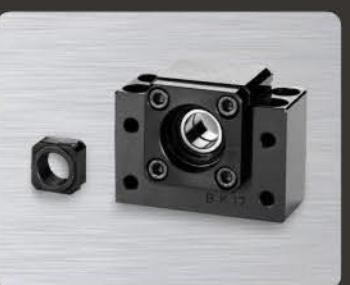


滚动功能部件 综合技术手册

Rolling Components Comprehensive
Technical Manual

三环品质，创领好未来

Make high quality · create the future



”公司简介 COMPANY PROFILE

公司座落于市场经济“温州模式”的发祥地和享有“中国电器之都”美誉的乐清柳市镇，毗邻温州机场、温州火车站和风景秀丽的雁荡山景区，紧邻104国道与甬台温高速公路，具有良好的地担优势和发展优势。

公司主要生产TRH、TRS直线滑轨幅系列，滚珠丝杆幅等滚动功能部件，公司拥有超万平米生产车间，数十条导轨生产线及近百台高精密自动化生产设备，我们严格按照ISO 9001:2000质量体系运作，所有环节实施全程质量监控，凭借先进的制造工艺和高级技师精密求精的工作态度严把质量关，使产品在客户心中树立了良好的品牌形象，市场占有率不断攀升。

展望未来，我们携手全体员工以高效、务实的精神，竭诚为广大用户提供一流的品质和服务，欢迎国内外客商光临合作与洽谈。

Yueqing Three-ring Precision Machinery Co., Ltd is established in 2010 which is specialized in manufacturing TRH series linear guide and rolling function units. Our company is located in Liushi town which is famous for the birthplace of “Wenzhou Market Economy Pattern” and the “Capital of Electric” in China. It is adjacent to Wenzhou Airport, Wenzhou Railway Station and Ningbo-Taizhou-Wenzhou Expressway that make us have a great advantage of transportation and further development.

Our brand products--CHTR Linear Guide sells well in the domestic market and also the oversea market by the export company. Depending on the advanced manufacturing technology and excelsior attitude of senior technician, our TRH series products have build a very good brand image during our customer and the market share is rising year and year. Right now we hope we can do the overseas business by ourself. We welcome customers, business associations and friends from all over the world to come to our company for communication, guidance and business negotiation. We will be diligent, honest and consistent, providing our customers with quality products and perfect pre-sales and after-sales services.

We sincerely hope you contact us and seek cooperation for mutual benefits to create a common development and brilliant future. Choose us, you get the right one!

企业目录 ” ENTERPRISE DIRECTORY



线性滑轨系列 Linear Guide Series

产品结构 Product Structure	A01
产品特点 Product Features	A02-03
线性滑轨精度选择 Accuracy for Choose	A04
线性滑轨精度规格 Accuracy Specification	A05-06
线性滑轨安装精度 Installation Accuracy of Linear Guide	A07
导轨副连接基准的结构形式 Structure of Connective Datum of Linear Guide	A08
安装基面的台肩高及倒角形式导轨基准面安装 the Height and Chamfering of Installation Platform	A09
线性滑轨副的安装调整 Installation and Adjustment of Linear Guide	A10-13
线性滑轨防尘配件 Linear Slide Dustproof Accessories	A14
底面螺纹孔TRH型线性滑轨副 TRH Series Linear Guide with Bottom Installation Thread Hole	A15
TRH线性滑轨系列规格参数(高组装) Specification of TRH Series Linear Guide(High Assembly)	A16-21
TRS线性滑轨系列规格参数(低组装) Specification of TRS Series Linear Guide(Low Assembly)	A22-25
TSR线性滑轨规格参数 Specification of TSR Series Linear Guide	A26-29
TRG线性滑轨系列规格参数(滚柱型) Specification of TRG Series Linear Guide(Roller Type)	A30-33
TRC线性滑轨系列规格参数(十字交叉) TRC Linear Slide Series Specifications(Cross)	A34-35
TRN,TRW线性滑轨系列规格参数(微型) Specification of TRN,TRW Series Linear guide(Mini Type)	A36-37



滚珠螺杆系列 Ball Screw Series

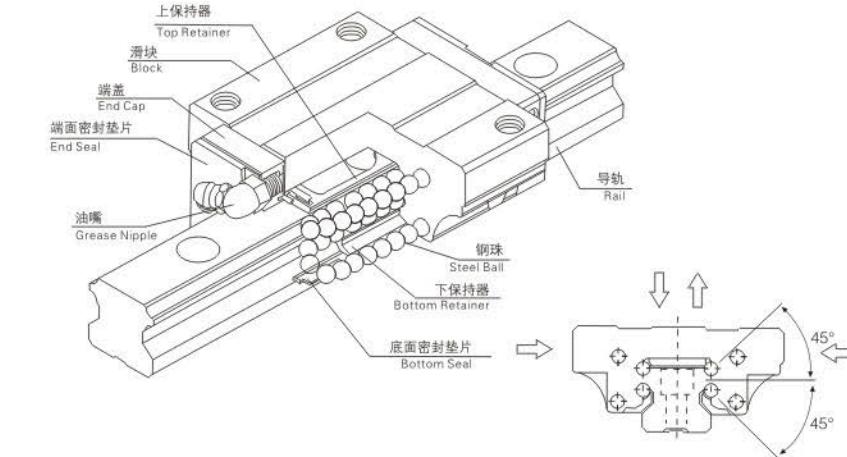
滚珠丝杆公称代号 Ball Screw Model Code	B01
SFU型滚珠丝杆尺寸表 SFU Type Ball Screw Size Table	B02-03
DFU型滚珠丝杆尺寸表 DFU Type Ball Screw Size Table	B04
SFI型滚珠丝杆尺寸表 SFI Type Ball Screw Size Table	B05



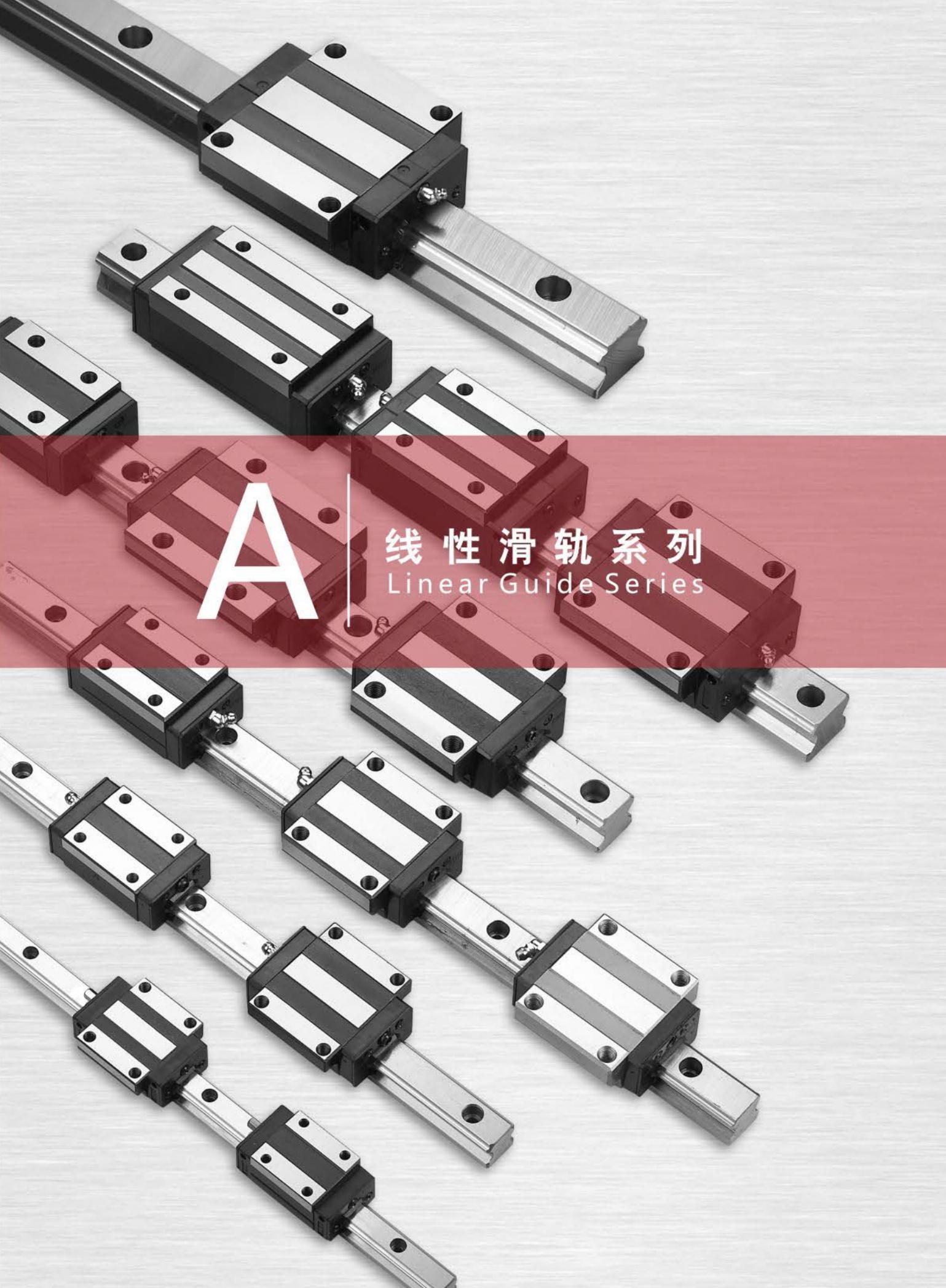
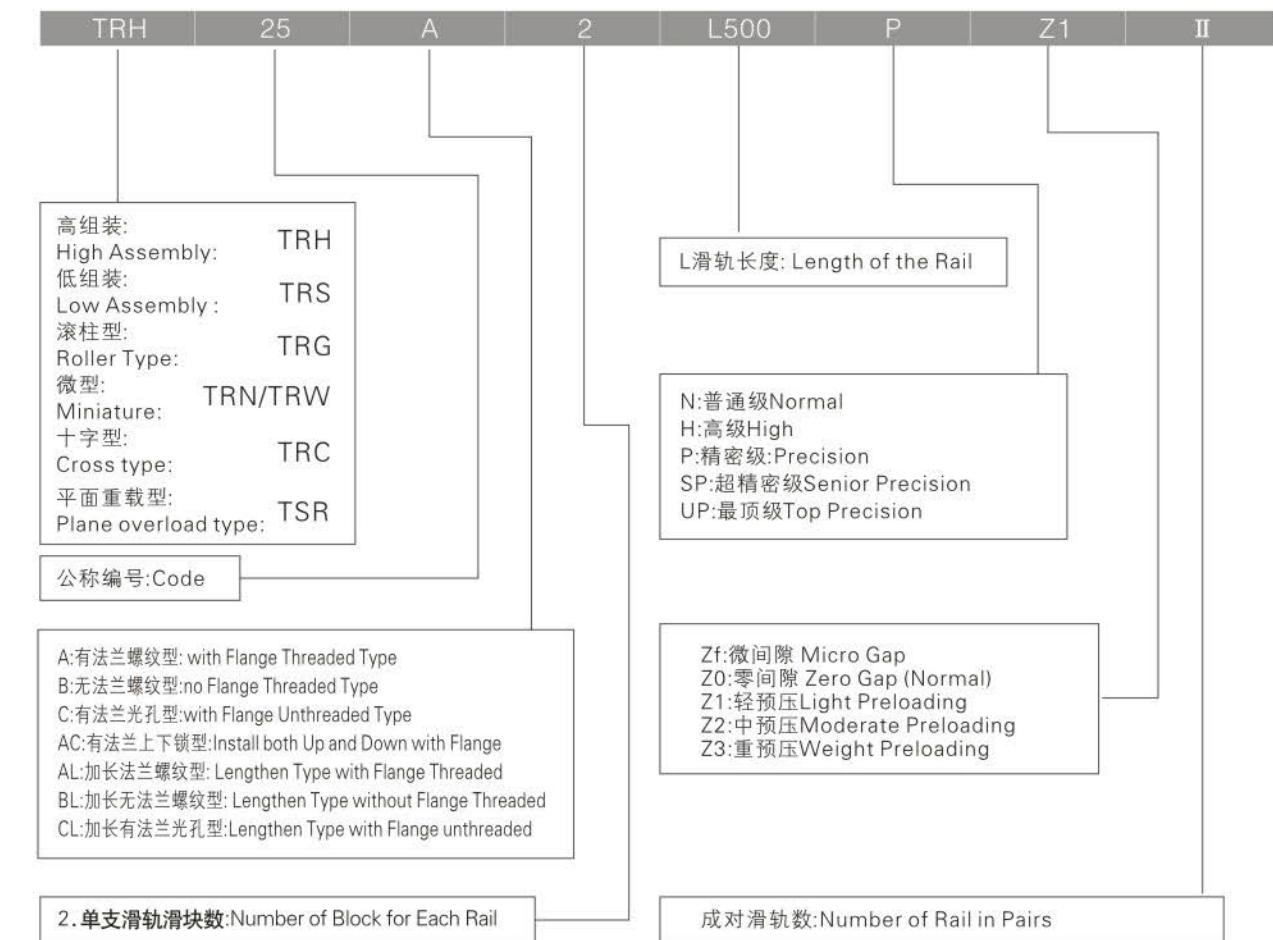
滚珠螺杆支撑座系列 Ball Screw Support End Series

B K固定端/ B F支撑端 BK Fixed End/BF Support End	C01
E K固定端/ E F固定端 EK Fixed End/EF Support End	C02
F K固定端/ F F支撑端 FK Fixed End/FF Support End	C03

产品结构
Product Structure



线性滑轨公称型号组成
Linear Guide Model Code



产品特点 Product Feature

• 具互换之特性

在严密的制作精度管控下，尺寸能够维持在稳定的公差内，所以对于互换型线性导轨，组装时可将滑块任意装配在同型号的滑轨上，并且保持其相同的顺畅度、预压及精度，易于组装与维修。

• Interchangeability

For the tightly control of production precision, all the size can be maintained at a stable tolerance range. So the interchange type linear guide can keep the same smoothness, preloading and precision when the block arbitrarily assemble on the same type of rail. It is very easy to assemble and repair.

• 定位精度高

使用线性滑轨作为机台引导时，由于线性滑轨的摩擦方式为滚动摩擦，摩擦系数是滑动摩擦系数的1/50，动摩擦力与静摩擦力的差距变得很小，因此当机台运行时，不会有打滑的现象发生，可达到极高的定位精度。

• High Positioning Accuracy

When machine that vectoring by linear guide ,the friction coefficient will be 1/50 of sliding friction coefficient,as the friction method of linear guide is rolling friction, the disparity of dynamic friction and static friction will become smaller, when machine runs, there will be no slipping phenomenon and the positioning accuracy can reach very high

• 润滑油路设计优

专利的润滑油路设计，能够均匀的将润滑油脂注入每一个循环回路，无论各种安装方式下都可以获得最佳的润滑效果，并且提升整体的行走顺畅度与使用寿命，实现高精度、高可靠度及平滑稳定的直线运动要求。

• Excellent Lubrication Design

Lubrication design patent, can evenly the lubricating grease injection Patent design of Lubricant oil-way can evenly inject lubricating grease to every loop and obtain the optimal lubrication effect under various installation method, it improves the overall running smoothness and service life to achieve the high precision,high reliability and smooth stability of linear motion requirements

• 四方向等载荷力

TRH导轨滚动体设计为特殊的压力角，决定其径向、反径向和水平方向可承受等额载荷。

• Four Direction Equal Load Capacity

TRH rail rolling body is to be designed with special pressure angle which make it can bear the same rated load of its radial, anti radial and horizontal direction.



