7	4.8	5	15	4.2*2.4*2.3	295	0.97	1.32	2.82	2.82	5.18	0.01	0.22
LGC7 HSD	8	1.5	5	17	31.1	21.9	12	13	M2*2.5	1.5	13	2	7	4.8	5	15	4.2*2.4*2.3	295	1.33	2.05	4.53	4.53	8.05	0.015	0.22
LGC9 SS	10	2	5.5	20	21.9	11.9	15		M3*3.0	1.8	/	/	9	6.5	7.5	20	6*3.5*3.5	515	1.2	1.3	4.38	4.38	6.77	0.01	0.38
LGC9 NS	10	2	5.5	20	29	19	15	10	M3*3.0	1.8	/	/	9	6.5	7.5	20	6*3.5*3.5	515	1.8	2.34	6.99	6.99	12.19	0.017	0.38
LGC9 HS	10	2	5.5	20	39	29	15	16	M3*3.0	1.8	/	/	9	6.5	7.5	20	6*3.5*3.5	515	2.45	3.64	10.67	10.67	18.95	0.026	0.38
LGC9 SSD	10	2	5.5	20	21.9	11.9	15		M3*3.0	1.8	/	2.5	9	6.5	7.5	20	6*3.5*3.5	515	1.2	1.3	4.38	4.38	6.77	0.01	0.38
LGC9 NSD	10	2	5.5	20	29	19	15	10	M3*3.0	1.8	10	2.5	9	6.5	7.5	20	6*3.5*3.5	515	1.8	2.34	6.99	6.99	12.19	0.016	0.38
LGC9 HSD	10	2	5.5	20	39	29	15	16	M3*3.0	1.8	16	2.5	9	6.5	7.5	20	6*3.5*3.5	515	2.45	3.64	10.67	10.67	18.95	0.025	0.38
LGC12 SS	13	2.5	7.5	27	27	13	20		M3*3.5	2.9	/	/	12	7.5	10	25	6*3.5*4.5	495	1.92	2.03	7.53	7.53	13.5	0.023	0.55
LGC12 NS	13	2.5	7.5	27	34.6	20.6	20	15	M3*3.5	2.9	/	/	12	7.5	10	25	6*3.5*4.5	495	2.67	3.25	11.85	11.85	21.6	0.037	0.55
LGC12 HS	13	2.5	7.5	27	47.6	33.6	20	20	M3*3.5	2.9	/	/	12	7.5	10	25	6*3.5*4.5	495	3.54	4.88	18.34	18.34	32.39	0.06	0.55
LGC12 SSD	13	2.5	7.5	27	27	13	20		M3*3.5	2.9	/	3	12	7.5	10	25	6*3.5*4.5	495	1.92	2.03	7.53	7.53	13.5	0.022	0.55
LGC12 NSD	13	2.5	7.5	27	34.6	20.6	20	15	M3*3.5	2.9	14	3	12	7.5	10	25	6*3.5*4.5	495	2.67	3.25	11.85	11.85	21.6	0.035	0.55
LGC12 HSD	13	2.5	7.5	27	47.6	33.6	20	20	M3*3.5	2.9	20	3	12	7.5	10	25	6*3.5*4.5	495	3.54	4.88	18.34	18.34	32.39	0.058	0.55
LGC15 SS	16	4	8.5	32	33.1	18.5	25		M3*4.0	3.1	/	/	15	10	15	40	6*3.5*4.5	590	3.5	3.89	16.97	16.97	32.27	0.042	1.07
LGC15 NS	16	4	8.5	32	42.1	27.5	25	20	M3*4.0	3.1	/	/	15	10	15	40	6*3.5*4.5	590	4.65	5.84	25.23	25.23	48.41	0.062	1.07
LGC15 HS	16	4	8.5	32	60.1	45.5	25	25	M3*4.0	3.1	/	/	15	10	15	40	6*3.5*4.5	590	6.64	9.73	41.74	41.74	80.68	0.102	1.07
LGC15 SSD	16	4	8.5	32	33.1	18.5	25		M3*4.0	3.1	/	4	15	10	15	40	6*3.5*4.5	590	3.5	3.89	16.97	16.97	32.27	0.041	1.07
LGC15 NSD	16	4	8.5	32	42.1	27.5	25	20	M3*4.0	3.1	20	4	15	10	15	40	6*3.5*4.5	590	4.65	5.84	25.23	25.23	48.41	0.058	1.07
LGC15 HSD	16	4	8.5	32	60.1	45.5	25	25	M3*4.0	3.1	25	4	15	10	15	40	6*3.5*4.5	590	6.64	9.73	41.74	41.74	80.68	0.10	1.07

### 2-2-3 LGC series - Accuracy specification of rolling linear guideways

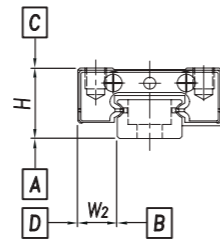
The precision of linear guideways can be divided into walking parallelism, combined height, width tolerance, when more than one block is used on the same guide rail or when more than one guide rail is installed on the same plane, the mutual tolerance of height, width and combination of each model is specified. Please refer to the precision specification of each model for details.