• 高刚性、高负荷

TRH导轨采用特殊的四列圆弧沟槽设计，增大了接触面积，相对两面列式沟槽承受载荷能力、接触刚度和系统刚度都大有提高。

• High Rigidity, High Load

TRH Linear guideway is designed with four columns arc grooves which increase the contact area, compare with two columns groove design, it has been greatly improve on the loading capacity, contact stiffness and system rigidity.

• 高精度

TRH导轨采用高精度特型专机多面同时磨削、激光检测等先进手段、易于保证导轨的制造精度。

• High Precision

TRH linear guideway is produced by high precision special plane which can polyhedrally grind at the same time, detected by laser and other advanced process. all of these guarantee the manufacturing precision of TRH linear guideway.

• 平滑、低噪音、环保无污染

TRH返向系统设计，简单圆滑的钢珠回来设计，并采用耐冲击的强强化合成树脂之钢珠循环配件，运动顺畅度佳，因而达到平滑而无噪音的直线运动。

• Smoothness, Low Noise,

The returning device of TRH linear guide adopt a simple and lubricant ball recirculation design with shock resistant circulative accessory --strengthening synthetic resin, the smoothness of the movement is good which achieves a smooth and noiseless linear motion.

• 结构小型化

TRH导轨断面和刚性达到最优化设计，断面小而刚性大，因而实现机床小型化的目的。

• Compact Structure

The section and rigidity of TRH linear guideway attain the most optimal design which is with a small section but high rigidity, thus achieve the purpose of miniaturization of machine tool.

• 安装简单

TRH导轨对用户的安装基面要求低，安装、调试简单

• Easy Installation

Low requirements of installation guide for TRH users, it is easy for installation and debugging

• 具自动调心能力

正面组合的圆弧沟槽设计，使其具有自动调心的能力，即使给予预压也能够吸收安装误差，并维持平滑稳定、高精度的直线运动

• With automatic self-aligning capability

Arc groove design of the front combination makes the linear guideway has the ability to automatically adjust the center, even if to give preloading it can absorb installation error, and maintains a high precision,smooth and stable linear motion.

线性滑轨精度选择

Accuracy for Choose

五种精度等级供客户选用：普通级/高级/精密级/超精密级/最顶级。

THR滑轨的精度主要表现在三个方面：行走精度，组合尺寸精度和成对高度或宽度的相互误差(1轴上使用几个TR滑块时，或同一平面上安装有几根轴时，规定了各型号的高度，宽度的成对相互误差)。

Five accuracy grades for choose:Normal/High/Precision/Senior Precision/Top Precision.

The accuracy of TRH series products are mainly reflected on three aspects: accuracy of running parallelism, accuracy of assembly size, accuracy of the position error of height and width in pairs(when several blocks used on one rail or several rails install on one plane, the position error of height and width in pairs is prescriptive)

详细请参照各型号的规格表

For details please refer to the specification table

机种名 Machine Type	精度等级 Accuracy Class				
	N	H	P	SP	UP
机械加工中心 Machining Center			○	○	
车床 Turning Lathe			○	○	
铣床 Milling Machine			○	○	
镗床 Boring Machine			○	○	○
座标镗床 Jig-Boring Machine				○	○
磨床 Grinding Machine			○	○	○
放电加工机 Electrical Discharge Machine		○	○		
挤压机 Pressing Machine		○	○		
镭射加工机 Laser Processing Machine	○	○	○		
木工机 Woodworking Machine	○	○	○		
Nc钻床 NC Drilling Machine		○	○		
攻牙中心 Tapping Center		○	○		
集装箱交换装置 Container Switching Device	○				
ATC	○				
线切割机 Wire Electrical Discharge Machining		○	○		
砂轮修整装置 Wheel Dressing Device			○	○	

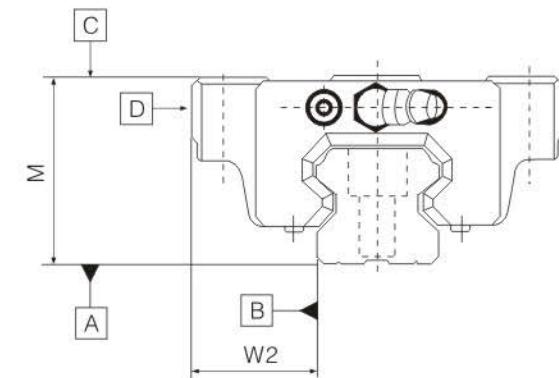
机种名 Machine Type	精度等级 Accuracy Class				
	N	H	P	SP	UP
直交座标型 Orthogonal Coordinate	○	○			
圆柱座标型 Cylindrical Coordinate	○	○			
线接合器 Line Adapter		○	○		
探测器 Detector			○	○	
电子部件插入机 Electronic Component Insertion Machines	○	○			
印刷电路板开孔机 Printed Circuit Board Tapping Machine	○	○	○		
射出成型机 Injection Moulding Machine	○	○			
三次元测定机 Three Dimensional Measuring Instrument			○	○	
办公机器 Office Machine	○	○			
搬运机器 Transmission Machine	○	○			
Xy工作台 XY Work Table	○	○	○		
涂装机 Coating Machine	○	○			
焊接机 Welding Machine	○	○			
医疗机器 Medical Machine	○	○			
Digitizer	○	○	○		
检查装置 Checking Device		○	○	○	

线性滑轨精度规格

Accuracy Specification

TRH型形位公差及精度如PA05表1、PA06表2所示，各型号的精度被分为：普通型，高级，精密级，超精密级，最高级。

Geometric tolerance and accuracy of TRH type show as table 1 in page A05 and table 2 in page A06, the accuracy of each type is separated into :Normal,High,Precision,Senior Precision,Top Precision.


TRH型滑轨副尺寸精度检验项目 (表1)

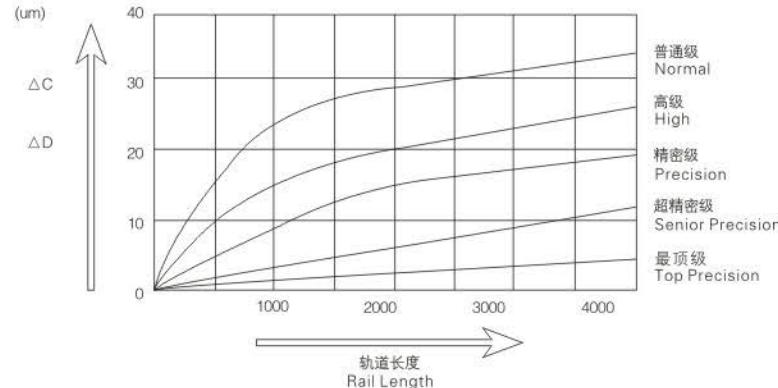
Size Accuracy Inspection of TRH Linear Guide (Table 1)

单位: mm

公称型号 Model Code	精度规格 Accuracy specification	普通型 Normal	高级 High	精密级 Precision	超精密级 Senior Precision	超超精密级 Top Precision
		N	H	P	SP	UP
TRH15 TRH20	高度M的尺寸容许误差 allowable error of height size M	±0.1	±0.03	0 -0.03	0 -0.015	-0.008
	高度M的成对相互差 allowable mutual error of height size M in pairs	0.02	0.01	0.006	0.004	0.003
	宽度W2的尺寸容许误差 allowable error of width size W2	±0.1	±0.03	0 -0.03	0 -0.015	-0.008
	宽度W2的成对相互差 allowable mutual error of width size W2 in pairs	0.02	0.01	0.006	0.004	0.003
TRH25 TRH30 TRH35	高度M的尺寸容许误差 allowable error of height size M	±0.1	±0.04	0 -0.04	0 -0.02	-0.01
	高度M的成对相互差 allowable mutual error of height size M in pairs	0.02	0.015	0.007	0.005	0.003
	宽度W2的尺寸容许误差 allowable error of width size W2	±0.1	±0.04	0 -0.04	0 -0.02	-0.01
	宽度W2的成对相互差 allowable mutual error of width size W2 in pairs	0.03	0.015	0.007	0.005	0.003
TRH45 TRH55	高度M的尺寸容许误差 allowable error of height size M	0.1	±0.05	0 -0.05	0 -0.03	-0.02
	高度M的成对相互差 allowable mutual error of height size M in pairs	0.03	0.015	0.007	0.005	0.003
	宽度W2的尺寸容许误差 allowable error of width size W2	±0.1	±0.05	0 -0.05	0 -0.03	-0.02
	宽度W2的成对相互差 allowable mutual error of width size W2 in pairs	0.03	0.02	0.01	0.007	0.005
TRH65 TRH85	高度M的尺寸容许误差 allowable error of height size M	±0.08	±0.04	0 -0.05	0 -0.04	-0.03
	高度M的成对相互差 allowable mutual error of height size M in pairs	0.03	0.02	0.01	0.007	0.005
	宽度W2的尺寸容许误差 allowable error of width size W2	±0.08	±0.04	0 -0.05	0 -0.04	-0.03
	宽度W2的成对相互差 allowable mutual error of width size W2 in pairs	0.03	0.02	0.01	0.007	0.005

线性滑轨精度规格 Accuracy Specification

(表2) Table 2



滑轨长 Rail Length		行走平行度值(μm) Running Parallelism Value				
含以上 Above	以下 Below	N	H	P	SP	UP
0	315	9	6	3	2	1.5
315	399	11	8	4	2	1.5
400	499	13	9	5	2	1.5
500	629	16	11	6	2.5	1.5
630	799	18	12	7	3	2
800	1000	20	14	8	4	2
1001	1249	22	16	10	5	2.5
1250	1599	25	18	11	6	3
1600	1999	28	20	13	7	3.5
2000	2499	30	22	15	8	4
2500	2999	32	24	16	9	4.5
3000	3499	33	25	17	11	5
3500	4000	34	26	18	12	6

TRH线性滑轨容许静力矩参数表

Allowable Statical Torque of TRH Series

单位: KN·m

型号 Model	方向 Direction	MA		MB		MC
		1个 1 Block	2个靠紧 2 Close blocks	1个 1 Block	2个靠紧 2 Close blocks	1个 1 Block
TRH15		0.07	0.37	0.07	0.37	0.10
TRH20		0.16	0.82	0.16	0.82	0.23
TRH20L		0.27	1.4	0.27	1.4	0.31
TRH25		0.27	1.4	0.27	1.4	0.4
TRH25L		0.46	2.4	0.46	2.4	0.51
TRH30		0.43	2.3	0.43	2.3	0.65
TRH30L		0.73	3.7	0.73	3.7	0.86
TRH35		0.64	3.4	0.64	3.4	1.0
TRH35L		1.1	5.6	1.1	5.6	1.4
TRH45		1.3	6.9	1.3	6.9	2.1
TRH45L		2.1	10.9	2.1	10.9	2.8
TRH55		2.2	11.7	2.2	11.7	3.6
TRH55L		3.7	18.8	3.7	18.8	4.8
TRH65		4.2	21.0	4.2	21.0	6.6
TRH65L		7.2	35.8	7.2	35.8	8.9
TRH85		10.2	56.5	10.2	56.5	12.6
TRH85L		12.4	63.5	12.4	63.5	16.7

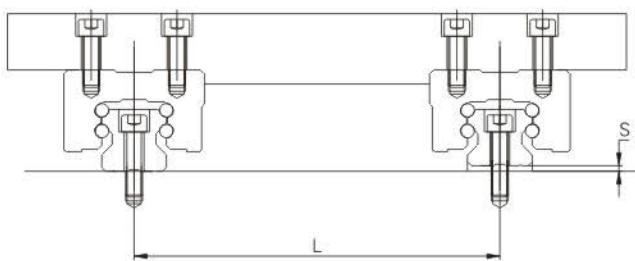
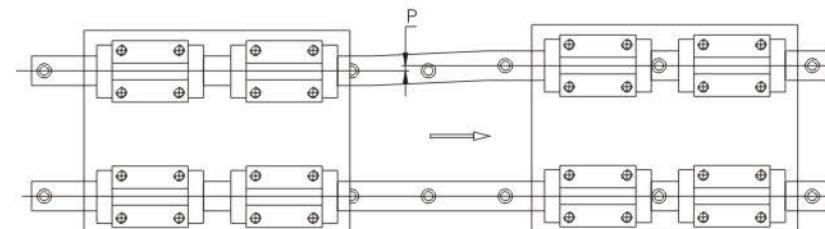
线性滑轨安装精度 Installation Accuracy

• 滑轨安装面容许误差

The allowable error of linear guide installation

TRH导轨系列产品的滑块具有自动调心的特性，即使安装面稍有加工误差，根据导轨的预压等级不同，如能符合下表的容许误差值内，都能获得顺畅的直线运动。这就是TRH导轨系列产品所具有的特殊优点。

The block of TRH series has the ability to automatically adjust the center, even if the installation face has a little error, it can still have the smoothly linear motion according different pre-load (such as to meet the following allowable error range). This is the special advantages of TRH series linear guide products.



二轴左右平行度误差容许值
Allowable error of parallelism of right and left

单位: μm

预压等级 Pre-load	Moderate Preloading	Light preload	Normal
	P		
15	-	18	25
20	18	20	25
25	20	22	30
30	27	30	40
35	30	35	50
45	35	40	60
55	45	50	70
65	55	60	80
85	70	75	90

注: 轴间距离500mm时容许值与L成正比

Note: when the distance of two rails is 500mm, the error allowable value is proportional to L

二轴上下水平高度误差容许值
Allowable error of horizontal height of up and down

单位: μm

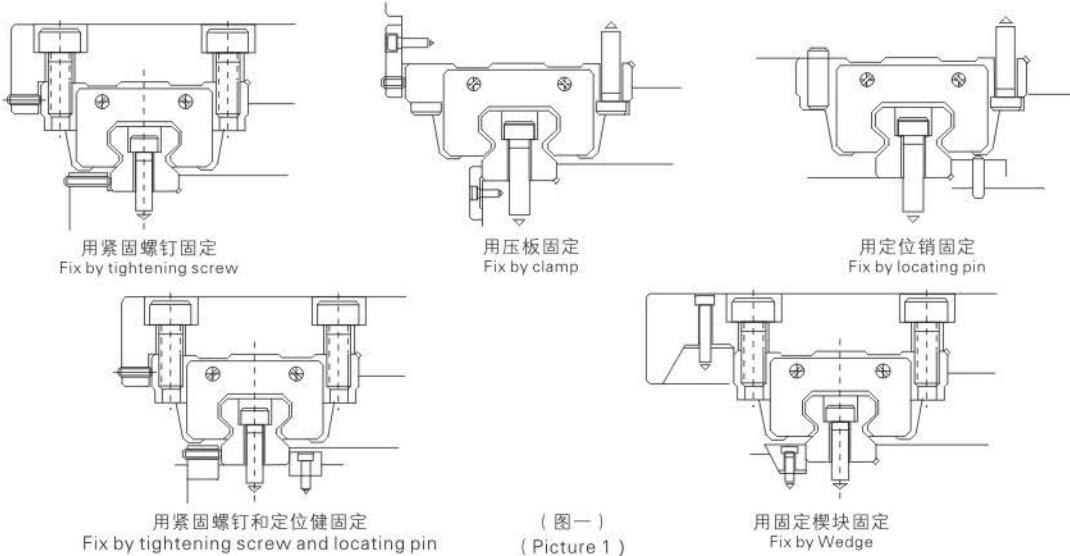
预压等级 Pre-load	Moderate Preloading	Light preload	Normal
	S		
15	-	85	130
20	50	85	130
25	70	85	130
30	90	110	170
35	120	150	210
45	140	170	250
55	170	210	300
65	200	250	350
85	240	290	400

导轨副链接基准面结构形式

Structure of Connective Datum of Linear Guide

• 导轨副连接基准面的结构形式

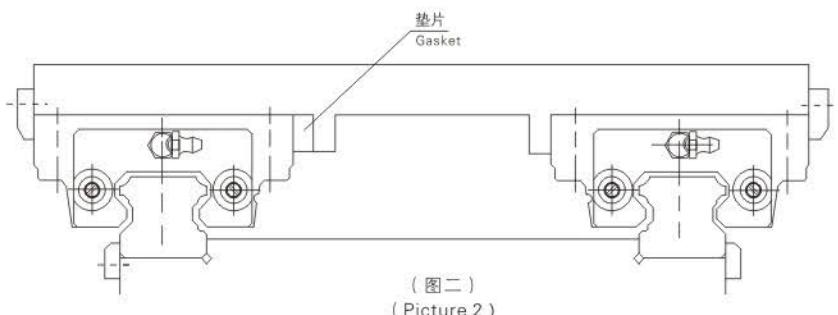
Structure of Connective Datum of Linear Guide



(图一)
(Picture 1)

1.在同一平面安装两根导轨时,如所受的负载为冲击载荷且精度要求高,两根导轨侧面都应有定位面,滑块侧面也应设置定位面,如图一所示

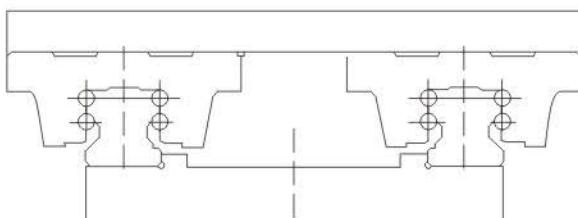
When install two rails on one surface, both of the rails and blocks should have the locating surface if the load type is impact load and requirement of the precision is high, as that shows in picture 1



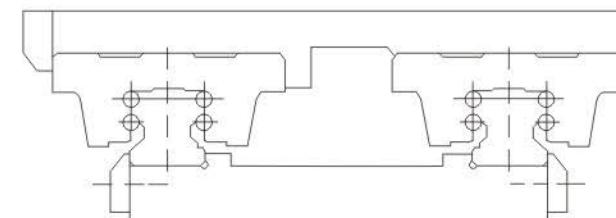
(图二)
(Picture 2)

2.图三,图四所示为最常用的安装方式

Picture 3 and picture 4 is the normal installation method



(图三)
(Picture 3)



(图四)
(Picture 4)

安装基面的台阶高度及倒三角形式导轨基准面安装

Height and Chamfering of Installation Platform

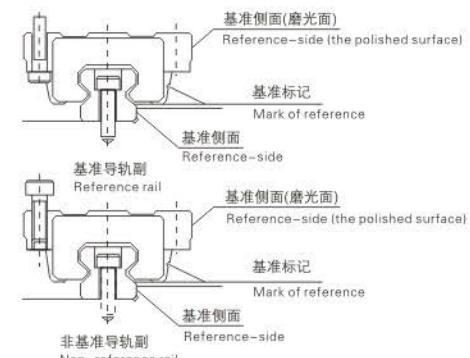


将滑块和导轨安装在床身和工作台时,为使滑块和导轨不与基础发生干涉,按表-10中的R值加工成清角槽。

First, When install the block and rail to lath or work table, it should undercut a groove to avoid the block and rail interfere with the reference surface(table-10).

其次认清导轨副安装时所需的基准侧面。

Second, know clearly about the reference-side when installation.



规格 Model	倒角(r) Chamfer(r)	基面肩高(H1) platform height(H1)	基面肩高(H2) platform height(H2)	E
TRH15	≤ 0.3	3.5	4	4.5
TRH20	≤ 0.5	4	4.5	5
TRH25	≤ 0.5	5	6	6.5
TRH30	≤ 0.5	6	6	7
TRH35	≤ 0.5	7	6	10
TRH45	≤ 0.7	8	8	11
TRH55	≤ 0.7	11	8	13
TRH65	≤ 1.0	12	10	14
TRH85	≤ 1.0	13	12	16

线性滑轨副的安装调整

Installation and Adjustment of Linear Guide

1. 安装与使用

Installation and Use

请小心轻拿轻放,避免磕碰以影响导轨副的直线精度。不允许将滑块拆离导轨或超过行程又推回去。若因安装困难,需要拆下滑块,可向我公司订购引导轨。(引导轨是一种装配辅助工具,其实际尺寸比导轨小一号。需要时,可将导轨与引导轨的端头对接,把滑块从导轨推到引导轨上,当导轨安装好后,再将滑块从引导轨推到导轨上,注意基准方向)。

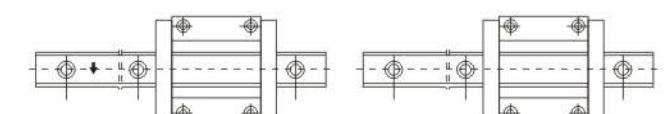
Please Handling the products gently to avoid to influence of the precision of the linear guide. The block is not allowed to detach the rail or or push back to the rail when it is over stroke. If the block need to dismantle from the rail because of the difficulty assembly, you can order the fake rail from us.(fake rail is a Auxiliary tools which has a smaller size than the guide rail. When dismantle the block, firstly joint the end of fake rail and guide rail, then push the block from the guide rail to fake rail. When the guide rail is assembly, push the block from the fake rail back to the guide rail, pay attention of the reference direction when do these steps)

2. 安装注意事项

Install Caution

首先正确区分基准导轨副与非基准导轨副(基准导轨上有HD的标记,滑块上有磨光的基准侧面)(见图)

When install the products distinguish the reference guide rail and non-reference guide rail clearly(the reference guide rail has the reference mark and the block has a reference-side polished surface)



基准导轨副
Reference Guide Rail

非基准导轨副
Non-reference Guide Rail

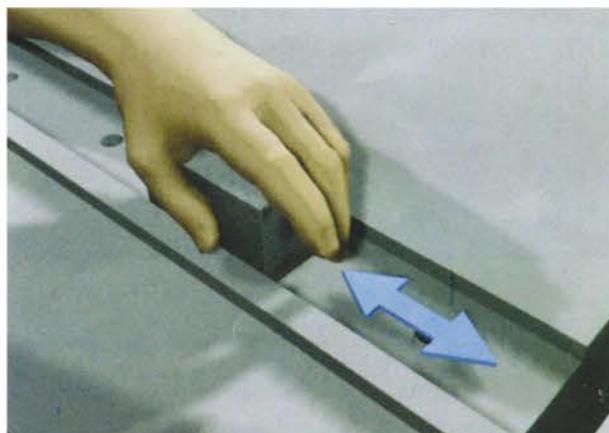
线性滑轨副的安装调整

Installation and adjustment of Linear Guide

3、滑轨副的基本安装步骤

Installation Step of Guideway

A、检查装配面
Check the mounting surface



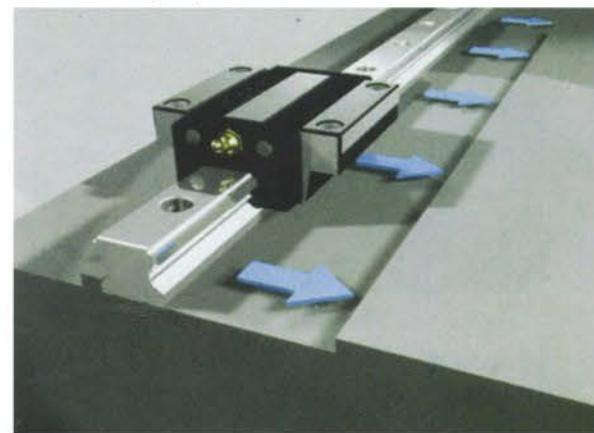
C、检查螺栓的位置，确认螺纹位置正确
Check the position of the bolt hole, to determine the correct position



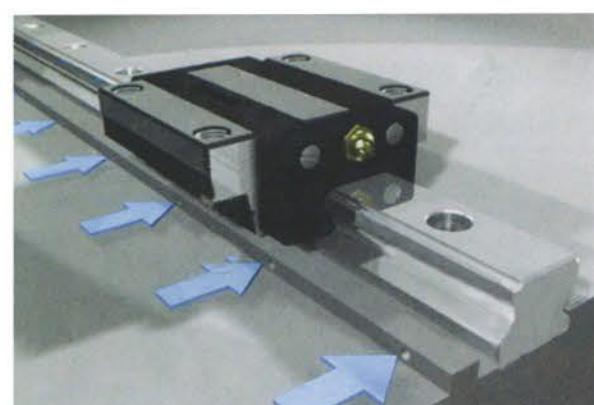
E、最终拧紧安装螺栓
Finally screw down the bolt



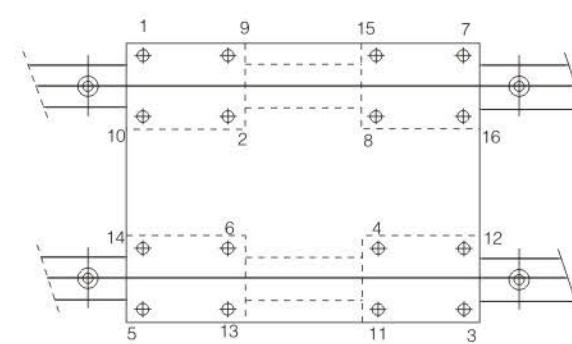
B、设置滑轨的基准侧面与安装台阶的基准侧面相对
Set the reference-side of guideway opposite to the reference-side of installing step.



D、预紧固定螺钉，使滑轨基准面与安装台阶侧面紧密相接
Preloading to fix the bolt, make the reference-side of guideway closely connect to the side of installing step



F、依次拧紧滑块的紧固螺钉
Tightened the fastening screws of block in turn



线性滑轨副的安装调整

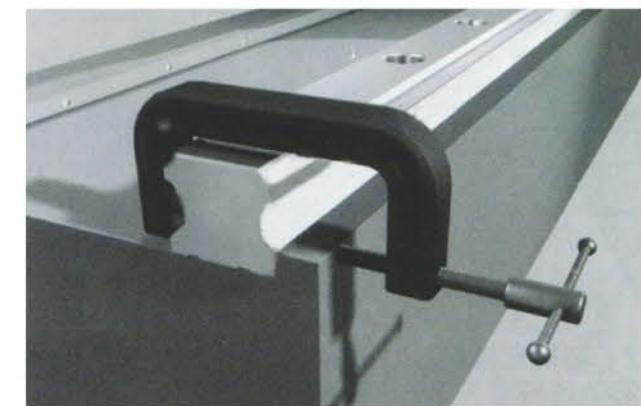
Installation and Adjustment of Linear Guide

4、基准滑轨副的安装方法（有下述两种方法）

Installation methods of reference linear rail(two ways for choose as following)

A.利用U型夹头将滑轨的基准侧面与安装台阶的基准侧面夹紧，然后在该处用固定螺栓拧紧（建议采用配攻螺纹孔），由一端开始，一次将滑轨固定。

To use a U-type grip holder to clamp the reference surface of rail and reference side surface of installation step, then use the fixed bolt to tighten the rail(tapping hole is suggested), it should fix in turn from one end to the other end.



B.无安装台阶时，将滑轨一端固定后，按图-9所示方法将表针靠在滑轨的基准侧面，以直线块规为基准，自滑轨的一端开始读取指针值校准直线度，并以此将导轨固定。

When there is not installation step, first fixed one end of the rail, then according to the following picture, lean the gauge on the reference surface of the rail, adjust the linear accuracy from the guage then fix the rail in turn.

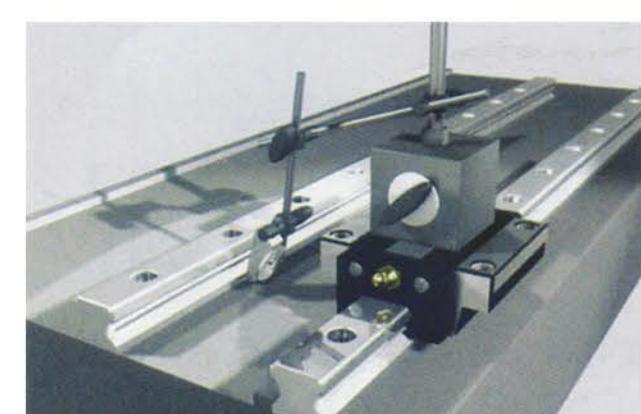


5、非基准滑轨副的安装方法

Installation Methods of Non-reference Linear Guide

如图所示，将吸铁表固定在基准滑轨副的滑块上，从导轨的一端读取平行度一面顺次将非基准滑轨副固定好。

As showed in the picture. Fix the Iron absorption meter onto the block. Read the parallelism and then fixed the non-reference rail in turn.



线性滑轨副的安装调整

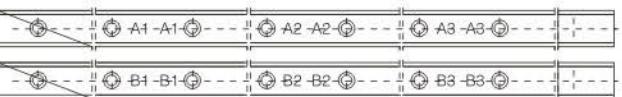
Installation and adjustment of Linear Guide

6.接长滑轨副的区别

Distinction of the Lengthened Linear Guide Rail

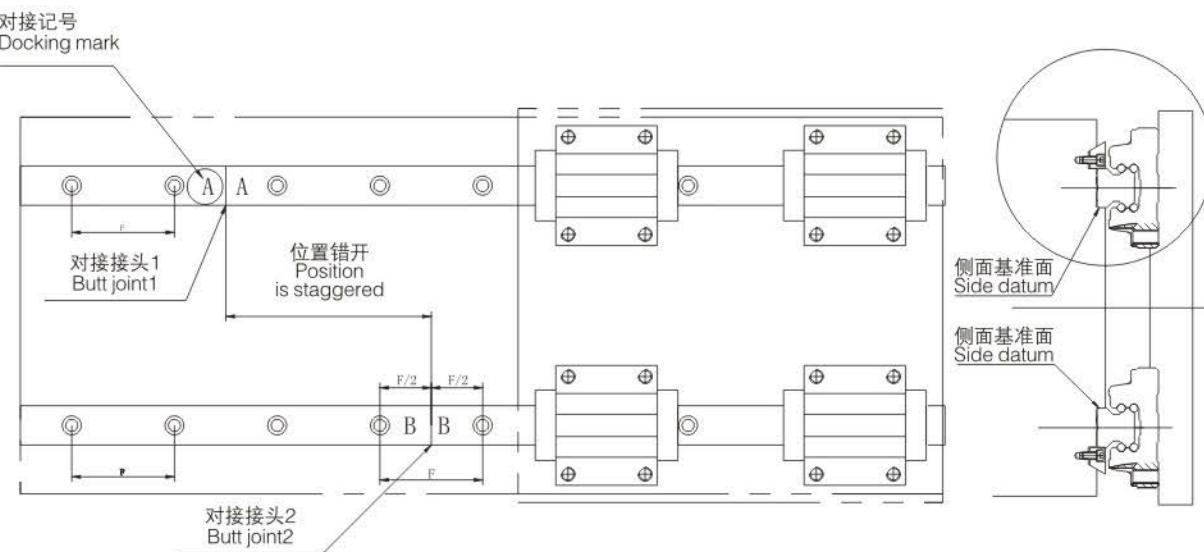
当使用接长导轨时，我们采用同一套滑轨副编同一英文大写字母，连续阿拉伯数字表示链接顺序，对接端头由同一阿拉伯数字相连（如图）

When rail that need to joint to be lengthened, we will write the same capital on one set rail, and the continuous Arabic numerals to indicate the joint sequence, the joint end mark the same arabic number (as showed in picture)



7.成对使用对接导轨安装示意图

Pairing the use of docking rails



1、导轨安装基本面应该有基准面和侧面基准面。

2、对接部分按照对接记号拼接对接接头应该错开安装。

3、导轨安装时侧面基准面安装时应该施加压力，使其确保和侧面基准面吻合。(具体安装示意图如图1、图2所示)

1. rail mounting base should have a base and side datum.