#### A. walking parallelism

The parallelism error between the block and the datum plane when the block moves over the whole length of the orbit by fastening the rail to the datum plane.



Walking parallelism



Combination of size

Table 2.6-LGC series walking parallel precision

Mode	LGC - 5,7,9,12,15		
	Precision code(μm)		
Rail length(mm)	Common (C)	High(H)	Precision(P)
0-50	12	6	2
50-80	13	7	3
80-125	14	8	3
125-200	15	9	4
200-250	16	10	5
250-315	17	11	5
315-400	18	11	6
400-500	19	12	6
500-515	20	13	7

#### B. Allowable dimensional tolerances for combination height and width

Table 2.7 -- LGC series non-interchangeable sliding track precision assembly accuracy table

Rail length(mm)	LGC - 5,7,9,12,15		
	Common C	High H	Precision P
Allowable dimensional error of height H	± 0.04	± 0.02	0/-0.01
Allowable dimensional error of width W2	± 0.04	± 0.025	0/-0.015
The mutual error of the paired height H	0.03	0.015	0.007
Mutual error of paired width W2	0.03	0.02	0.01
Block C In the face of the A slide The parallelism of the surface	Walking parallelism (table 2.6 -- LGC series walking parallelism precision)		
Block D In the face of the B slide The parallelism of the surface	Walking parallelism (table 2.6 -- LGC series walking parallelism precision)		

Table 2.8 - LGC series interchangeability slide precision assembly precision table

Model(mm)	LGC-5,7,9,12,15		
	Common C	High H	Precision P
Allowable dimensional error of height H	± 0.04	± 0.02	0/-0.01
Allowable dimensional error of width W2	± 0.04	± 0.025	0/-0.015
The mutual error of a pair height H	0.03	0.015	0.007
Mutual error of a pair width W2	0.03	0.02	0.01
Mutual error of multiple paired height H	0.07	0.04	0.02
Block C In the face of the A slide The parallelism of the surface	Walking parallelism (table 2.6 -- LGC series walking parallelism precision)		
Block D In the face of the B slide The parallelism of the surface	Walking parallelism (table 2.6 -- LGC series walking parallelism precision)		

### 2-2-4 LGC series - Preloading specification of rolling linear guideways

A.The purpose of preloading: by increasing the diameter of the steel ball, the contact part of the track surface and the rolling object will generate the internal stress in advance, so that the load applied to the linear guideways from the outside will be absorbed by this internal stress, thus controlling the elastic displacement and improving the rigidity.

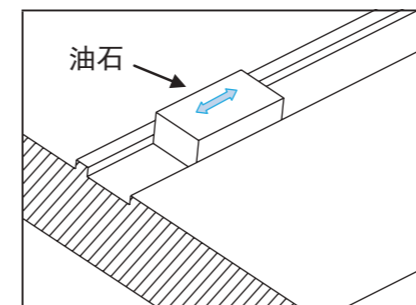
B.Preloading set: preloading amount should consider the size of the installation of machinery and equipment characteristics of linear guideways, as well as the load is applied to linear guideways, when rolling objects for steel ball, linear guide of preloading for about a third of the load, but if by vibration load or changing load, especially need high rigidity, should set a larger preloading.

#### C.selection of preloading grades

Table 2.9 - LGC5/ LGC7/LGC9/ LGC12/LGC15 series preloading range and selection

Preloading code	Mark	Preloading	Suitable accuracy
Micro clearance	ZF	precision clearance 2 ~ 8um	C
None	Z0	0	C、H、P
Light preloading	ZA	0.02 ~ 0.04C	C、H、P

### 03.Installation of rolling linear guideways



1. Please remove burrs and sundries on the mounting surface before installation to ensure that there is no rust on the mounting surface.
2. Check whether the accuracy of the mounting surface meets the requirements.