2. the docking part in accordance with the docking mark stitching docking connector should be staggered to install.

3. rail installation side of the base surface should be installed when the pressure to ensure that the side surface and ensure that the surface coincide. (Specific installation diagram shown in Figure 1, Figure 2)

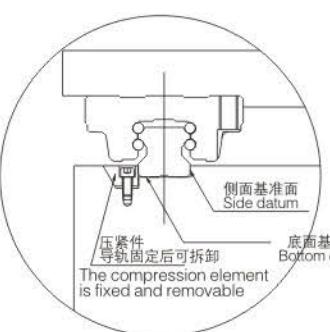


图1
figure 1

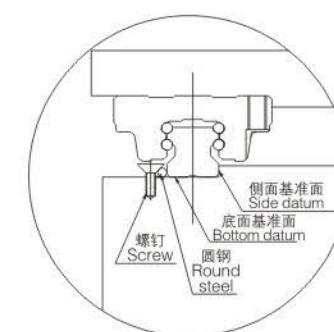


图2
figure 2

线性滑轨副的安装调整

Installation and adjustment of Linear Guide

8、紧固螺栓时，建议采用恒扭矩扳手并按表推荐扭矩值进行安装

When tightening the bolt, should use a constant torque wrench and install as the recommend torque value as the following table:

螺钉公称尺寸 screw model no	M4	M5	M6	M8	M10	M12	M16
扭矩值 torque value	2.6-4.0	5.1-8.5	8.7-14	21.6-30.5	42.2-67.5	73.5-118	178-295

9、线性滑轨副的防护

Protection of Rolling Linear Guide



10、线性滑轨副的润滑

The Lubrication of Rolling Linear Guide

线性滑轨副的润滑的主要目的是减少摩擦和磨损以防止过热，破坏其内部结构，影响导轨副的运动功能。线性滑轨副在出厂之前均已经填注了低噪音高级润滑脂，以保证滚珠在运行过程中的良好润滑，但为了避免因润滑损耗造成的润滑不足，建议在滑块实际总运行行程50km时候定期补充。当线性滑轨副的运行速度为高速时($V \geq 35m/min$)，推荐使用N32润滑或接由管强制润滑(如图)。低速时($V \leq 35m/min$)推荐使用锂基润滑脂润滑。

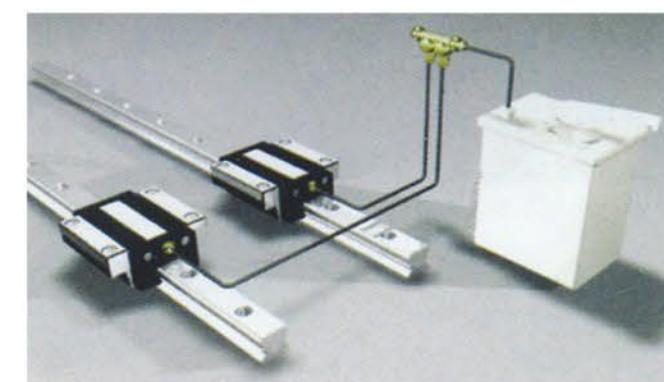
The main purpose of linear guide lubrication is to reduce friction and wear in order to prevent overheating from destruction of its internal structure which will effect the motor function of linear guide. Rolling linear guide have been filled with high lubricating grease prior to shippment, to ensure good lubrication during operation, but in order to avoid the loss of lubrication caused by the lack of lubrication , recommend a regular supplement when the slider stroke is 50km . When the rounning speed of linear guide is for high speed ($V \geq 35m/min$), recommend to use of N32 lubrication or connect by pipe to forced lubrication (show as in picture). For low speed ($V \leq 35m/min$),recommend to use the lithium lubricating grease

由于线性滑轨副的应用范围不断增大，各种工况，场合都需要使用，为了适应不同用户的密封防护要求，特设计成如下各种密封方式选用，在订货时请予以区分。

Because of the scope of application of linear guide is expanded, various conditions, applications are required to use, in order to adapt to different user's requirements of seal protection, special designed as following various sealing mode is for select, please distinguishing when make the order.

若工作环境很恶劣，且空间允许，除利用滑轨的密封外，还应考虑增加防尘“皮老虎”装置(如图)

If the work environment is very bad, and the space allow, in addition to make use of to play tricks of seal completely, also adapt to consideration increment the dust palliative "skin tiger" device(is like diagram)



(低速应用场合，严禁在线性滑轨副安装前用汽油将滚动滑块内部的润滑脂清洗掉，以免出厂之前增加的润滑脂失效)

When used in Low speed occasion, it is strictly prohibited to cleaned the lubrication of the internal linear block by the gasoline before installation to avoid the failure of lubrication that add prior to shippment.

线性滑轨防尘配件

Linear Slide Dustproof Accessories

在有粉尘、铁屑的坏境中，如果在滑块直线运动系统中有异物进入，则可能导致滑块内部异常磨损，缩短使用寿命，并会影响滑块直线运动的顺畅度，因此必须采取措施，防止异物的进入。

防尘系列产品是针对于存在粉尘、木屑、铁屑等杂质的坏境，产品配置了高度防尘作用的防尘配件，客户若有在以上类似环境中使用的滑轨、滑块，要求防尘配置需求时，请在产品滑块类型编号后面加密封代号。

In the presence of dust and iron, if there is foreign matter in the linear motion system of the slider, it may cause abnormal wear inside the slider, shorten the service life and affect the smoothness of the linear motion of the slider. Measures to prevent the entry of foreign matter.

Dust-proof products are for the existence of dust, wood chips, iron and other impurities in the bad environment, the product configuration of a high degree of dust-proof dust-proof accessories, if customers in the above environment similar to the use of slides, When the dust is configured, add a seal code after the product slider type number.

密封代号 Seal code	密封方式 Sealing method	防尘配件 Dustproof accessories	应用场景 Application
U	端密封 End seal	刮屑板 Scraper board	精密检测仪器等无尘环境 Precision detection equipment and other dust-free environment
UU	端密封+底部密封 End seal + Bottom seal	刮屑板+底部防尘片 Scraper board + bottom dust film	常规密封场合 Conventional sealing occasions
UX	端密封+金属刮板 End seal + metal scraper	刮屑板+金属刮板 Scraper board + metal scraper	有铁屑、火花等场合 There are iron, sparks and other occasions
UUX	端密封+金属刮板+底部密封 End seal + metal scraper +Bottom seal	刮屑板+金属刮板+底部防尘片 Scraper board + metal scraper+bottom dust film	有粉尘、铁屑、火花。杂质等场合 There is dust, iron, sparks. Impurities and other occasions

注：其中U密封形式为常规密封形式，在订货时可不标注。

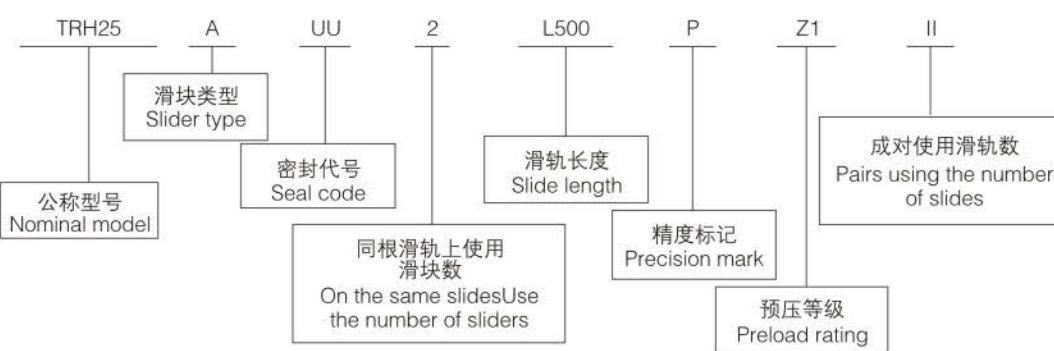
Note: Where U sealed form for the conventional seal form, when the order can not be marked.

防尘片阻力值 Dust resistance value

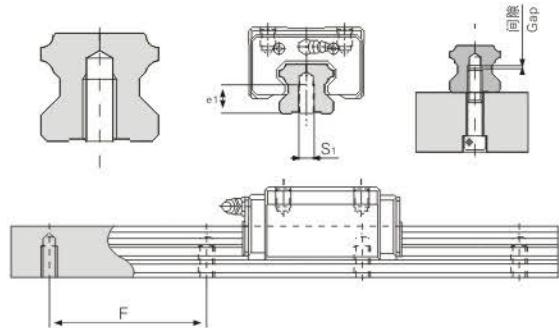
TRH...UU型滑块（内部加入润滑剂状态下），平均每个防尘装置的最大阻力值，请参考防尘装置阻力表。

TRH ... UU-type slider (internal lubricant), the average resistance of each dust-proof device,Please refer to the dust resistance table.

底部防尘片阻力表 The bottom of the dust sheet resistance table. 单位unit: N			
公称型号 Nominal model	最大阻力值 Maximum resistance value	公称型号 Nominal model	最大阻力值 Maximum resistance value
15	2.0	45	19.6
20	2.5	55	19.6
25	3.9	65	34.3
30	7.8	85	34.3
35	11.8		

公称型号编号 Nominal model number

底面螺纹孔TRH型线性滑轨副

TRH Series Linear Guide with Bottom Installation Thread Hole



TRH型线性滑轨副中包括下图所示类型，它的导轨底面上加工了螺纹安装孔。当需要从底部安装线性滑轨副，以及需要提高防尘性能时，这种线性滑轨副更加适用。

1.选择螺栓长度，保证在螺栓端部和螺纹底部（有效螺纹深度）之间有2到5mm的间隙。（参见上图）

2.有关螺纹的标准螺距F尺寸请参看第A15页表格的F节距

3.易导轨底部有整改的需在导轨长度后+“T”代号。

例：TRH25L800-TN

TRH series linear guide includ the follow type linear rail which is processed the threaded installation holes at the bottom of the rail. It is more suitable for that need to install the rolling linear guide from the bottom or improve the dustproof performance.

When select the length of the bolt, the end of the bolt and the bottom of the thread (the effective depth of thread) need to have a gap of 2 to 5 mm (refer to the above picture)

Standard pitch of thread F size please refer to the table of page A15 – Pitch F

型号 Model	S1	有效螺纹深度 Effective depth of thread e1
TRH15	M5	8
TRH20	M6	10
TRH25	M6	12
TRH30	M8	15
TRH35	M8	17
TRH45	M12	24
TRH55	M14	24
TRH65	M20	30

G值规格参数

Specification of G Figure

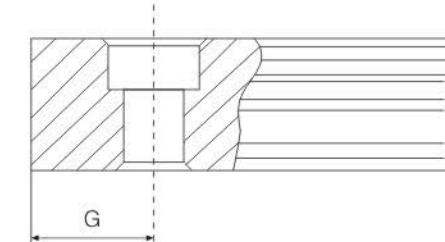
对G值的推荐范围

Recommend Range of G

G值过小，则影响导轨端部平刮孔的加工；

G值过大，则影响导轨端部处的稳定性和精度。

根据实际使用情况，对用户推荐如下尺寸：



Too small for G value will affect to machine the flat wiper hole of the rail end

Too big for G value will affect the stability and accuracy of the rail end

According to the actual usage, recommend the following dimensions to the user.

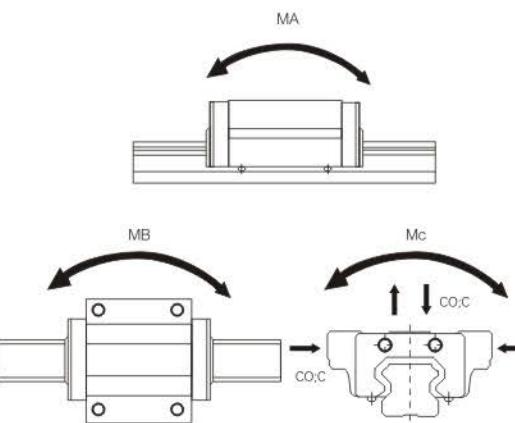
G	最小值 Min size	最大值 Max size	推荐值 Recommend size
TR15	6	30	20
TR20	8	30	20
TR25	9	30	20
TR30	11	40	20
TR35	11	40	20
TR45	14	50	25
TR55	16	60	30
TR65	16	75	35
TR85	21	90	45

TRH线性滑轨系列规格参数 (高组装)

Specification of TRH Series(High Assembly)

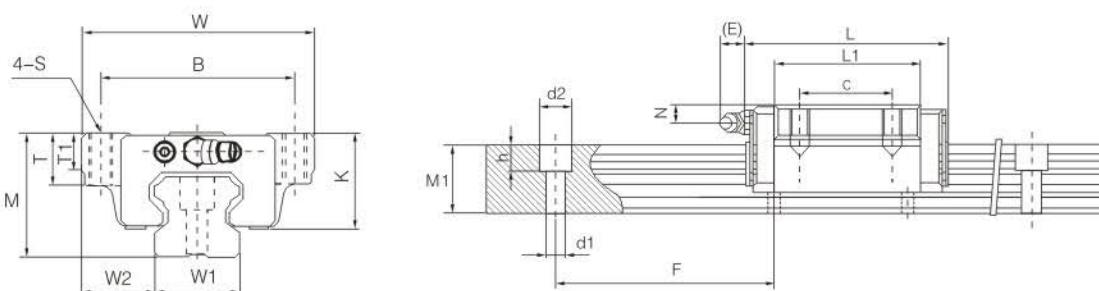


• TRH-A型 TRH-AL型

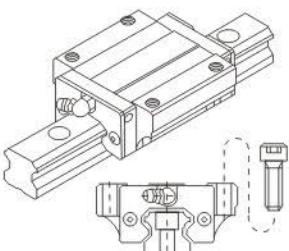


注：Ma,Mb,Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TRH-A型 TRH-AL型



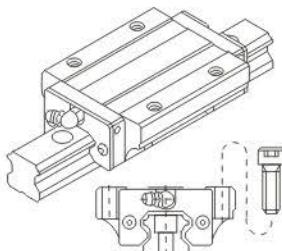
• TRH-A型



在滑块的法兰部加工了螺纹安装孔可以使用较长的螺栓

The flange part is produced with the threaded installation hole which can use the long screw bolt

• TRH-AL型



具有与TRH-A相同的横截面形状，加长了滑块的全长，提升了额定负荷能力

Same cross section to TRH-A, lengthened the block's length, enhance the rated load capacity

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension								油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	S	L1	T	T1	K	N	E	
TRH15A	24	47	61.8	38	30	M5	39.8	8.5	8.5	20	4.3	5.5	G-M4
TRH20A	30	63	77.4	53	40	M6	50.8	10	10	26	5	12	G-M6
TRH20AL	30	63	93.4	53	40	M6	66.8	10	10	26	5	12	G-M6
TRH25A	36	70	83.5	57	45	M8	59.5	16	12	30.5	6	12	G-M6
TRH25AL	36	70	102.6	57	45	M8	78.6	16	12	30.5	6	12	G-M6
TRH30A	42	90	100.5	72	52	M10	70.5	18	12	35	7	12	G-M6
TRH30AL	42	90	123	72	52	M10	93	18	12	35	7	12	G-M6
TRH35A	48	100	113.9	82	62	M10	80.5	20	14	39.5	8	12	G-M6
TRH35AL	48	100	139.2	82	62	M10	105.8	20	14	39.5	8	12	G-M6
TRH45A	60	120	138.5	100	80	M12	97.7	22	15	51	10	16	G-PT1/8
TRH45AL	60	120	169.5	100	80	M12	128.7	22	15	51	10	16	G-PT1/8
TRH55A	70	140	163	116	95	M14	118	29	15	57	11	16	G-PT1/8
TRH55AL	70	140	201	116	95	M14	156.1	29	15	57	11	16	G-PT1/8
*TRH65A	90	170	186	142	110	M16	147	37	23	76	19	16	G-PT1/8
*TRH65AL	90	170	246	142	110	M16	206.5	37	23	76	19	16	G-PT1/8
*TRH85A	110	215	247	185	140	M20	178.6	55	30	94	23	16	G-PT1/8
*TRH85AL	110	215	303	185	140	M20	236	55	30	94	23	16	G-PT1/8

型号 Model	导轨尺寸 Rail Dimension					基本额定负荷 Basic Load Rating		重量 Weight	
	宽度W1 Width W1	W2	高度M1 Height M1	节距F Pitch F	d1 × d2 × h	c (kN)	Co (kN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TRH15A	15	16	15	60	4.5 × 7.5 × 5.3	8.33	13.5	0.19	1.5
TRH20A	20	21.5	18	60	6 × 9.5 × 8.5	13.8	23.8	0.42	2.3
TRH20AL	20	21.5	18.	60	6 × 9.5 × 8.5	21.3	31.8	0.53	2.3
TRH25A	23	23.5	22	60	7 × 11 × 9	19.9	34.4	0.64	3.3
TRH25AL	23	23.5	22	60	7 × 11 × 9	27.2	45.9	0.83	3.3
TRH30A	28	31	26	80.	9 × 14 × 12	28	46.8	1.11	4.8
TRH30AL	28	31	26	80	9 × 14 × 12	37.3	62.5	1.46	4.8
TRH35A	34	33	29	80	9 × 14 × 12	37.3	61.1	1.62	6.6
TRH35AL	34	33	29	80	9 × 14 × 12	50.2	81.5	2.08	6.6
TRH45A	45	37.5	38	105	14 × 20 × 17	60	95.6	2.88	11.0
TRH45AL	45	37.5	38	105	14 × 20 × 17	80.4	127	3.3	11.0
TRH55A	53	43.5	44	120	16 × 23 × 20	88.5	137	4.5	15.1
TRH55AL	53	43.5	44	120	16 × 23 × 20	119	183	5.7	15.1
*TRH65A	63	53.5	53	150	18 × 26 × 22	141	215	8.5	22.5
*TRH65AL	63	53.5	53	150	18 × 26 × 22	192	286	10.7	22.5
*TRH85A	85	65	65	180	24 × 35 × 28	210	310	17.0	35.2
*TRH85AL	85	65	65	180	24 × 35 × 28	282	412	23.0	35.2

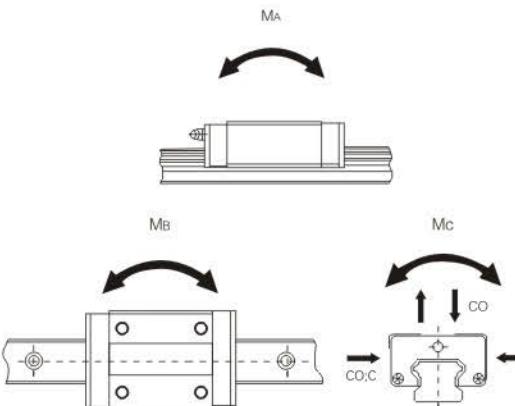
型号前加*表示此型号为开发中产品

TRH线性滑轨系列规格参数 (高组装)

Specification of TRH Series(High Assembly)

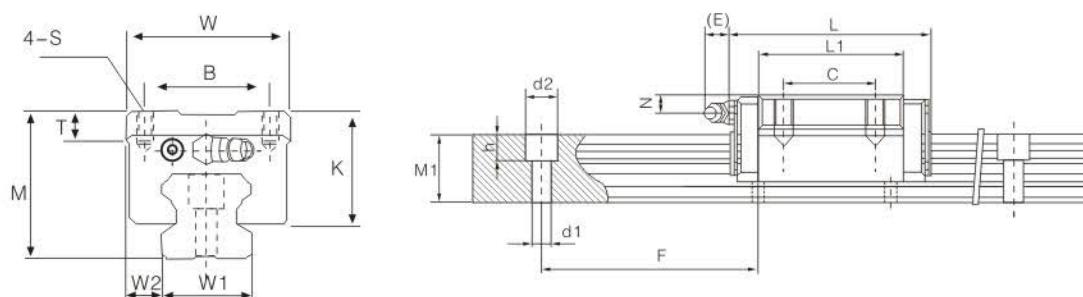


• TRH-B型 TRH-BL型

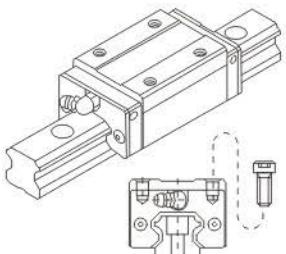


注：Ma,Mb,Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TRH-B型 TRH-BL型



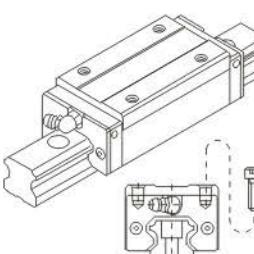
• TRH-B型



TRH-B型缩小了滑块的宽度此型号最适用于紧凑结构设计

TRH-B Type Block reduce the width of the block which is suitable for the compact structure

• TRH-BL型



具有与TRH-B相同的横截面形状，加长了滑块的全长，提升了额定负荷能力

Same cross section to TRH-B, lengthened the block's length, enhance the rated load capacity

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension							油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	S	L1	T	K	N	E	
TRH15B	28	34	61.8	26	26	M4×0.7×5	39.8	6	24	8.3	5.5	G-M4
TRH20B	30	44	77.4	32	36	M5×0.8×6	50.8	8	26	5	12	G-M6
TRH20BL	30	44	93.4	32	50	M5×0.8×6	66.8	8	26	5	12	G-M6
TRH25B	40	48	83.5	35	35	M6×8	59.5	10	34.5	10	12	G-M6
TRH25BL	40	48	102.6	35	50	M6×8	78.6	10	34.5	10	12	G-M6
TRH30B	45	60	100.5	40	40	M8×10	70.5	12	38	10	12	G-M6
TRH30BL	45	60	123	40	60	M8×10	93	12	38	10	12	G-M6
TRH35B	55	70	113.9	50	50	M8×12	80.5	12	47.5	15	12	G-M6
TRH35BL	55	70	139.2	50	72	M8×12	105.8	12	47.5	15	12	G-M6
TRH45B	70	86	138.5	60	60	M10×17	97.7	15	61	20	16	G-PT1/8
TRH45BL	70	86	169.5	60	80	M10×17	128.7	15	61	20	16	G-PT1/8
TRH55B	80	100	163	75	75	M12×18	118	18	67	21	16	G-PT1/8
TRH55BL	80	100	201	75	95	M12×18	156.1	18	67	21	16	G-PT1/8
*TRH65B	90	126	186	76	70	M16×20	147	23	76	19	16	G-PT1/8
*TRH65BL	90	126	246	76	120	M16×20	206.5	23	76	19	16	G-PT1/8
*TRH85B	110	156	247	100	80	M18×25	178.6	30	94	23	16	G-PT1/8
*TRH85BL	110	156	303	100	140	M18×25	236	30	94	23	16	G-PT1/8

型号 Model	导轨尺寸 Rail Dimension					基本额定负荷 Basic Load Rating		重量 Weight	
	宽度W1 Width W1	W2	高度M1 Height M1	节距F Length of pitch F	d1×d2×h	c (kN)	Co (kN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TRH15B	15	9.5	15	60	4.5×7.5×5.3	8.33	13.5	0.2	1.5
TRH20B	20	12	18	60	6×9.5×8.5	13.8	23.8	0.34	2.3
TRH20BL	20	12	18.	60	6×9.5×8.5	21.3	31.8	0.43	2.3
TRH25B	23	12.5	22	60	7×11×9	19.9	34.4	0.56	3.3
TRH25BL	23	12.5	22	60	7×11×9	27.2	45.9	0.73	3.3
TRH30B	28	16	26	80.	9×14×12	28	46.8	0.91	4.8
TRH30BL	28	16	26	80	9×14×12	37.3	62.5	1.18	4.8
TRH35B	34	18	29	80	9×14×12	37.3	61.1	1.54	6.6
TRH35BL	34	18	29	80	9×14×12	50.2	81.5	1.99	6.6
TRH45B	45	20.5	38	105	14×20×17	60	95.6	2.92	11.0
TRH45BL	45	20.5	38	105	14×20×17	80.4	127	3.1	11.0
TRH55B	53	23.5	44	120	16×23×20	88.5	137	4.3	15.1
TRH55BL	53	23.5	44	120	16×23×20	119	183	5.4	15.1
*TRH65B	63	31.5	53	150	18×26×22	141	215	7.3	22.5
*TRH65BL	63	31.5	53	150	18×26×22	192	286	9.3	22.5
*TRH85B	85	35.5	65	180	24×35×28	210	310	13.0	35.2
*TRH85BL	85	35.5	65	180	24×35×28	282	412	16.0	35.2

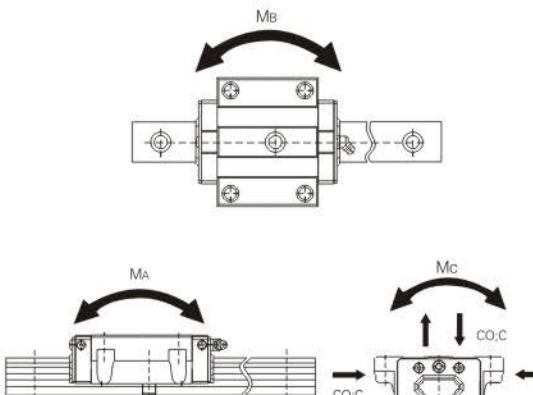
型号前加*表示此型号为开发中产品

TRH线性滑轨系列规格参数 (高组装)

Specification of TRH Series(High Assembly)

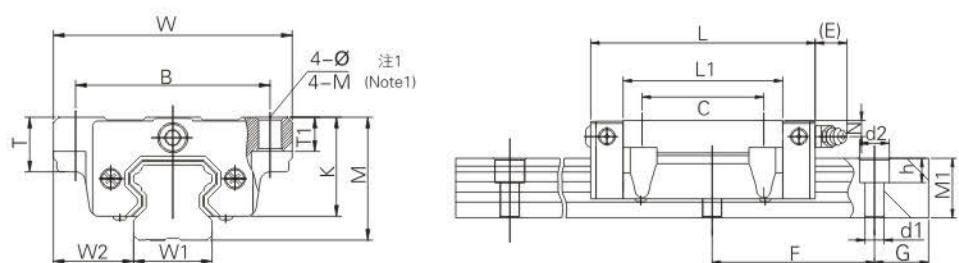


• TRH-C型 TRH-ACL型 TRH-AC型

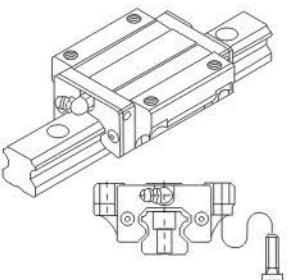


注: Ma, Mb, Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TRH-C型 TRH-ACL型 TRH-AC型

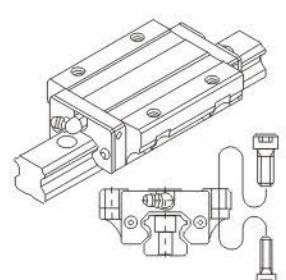


• TRH-C型



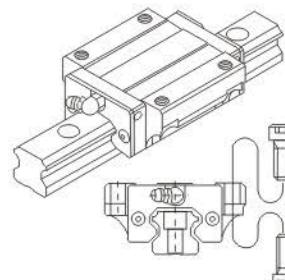
在滑块的法兰部加工了通孔安装孔，可在螺栓无法从上面贯穿工作台的情况下使用
With the unthreaded installation hole, can install from the bottom of the block when bolt can't run through the operating platform from the above

• TRH-ACL型



具有与TRH-AC相同的横截面形状，加长了滑块的全长，提升了额定负能力，并可以双向安装螺栓
Same cross section to TRH-AC, lengthened the block's length, enhance the rated load capacity, and can install from the both side of block

• TRH-AC型



TRH-C是光孔型螺栓可以从下往上安装；
TRH-AC可以双向安装螺栓
TRH-C can install from the bottom to the top and the flange hole has no thread;
TRH-AC can install bidirectionally

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension									油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	Ø	M	L1	T	T1	K	N	E	
TRH15C/TRH15AC	24	47	61.8	38	30	4.5	M5	39.8	8.5	7	20	4.3	5.5	G-M4
TRH20C/TRH20AC	30	63	77.4	53	40	6	M6	50.8	10	10	26	5	12	G-M6
TRH20ACL	30	63	93.4	53	40	6	M6	66.8	10	10	26	5	12	G-M6
TRH25C/TRH25AC	36	70	83.5	57	45	7	M8	59.5	16	10	30.5	6	12	G-M6
TRH25ACL	36	70	102.6	57	45	7	M8	78.6	16	10	30.5	6	12	G-M6
TRH30C/TRH30AC	42	90	100.5	72	52	9	M10	70.5	18	10	35	7	12	G-M6
TRH30ACL	42	90	123	72	52	9	M10	93	18	10	35	7	12	G-M6
TRH35C/TRH35AC	48	100	113.9	82	62	9	M10	80.5	20	13	39.5	8	12	G-M6
TRH35ACL	48	100	139.2	82	62	9	M10	105.8	20	13	39.5	8	12	G-M6
TRH45C/TRH45AC	60	120	138.5	100	80	11	M12	97.7	22	15	51	10	16	G-PT1/8
TRH45ACL	60	120	169.5	100	80	11	M12	128.7	22	15	51	10	16	G-PT1/8
TRH55C/TRH55AC	70	140	163	116	95	14	M14	118	29	17	57	11	16	G-PT1/8
TRH55ACL	70	140	201	116	95	14	M14	156.1	29	17	57	11	16	G-PT1/8
*TRH65C/TRH65AC	90	170	186	142	110	16	M16	147	37	23	76	19	16	G-PT1/8
*TRH65ACL	90	170	246	142	110	16	M16	206.5	37	23	76	19	16	G-PT1/8
*TRH85C/TRH85AC	110	215	247	185	140	18	M20	178.6	55	30	94	23	16	G-PT1/8
*TRH85ACL	110	215	303	185	140	18	M20	236	55	30	94	23	16	G-PT1/8