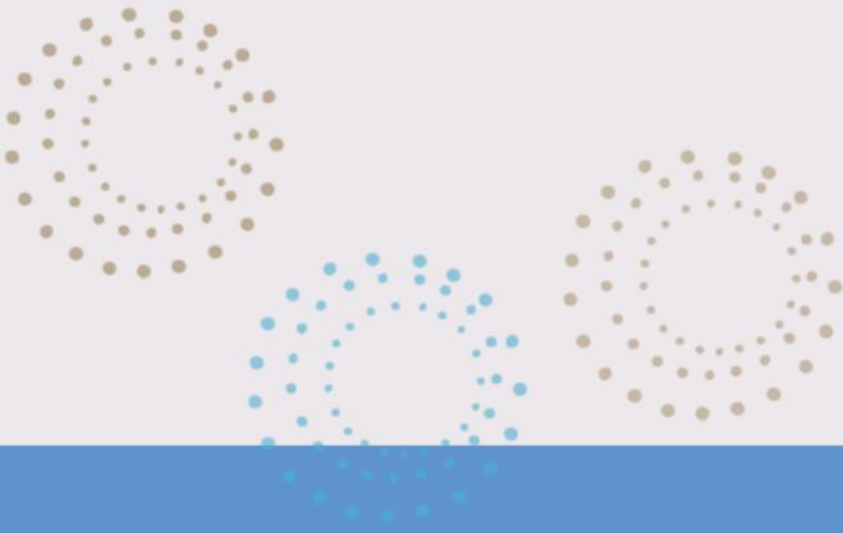
	<ol style="list-style-type: none"> <li>1. Lay the rail against the installation plane, and pay attention to that the sidewall of the rail is against the side wall of the mounting face of the table enchmark.</li> <li>2. Gently lock the countersunk head screw on the guide rail surface, so that the bottom of the guide rail and the bottom of the mounting table are roughly fixed.</li> </ol>
	<p>Use side screws to force the guide rail sideways against the base of the side wall of the mounting table. And pay attention to according to the order slowly lock the screw, pay attention to adjust the straightness at any time during the installation, in order to meet the use of demand</p>
	<p>Use a torque wrench to lock the countersunk head screws in accordance with the specified torque in order to force the bottom datum of the guide rail to the bottom datum of the mounting table.</p>
	<p>Install other driven side guides with the straightness of the guide as the reference. Please refer to the above installation method for installation steps.</p>
	<ol style="list-style-type: none"> <li>1. Roughly lock the platform to the block.</li> <li>2. Use the fastening screw to press the slider side wall reference to the platform side wall reference.</li> <li>3. Lock and tighten the screws in the diagonal order and fix the platform on the block.</li> <li>4. Gently push the platform to confirm whether the smoothness of sliding meets the requirements.</li> </ol>
	<p>Note:  <ol style="list-style-type: none"> <li>1. Linear guide rail products are coated with appropriate amount of anti-rust oil before shipment. Please wipe the anti-rust oil on the guide rail before installation and use before moving the block.</li> <li>2. Determine the installation datum: the direction indicated by the arrow on the guide rail surface is the datum of the side wall of the guide rail, while the surface of the wire groove (or step) on the side wall of the slide block is the datum of the side wall of the slide block.</li> </ol> </p>

Note: the product precision is the value after fixing the guide rail, not before fastening the slide rail screw. The slight deformation of the guide rail can be corrected after fastening through the above installation method, and there is no problem in use.

### 04.Linear motion system maintenance

In order to ensure the safety of personnel and equipment, improve the service life of the linear movement system, please strictly observe the maintenance precautions.

	<p>When holding or installing guide rail, due to gravity and steel ball free rolling characteristics, when the slider is upright or tilted, it may slip out of the track!</p> <p>If the personnel is located below it, it is very likely to cause damage to the personnel and products!          《When installation, please be sure to make good in advance fall prevention measures》</p>		<p>80°C is the slider plastic parts and scraper temperature limit, exceeding the service life will be hurt! Chemical or corrosive substances can also cause injury!</p> <p>《Pay attention to the use of temperature control and default cooling measures》</p>
	<p>In addition to ordering common swap class (C class) products can be used to replace the slider at will, other precision level above the accuracy, or pre-pressure requirements of the use of the environment, do not arbitrarily disassemble the slider mixed use. In addition, if the slider is disassembled, it will cause damage to the slider or loss of accuracy.</p> <p>Note: if the ball falls off accidentally, please contact the after-sale personnel of the r&amp;d department of precision transmission module. Please do not install it without authorization</p> <p>《Random disassembly may result in changes in pairing accuracy and preloading.》</p>		<p>All kinds of soft and hard dust may reduce the service life or lead to guide precision loss and surface damage!</p> <p>《In case of dust use environment, the design of protective cover is essential》</p>
	<p>It is essential to maintain adequate lubrication of the linear guide motion components. Please be sure to establish maintenance and performance records for lubrication maintenance based on the frequency of use of the equipment or the operating environment, and use the specified type of lubricating oil.</p> <p>Note: before the final delivery of linear guide, we will carry out anti-rust treatment, but anti-rust oil can not replace lubricating oil, so we suggest that customers must add the specified grease when installing and using. It is recommended to use lithium soap base grease (consistency no. 2), and for heavy duty use, it is recommended to use grease with extreme pressure additives</p> <p>《Less equipment needs more maintenance; When the equipment is attached with rust, it should be cleaned and lubricated every day》</p>		<p>Do not knock, so as not to cause indentation or damage on the rolling surface, which will affect the accuracy and service life.</p>



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