型号 Model	导轨尺寸 Rail Dimension					基本额定负荷 Basic Load Rating		重量 Weight	
	宽度W1 Width W1	W2	高度M1 Height M1	节距F Length of pitch F	d1×d2×h	c (kN)	Co (kN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TRH15C/TRH15AC	15	16	15	60	4.5×7.5×5.3	8.33	13.5	0.19	1.5
TRH20C/TRH20AC	20	21.5	18	60	6×9.5×8.5	13.8	23.8	0.42	2.3
TRH20ACL	20	21.5	18	60	6×9.5×8.5	21.3	31.8	0.53	2.3
TRH25C/TRH25AC	23	23.5	22	60	7×11×9	19.9	34.4	0.64	3.3
TRH25ACL	23	23.5	22	60	7×11×9	27.2	45.9	0.83	3.3
TRH30C/TRH30AC	28	31	26	80	9×14×12	28	46.8	1.11	4.8
TRH30ACL	28	31	26	80	9×14×12	37.3	62.5	1.46	4.8
TRH35C/TRH35AC	34	33	29	80	9×14×12	37.3	61.1	1.62	6.6
TRH35ACL	34	33	29	80	9×14×12	50.2	81.5	2.08	6.6
TRH45C/TRH45AC	45	37.5	38	105	14×20×17	60	95.6	2.88	11
TRH45ACL	45	37.5	38	105	14×20×17	80.4	127	3.3	11
TRH55C/TRH55AC	53	43.5	44	120	16×23×20	88.5	137	4.5	15.1
TRH55ACL	53	43.5	44	120	16×23×20	119	183	5.7	15.1
*TRH65C/TRH65AC	63	53.5	53	150	18×26×22	141	215	8.5	22.5
*TRH65ACL	63	53.5	53	150	18×26×22	192	286	10.7	22.5
*TRH85C/TRH85AC	85	65	65	180	24×35×28	210	310	17.0	35.2
*TRH85ACL	85	65	65	180	24×35×28	282	412	23.0	35.2

注: TRH-C为法兰光孔型，孔径为Φ值，TRH-AC/TRH-ACL为法兰螺纹型，其特点是螺栓可双向安装，安装孔为M值
Note: TRH-C means block with flange unthreaded type, the diameter of thread hole reference to Φ, TRH-AC/TRH-ACL means block with flange threaded type, the bolt can install from both side of block, the size of thread hole reference to M.

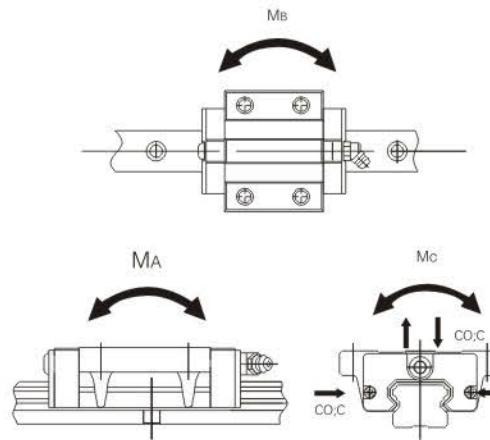
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TRS线性滑轨系列规格参数（低组装）

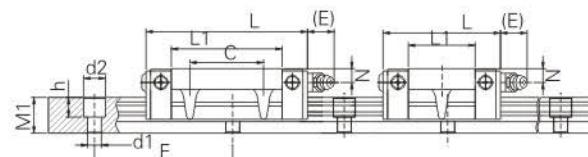
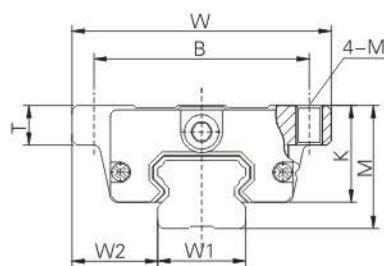
Specification of TRS Series (Low Assembly)



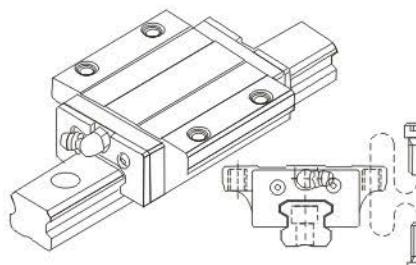
• TRS-A型 TRS-AS型



• TRS-A型 TRS-AS型



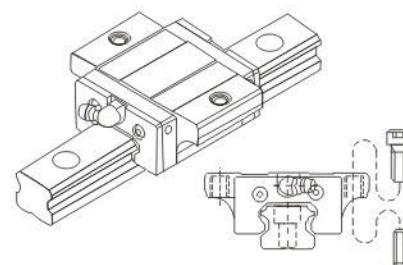
• TRS-A型



与TRH-A相比，TRS-A降低了组合高度，使用在高度有
限制的特定条件下

Compared with TRH-A, TRS-A reduces the combined height,
is used in the specific condition which has the height restriction.

• TRS-AS型



TRS-AS缩短了滑块的长度，在滑块长度和高度都有限制
的情况下使用

TRS-AS reduce the length of the block can be used in the
restriction of both height and length.

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension							油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	M	L1	T	K	N	E	
TRS15A	24	52	56.8	41	26	M5	39.8	7.2	19.7	5.5	5.5	G-M4
TRS15AS	24	52	40.1	41	-	M5	23.1	7.2	19.7	5.5	5.5	G-M4
TRS20A	28	59	70.1	49	32	M6	48.1	9	22.3	6	12	G-M6
TRS20AS	28	59	51	49	-	M6	29	9	22.3	6	12	G-M6
TRS25A	33	73	83	60	35	M8	59	11	26.8	8	12	G-M6
TRS25AS	33	73	59.5	60	-	M8	35.5	11	26.8	8	12	G-M6
TRS30A	42	90	98.1	72	40	M10	70.1	11	32	8	12	G-M6
TRS30AS	42	90	69.5	72	-	M10	41.5	11	32	8	12	G-M6
*TRS35A	48	100	108	82	50	M10	78	14	37	8.5	12	G-M6
*TRS35AS	48	100	75	82	-	M10	45	14	37	8.5	12	G-M6

型号 Model	导轨尺寸 Rail Dimension					基本额定负荷 Basic load ratings		重量 Weight	
	宽度W1 Width W1	W2	高度M1 Width M1	节距F Pitch F	di x d2 x h	C(KN)	Co(KN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TRS15A	15	18.5	12.5	60	(3.5x6x4.5) 4.5x7.5x5.3	7.83	16.19	0.21	1.25
TRS15AS	15	18.5	12.5	60	(3.5x6x4.5) 4.5x7.5x5.3	5.35	9.4	0.12	1.25
TRS20A	20	19.5	15.5	60	6x9.5x8.5	10.31	21.13	0.32	2.08
TRS20AS	20	19.5	15.5	60	6x9.5x8.5	7.23	12.74	0.19	2.08
TRS25A	23	25	18	60	7x11x9	16.27	32.4	0.59	2.67
TRS25AS	23	25	18	60	7x11x9	11.4	19.5	0.35	2.67
TRS30A	28	31	23	80	7x11x9 (9x14x12)	23.7	47.46	1.04	4.35
TRS30AS	28	31	23	80	7x11x9 (9x14x12)	16.42	28.1	0.62	4.35
*TRS35A	34	33	27.5	80	9x14x12	33.35	64.84	1.45	6.14
*TRS35AS	34	33	27.5	80	9x14x12	22.6	37.38	0.84	6.14

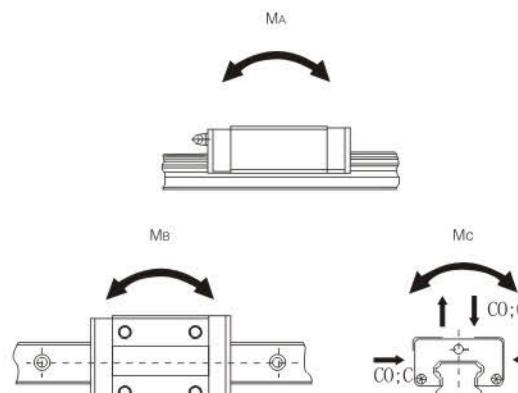
型号前加*表示此型号为开发中产品

TRS线性滑轨系列规格参数（低组装）

Specification of TRS Series (Low Assembly)

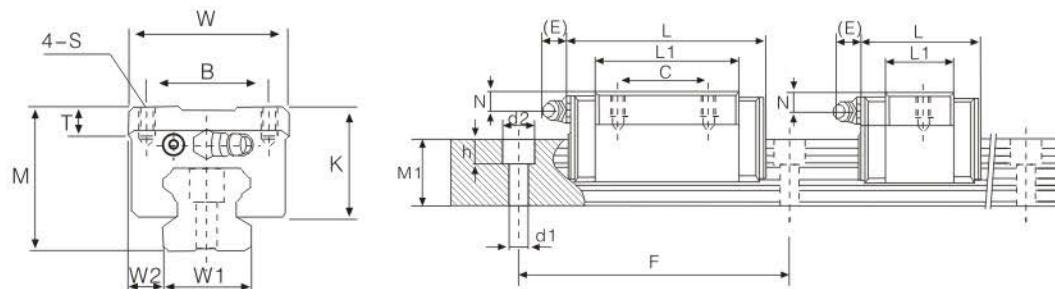


• TRS-B型 TRS-BS型

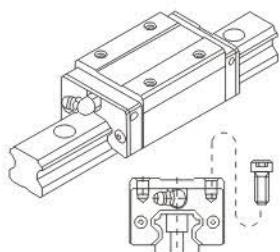


注：Ma,Mb,Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TRS-B型 TRS-BS型



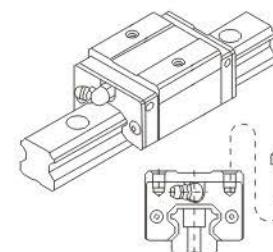
• TRS-B型



与TRH-B相比，TRS-B降低了组合高度，使用在高度有
限制的特定条件下

Compared with TRH-B, TRS-B reduces the combined height,
is used in the specific condition which has the height restriction.

• TRS-BS型



TRS-BS缩短了滑块的长度，在滑块长度和高度都有限制
的情况下使用

TRS-BS reduce the length of the block can be used in the
restriction of both height and length

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension							油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	S	L1	T	K	N	E	
TRS15B	24	34	56.8	26	26	M4X6	39.8	6	19.7	4.3	5.5	G-M4
TRS15BS	24	34	40.1	26	-	M4X6	23.1	6	19.7	4.3	5.5	G-M4
TRS20B	28	42	70.1	32	32	M5X7	48.1	8	22.3	5	12	G-M6
TRS20BS	28	42	51	32	-	M5X7	29	8	22.3	5	12	G-M6
TRS25B	33	48	83	35	35	M6X9	59	8	26.8	5	12	G-M6
TRS25BS	33	48	59.5	35	-	M6X9	35.5	8	26.8	5	12	G-M6
TRS30B	42	60	98.1	40	40	M8X12	70.1	10	32	7	12	G-M6
TRS30BS	42	60	69.5	40	-	M8X12	41.5	10	32	7	12	G-M6
*TRS35B	48	70	108	50	50	M8X12	78	12	37	8	12	G-M6
*TRS35BS	48	70	75	50	-	M8X12	45	12	37	8	12	G-M6

型号 Model	导轨尺寸 Rail Dimension							重量 Weight	
	W1	W2	M1	F	di x d2 x h	C(KN)	Co(KN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TRS15B	15	9.5	12.5	60	(3.5x6x4.5) 4.5x7.5x5.3	7.83	16.19	0.15	1.25
TRS15BS	15	9.5	12.5	60	(3.5x6x4.5) 4.5x7.5x5.3	5.35	9.4	0.09	1.25
TRS20B	20	11	15.5	60	6x9.5x8.5	10.31	21.13	0.24	2.08
TRS20BS	20	11	15.5	60	6x9.5x8.5	7.23	12.74	0.15	2.08
TRS25B	23	12.5	18	60	7x11x9	16.27	32.4	0.41	2.67
TRS25BS	23	12.5	18	60	7x11x9	11.4	19.5	0.25	2.67
TRS30B	28	16	23	80	7x11x9 (9x14x12)	23.7	47.46	0.76	4.35
TRS30BS	28	16	23	80	7x11x9 (9x14x12)	16.42	28.1	0.45	4.35
*TRS35B	34	18	27.5	80	9x14x12	33.35	64.84	1.13	6.14
*TRS35BS	34	18	27.5	80	9x14x12	22.6	37.38	0.66	6.14

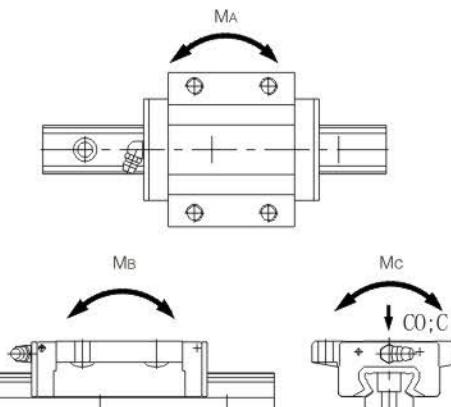
型号前加*表示此型号为开发中产品

TSR线性滑轨规格参数

Specification of TSR Series

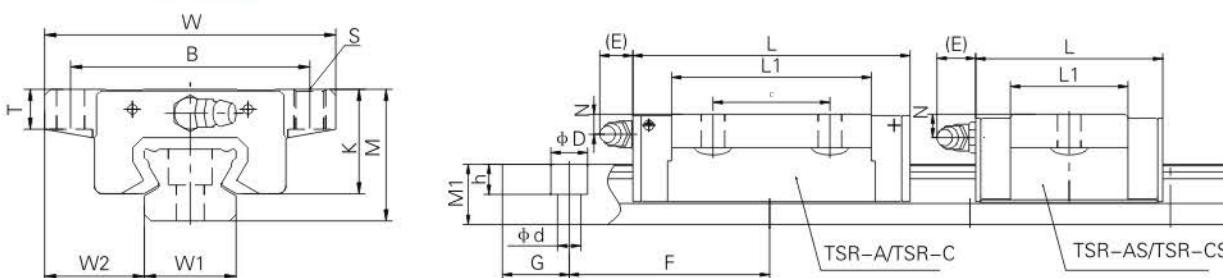


• TSR-A型 TSR-AS型

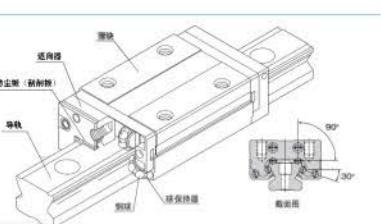


注：Ma,Mb,Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TSR-A,AS型



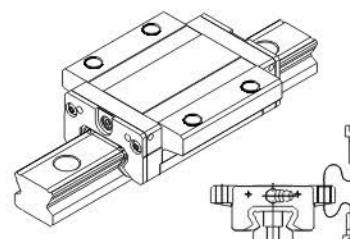
• TSR产品结构图



TSR线性滑轨系列改变了钢珠接触角的结构设计，使其在小型化的基准上使其径向承载能力大幅度的提高，非常适合在水平方向的安装，加入了钢球保持器消除了钢球之间的摩擦并提高了润滑油的保持性，因而实现了低噪音、高速、长寿命使用的运行。

The TSR linear guide rail series changed the structure design for contact angle of steel ball, make the radial carrying capacity of the miniaturized benchmark is greatly improved, it's very suitable for installation in horizontal direction. The addition of ball retainer eliminates friction between balls and improves the retention of grease. Thus, it achieved the operation of low noise, high speed and long-life use.

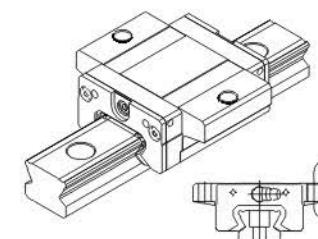
• TSR-A型



于TRH-A相比，TSR-A降低了组合高度，并采用了在径向上承载能力强的钢球接触结构，最适合于高度有限制的水平安装下使用，并具备上、下都可安装螺栓。

Compared with TRH-A, TSR-A reduces the combined altitude. A steel ball contact structure with strong carrying capacity in the radial direction is adopted. It is most suitable for horizontal installation with limited height, and the bolts can be installed up and down.

• TSR-AS型



于TSR-A相比，TSR-AS缩短了滑块长度，适合于在滑块长度和高度都有限制的情况下使用，也具备上、下都可安装螺栓。

Compared with TSR-A, TSR-AS reduces the length of block, suitable for use with limited length and height of block, and the bolts also can be installed up and down.

型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension							油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	S	L1	T	K	N	E	
TSR15B	24	34	56.9	26	26	M4×7	39.9	7	19.5	4.5	5.5	G-M4
TSR15BS			40.3	26	—	M4×7	23.3	7	19.5	4.5	5.5	G-M6
TSR20B	28	42	66.5	32	32	M5×8	46.6	9	22	5.5	12	G-M6
TSR20BS			47.7	32	—	M5×8	27.8	9	22	5.5	12	G-M6
TSR25B	33	48	83	35	35	M6×9	59.8	10	26.2	6	12	G-M6
TSR25BS			60	35	—	M6×9	36.8	10	26.2	6	12	G-M6
TSR30B	42	60	97	40	40	M8×12	70.7	10	32.5	8	12	G-M6
TSR30BS			69.1	40	—	M8×12	41.4	10	32.5	8	12	G-M6
TSR35B	48	70	110.9	50	50	M8×12	80.5	13	36.5	8.5	12	G-M6
TSR35BS			77.7	50	—	M8×12	47.3	13	36.5	8.5	16	G-M6
TSR45B	60	86	126	60	60	M10×15	90.5	15	47.5	11.5	16	G-PT1/8
TSR55B	68	100	156	75	75	M12×20	117	17	54.5	12	16	G-PT1/8

型号 Model	导轨尺寸 Rail Dimension						载荷 Load		重量 Weight	
	W1	W2	M1	F	dx Dx h		C(KN)	Co(KN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TSR15B	15	9.5	12.5	60	4.5×7.5×5.3 (3.5×6×4.5)			9.51	19.3	0.2
TSR15BS					5.39			11.1	0.15	1.2
TSR20B	20	11	15.5	60	6×9.5×8.5			12.5	25.2	0.4
TSR20BS					7.16			14.4	0.3	
TSR25B	23	12.5	18	60	7×11×9			20.3	39.5	0.6
TSR25BS					11.7			22.5	0.4	2.7
TSR30B	28	16	23	80	9×14×12 (7×11×9)			30	56.8	1.1
TSR30BS					17.2			32.5	0.8	
TSR35B	34	18	27.5	80	9×14×12			41.7	77.2	1.5
TSR35BS					23.8			44.1	1	6.4
TSR45B	45	20.5	35.5	105	11×17.5×14			55.3	101	2.5
TSR55B	48	26	38	120	14×20×17			89.1	157	4.2
					12.8					

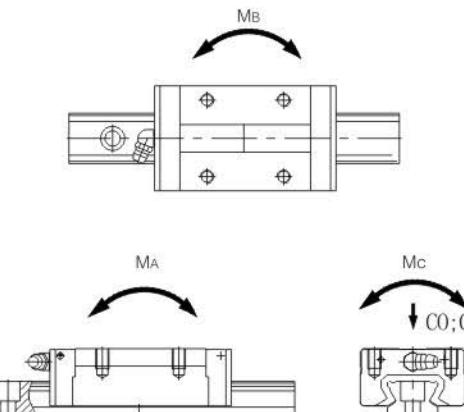
* “()”导轨安装孔括弧内尺寸需定制

TSR线性滑轨规格参数

Specification of TSR Series

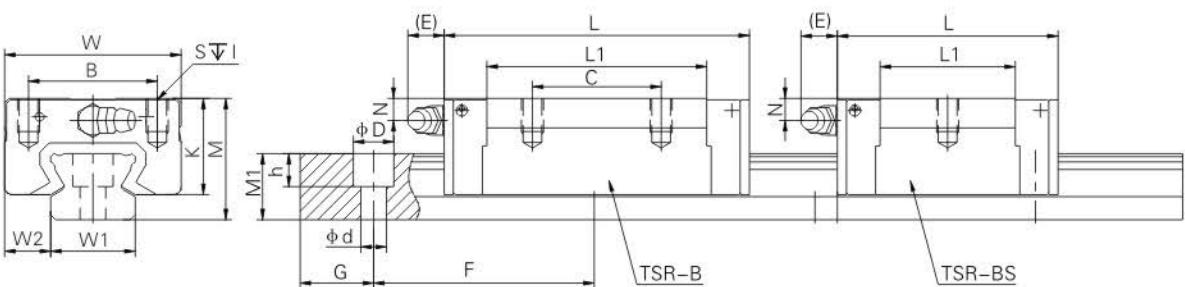


• TSR-B型 TSR-BS型

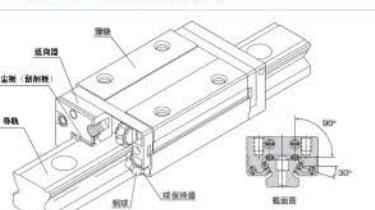


注：Ma,Mb,Mc参数见A06页
Note: Specification of MA, MB, MC refer to page A06

• TSR-B,BS型



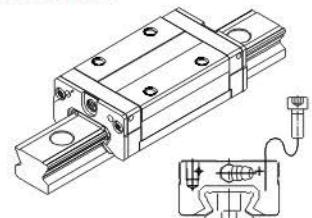
• TSR产品结构图



TSR线性滑轨系列改变了钢珠接触角的结构设计，使其在小型化的基准上使径向承载能力大幅度的提高，非常适合在水平方向的安装，加入了钢球保持器消除了钢珠之间的摩擦并提高了润滑油的保持性，因而实现了低噪音、高速、长寿命使用的运行。

The TSR linear guide rail series changed the structure design for contact angle of steel ball, make the radial carrying capacity of the miniaturized benchmark is greatly improved, it's very suitable for installation in horizontal direction. The addition of ball retainer eliminates friction between balls and improves the retention of grease. Thus, it achieved the operation of low noise, high speed and long-life use.

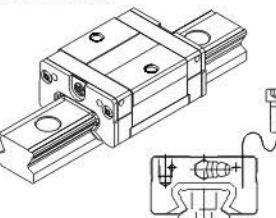
• TSR-B型



于TRH-B相比，TSR-B降低了组合高度，并采用了在径向方向上承载能力强的钢球接触结构，最适合于高度有限制的水平安装下使用

Compared with TRH-B, TSR-B reduces the combined altitude. A steel ball contact structure with strong carrying capacity in the radial direction is adopted. It is most suitable for horizontal installation with limited height.

• TSR-BS型



于TSR-B相比，TSR-BS缩短了滑块长度，适合于在滑块长度和高度都有限制的情况下使用

Compared with TSR-B, TSR-BS reduces the length of block, suitable for use with limited length and height of block.

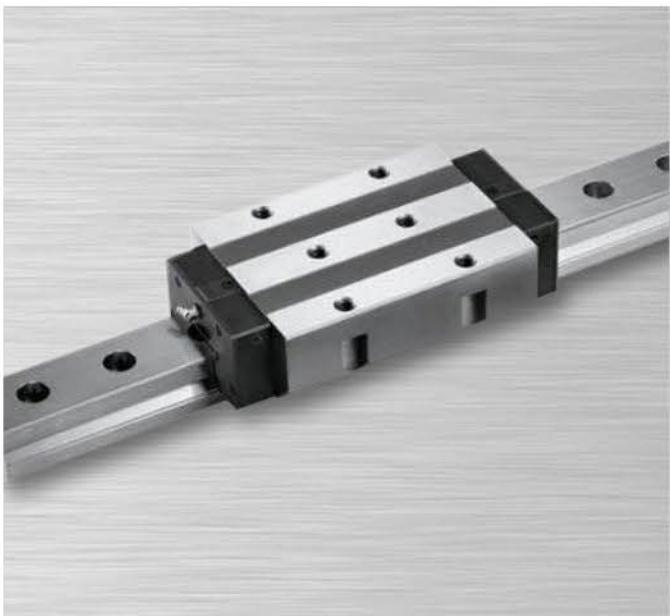
型号 Model	外形尺寸 Physical Dimension			滑块尺寸 Block Dimension							油嘴规格 Grease Nipple Specification	
	高度M Height M	宽度W Width W	长度L Length L	B	C	S	L1	T	K	N	E	
TSR15A	24	52	56.9	41	26	M5	39.9	7	19.5	4.5	5.5	G-M4
TSR15AS			40.3	41	—	M5	23.3	7	19.5	4.5	5.5	G-M6
TSR20A	28	59	66.5	49	32	M6	46.6	9	22	5.5	12	G-M6
TSR20AS			47.7	49	—	M6	27.8	9	22	5.5	12	G-M6
TSR25A	33	73	83	60	35	M8	59.8	10	26.2	6	12	G-M6
TSR25AS			60	60	—	M8	36.8	10	26.2	6	12	G-M6
TSR30A	42	90	97	72	40	M10	70.7	10	32.5	8	12	G-M6
TSR30AS			69.1	72	—	M10	41.4	10	32.5	8	12	G-M6
TSR35A	48	100	110.9	82	50	M10	80.5	13	36.5	8.5	12	G-M6
TSR35AS			77.7	82	—	M10	47.3	13	36.5	8.5	16	G-M6
TSR45A	60	120	126	100	60	M12	90.5	15	47.5	11.5	16	G-PT1/8
TSR55A	68	140	156	116	75	M14	117	17	54.5	12	16	G-PT1/8

型号 Model	导轨尺寸 Rail Dimension					载荷 Load		重量 Weight	
	W1	W2	M1	F	dx D x h	C(KN)	Co(KN)	滑块(kg) Block(kg)	导轨(kg/m) Rail(kg/m)
TSR15A	15	18.5	12.5	60	4.5×7.5×5.3 (3.5×6×4.5)		9.51	19.3	0.2
TSR15AS					5.39		11.1	0.15	1.2
TSR20A	20	19.5	15.5	60	6×9.5×8.5		12.5	25.2	0.4
TSR20AS					7.16		14.4	0.3	2.1
TSR25A	23	25	18	60	7×11×9		20.3	39.5	0.6
TSR25AS					11.7		22.5	0.4	2.7
TSR30A	28	31	23	80	9×14×12 (7×11×9)		30	56.8	1.1
TSR30AS					17.2		32.5	0.8	4.3
TSR35A	34	33	27.5	80	9×14×12		41.7	77.2	1.5
TSR35AS					23.8		44.1	1	6.4
TSR45A	45	37.5	35.5	105	11×17.5×14		55.3	101	2.5
TSR55A	48	46	38	120	14×20×17		89.1	157	4.2
					12.8				

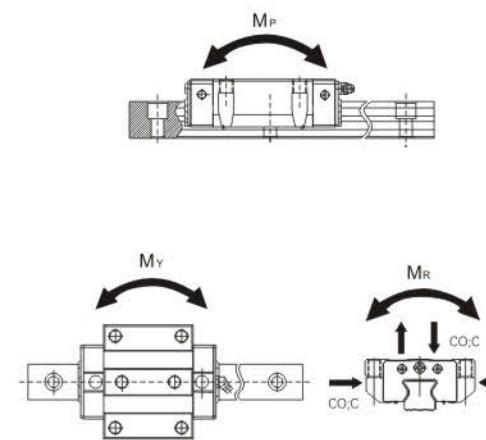
* “()”导轨安装孔括弧内尺寸需定制

TRG线性滑轨系列规格参数 (滚柱型)

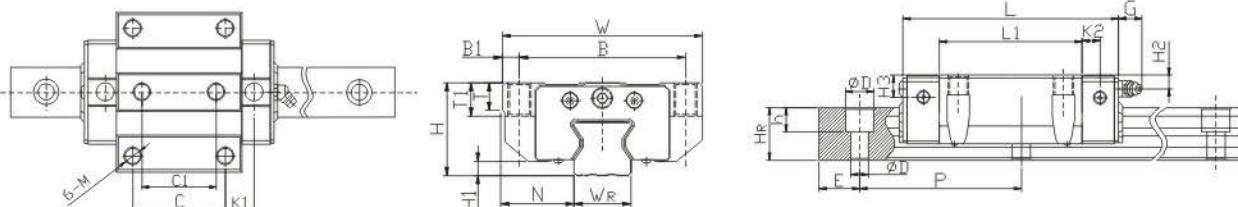
Specification of TRG Series (Roller Type)



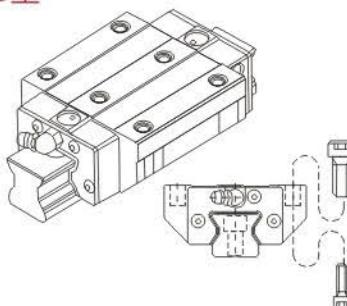
• TRG-AC型 TRG-ACL型



• TRG-AC型 TRG-ACL型



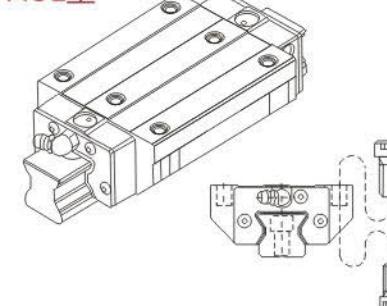
• TRG-AC型



除了可以从滑块的上面进行装配外，同时又适用于螺栓无法贯穿工作台的状态下使用，从滑块的底面往上进行装配

Can install from the upside of block, can also install from the bottom of the block when bolt can't run through the operating platform

• TRG-ACL型



与TRG-AC型具有相同断面尺寸，增加了滑块的长度，增加负荷滚柱数，提升整体的负荷能力

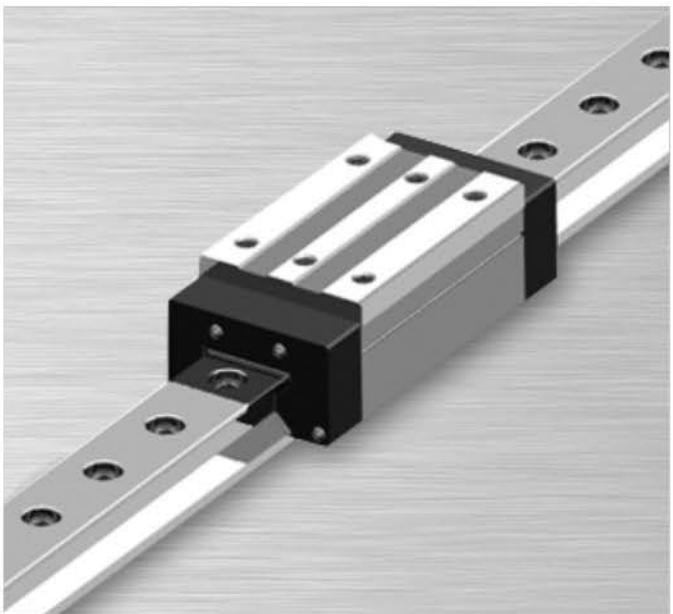
Same cross section to TRG-AC, lengthened the block's length, increase the quantity of roller, enhance the rated load capacity

型号 Model	组件尺寸 Component Dimension								滑块尺寸(MM) Slider Dimensions										油嘴规格 Grease Nipple Specification
	H	H ₁	N	W	B	B ₁	C	C ₁	L ₁	L	K ₁	K ₂	G	M	T	T ₁	H ₂	H ₃	
TRG20AC	30	5	21.5	63	53	5	40	35	57.5	86	13.8	6	5.3	M6	8	10	4.3	4.3	G-M6
TRG20ACL									77.5	106	12.8								
TRG25AC	36	5.5	23.5	70	57	6.5	45	40	64.5	97.9	15.75	7.25	12	M8	9.5	10	6.2	6	G-M6
TRG25ACL									81	114.4	24								
TRG30AC	42	6	31	90	72	9	52	44	71	109.8	17.5	8	12	M10	9.5	10	6.5	7.3	G-M6
TRG30ACL									93	131.8	28.5								
TRG35AC	48	6.5	33	100	82	9	62	52	79	124	16.5	10	12	M10	12	13	9	12.6	G-M6
TRG35ACL									106.5	151.5	30.25								
TRG45AC	60	8	37.5	120	100	10	80	60	106	153.2	21	10	12.9	M12	14	15	10	14	G-PT1/8
TRG45ACL									139.8	187	37.9								
TRG55AC	70	10	43.5	140	116	12	95	70	125.5	183.7	27.75	12.5	12.9	M14	16	17	12	17.5	G-PT1/8
TRG55ACL									173.8	232	51.9								
TRG65AC	90	12	53.5	170	142	14	110	82	160	232	40.8	15.8	12.9	M16	22	23	15	15	G-PT1/8
TRG65ACL									223	295	72.3								

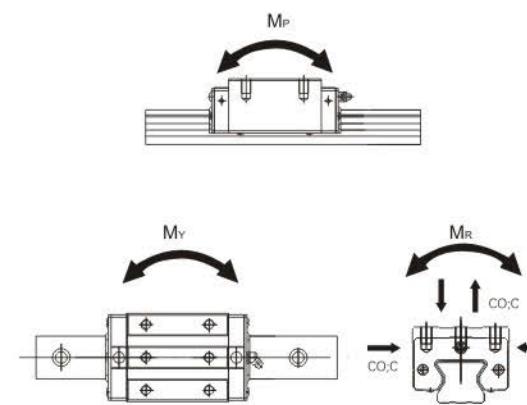
型号 Model	导轨尺寸 (mm) Rail Dimensions (mm)							导轨固定 螺栓尺寸 Tightening Bolt of Rail	基本额定负荷 Basic Load Rating		容许静力矩 Allowable Static Torque			重量 Weight	
	WR	H _R	D	h	d	P	E		(mm)	C(KN)	Co(KN)	MR KN·m	MP KN·m	MY KN·m	
TRG20AC	20	21	9.5	8.5	6	30	20	M5X20	21.3	46.7	0.647	0.46	0.46	0.44	2.76
TRG20ACL									26.9	63	0.872	0.837	0.837	0.62	
TRG25AC	23	23.6	11	9	7	30	20	M6X20	27.7	57.1	0.758	0.605	0.605	0.67	3.08
TRG25ACL									33.9	73.4	0.975	0.991	0.991	0.86	
TRG30AC	28	28	14	12	9	40	20	M8X25	39.1	82.1	1.445	1.06	1.06	1.06	4.41
TRG30ACL									48.1	105	1.846	1.712	1.712	1.42	
TRG35AC	34	30.2	14	12	9	40	20	M8X25	57.9	105.2	2.17	1.44	1.44	1.61	6.06
TRG35ACL									73.1	142	2.93	2.6	2.6	2.21	
TRG45AC	45	38	20	17	14	52.5	22.5	M12X35	92.6	178.8	4.52	3.05	3.05	3.22	9.97
TRG45ACL									116	230.9	6.33	5.47	5.47	4.41	
TRG55AC	53	44	23	20	16	60	30	M14X45	130.5	252	8.01	5.4	5.4	5.18	13.98
TRG55ACL									167.8	348	11.15	10.25	10.25	7.34	
TRG65AC	63	53	26	22	18	75	35	M16X50	213	411.6	16.2	11.59	11.59	11.04	20.22
TRG65ACL									275.3	572.7	22.55	22.17	22.17	15.75	

TRG线性滑轨系列规格参数 (滚柱型)

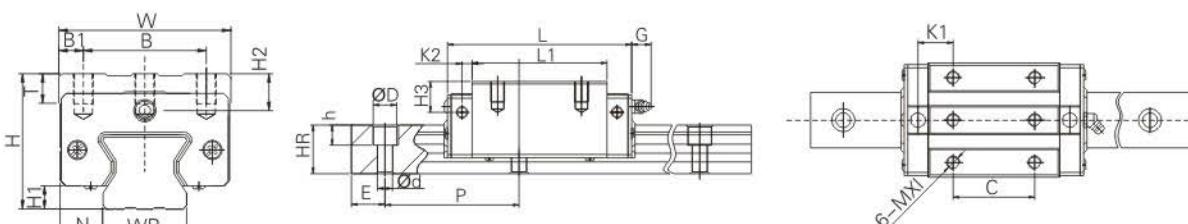
Specification of TRG Series (Roller Type)



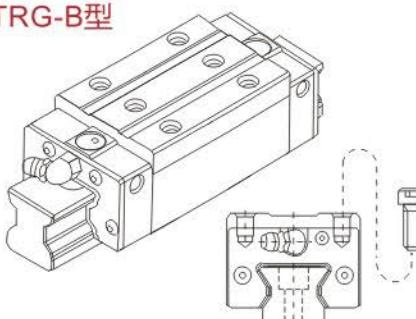
• TRG-B型 TRG-BL型



• TRG-B型 TRG-BL型



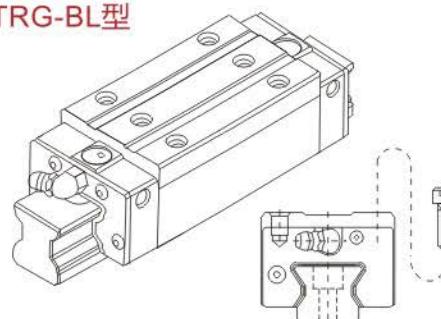
• TRG-B型



缩小滑块的宽度，可以从滑块的上面进行装配

Reduce the width of the block, can install from the upside of the block

• TRG-BL型



与TRG-B型具有相同的断面尺寸，增加了滑轨的长度，并增加了负荷滚柱数，提升整体的负荷能力

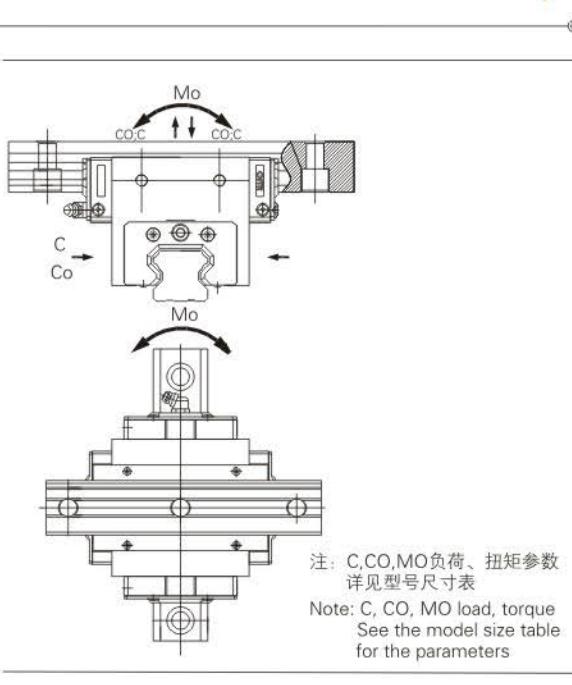
Same cross section to TRG-B, lengthened the block's length, increase the quantity of roller, enhance the rated load capacity

型号 Model	组件尺寸 Component Dimension							滑块尺寸(MM) Slider Dimensions								油嘴规格 Grease Nipple Specification	
	H	H1	N	W	B	B1	C	L1	L	K1	K2	G	MXL	T	H2	H3	
TRG20B	34	5	12	44	32	6	36	57.5	86	15.8	6	5.3	M5X8	8	8.3	8.3	G-M6
TRG20BL							50	77.5	106	18.8							
TRG25B	40	5.5	12.5	48	35	6.5	35	64.5	97.9	20.75	7.25	12	M6X8	9.5	10.2	10	G-M6
TRG25BL							50	81	114.4	21.5							
TRG30B	45	6	16	60	40	10	40	71	109.8	23.5	8	12	M8X10	9.5	9.5	10.3	G-M6
TRG30BL							60	93	131.8	24.5							
TRG35B	55	6.5	18	70	50	10	50	79	124	22.5	10	12	M8X12	12	16	19.6	G-M6
TRG35BL							72	106.5	151.5	25.5							
TRG45B	70	8	20.5	86	60	13	60	106	153.2	31	10	12.9	M10X17	16	20	24	G-PT1/8
TRG45BL							80	139.8	187	37.9							
TRG55B	80	10	23.5	100	75	12.5	75	125.5	183.7	37.75	12.5	12.9	M12X18	17.5	22	27.5	G-PT1/8
TRG55BL							95	173.8	232	51.9							
TRG65B	90	12	31.5	126	76	25	70	160	232	60.8	15.8	12.9	M16X20	25	15	15	G-PT1/8
TRG65BL							120	223	295	67.3							

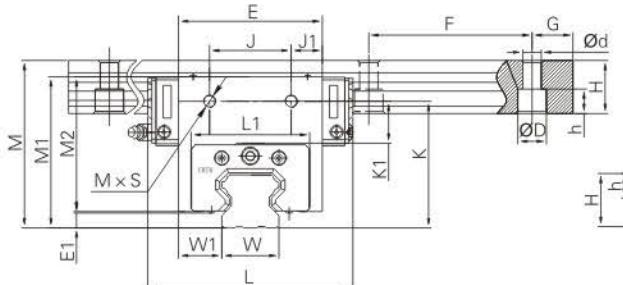
型号 Model	导轨尺寸 (mm) Rail Dimensions (mm)							导轨固定 螺栓尺寸 Tightening Bolt of Rail	基本额定负荷 Basic Load Rating		容许静力矩 Allowable Static Torque			重量 Weight	
	WR	HR	D	h	d	P	E		(mm)	C(KN)	Co(KN)	MR KN·m	MP KN·m	MY KN·m	滑块(kg) Block(kg)
TRG20B	20	21	9.5	8.5	6	30	20	M5X20	21.3	46.7	0.647	0.46	0.46	0.44	2.76
TRG20BL									26.9	63	0.872	0.837	0.837	0.62	
TRG25B	23	23.6	11	9	7	30	20	M6X20	27.7	57.1	0.758	0.605	0.605	0.67	3.08
TRG25BL									33.9	73.4	0.975	0.991	0.991	0.86	
TRG30B	28	28	14	12	9	40	20	M8X25	39.1	82.1	1.445	1.06	1.06	1.06	4.41
TRG30BL									48.1	105	1.846	1.712	1.712	1.42	
TRG35B	34	30.2	14	12	9	40	20	M8X25	57.9	105.2	2.17	1.44	1.44	1.61	6.06
TRG35BL									73.1	142	2.93	2.6	2.6	2.21	
TRG45B	45	38	20	17	14	52.5	22.5	M12X35	92.6	178.8	4.52	3.05	3.05	3.22	9.97
TRG45BL									116	230.9	6.33	5.47	5.47	4.41	
TRG55B	53	44	23	20	16	60	30	M14X45	130.5	252	8.01	5.4	5.4	5.18	13.98
TRG55BL									167.8	348	11.15	10.25	10.25	7.34	
TRG65B	63	53	26	22	18	75	35	M16X50	213	411.6	16.2	11.59	11.59	11.04	20.22
TRG65BL									275.3	572.7	22.55	22.17	22.17	15.75	

TRC线性滑轨系列规格参数 (十字交叉)

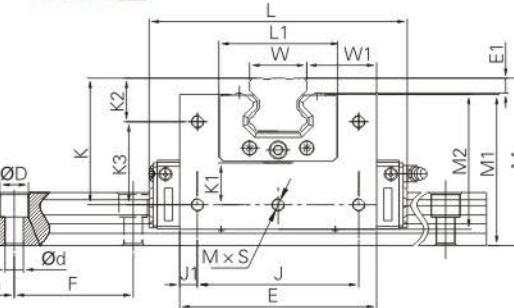
TRC Linear Slide Series Specifications (Cross)



• TRC型



• TRC-L型

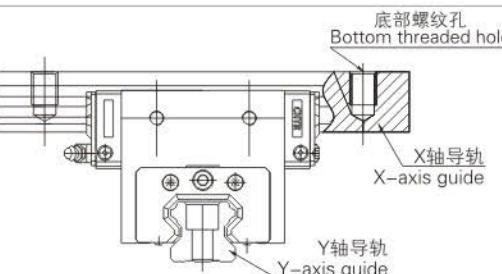


• 导轨底面有螺纹孔的TRC型/TRC-L型

TRC type / TRC-L type with threaded hole on the bottom of guide rail

TRC型其中包括有导轨底面带螺纹孔类型,其导轨底面攻有螺纹。在X轴导轨上进行螺纹加工后,便可以从顶部用螺栓固定。有底部螺纹要求的客户,可在订货时在导轨长度后加“T”代号。(导轨型号对应螺纹孔大小及有效深度参见TRH导轨底面螺纹孔参数表。)

TRC type includes the bottom of the guide rail with a threaded hole type, the bottom of the guide thread with thread. After threading on the X-axis guide, it can be secured from the top with bolts. There are bottom thread requirements of the customer, can be ordered in the rail length after the "T" code. (Refer to the TRH guide bottom thread hole parameter table for the corresponding screw hole size and effective depth.)



• 产品型号说明 Product model description

TR	C	20	L	4	UU	L1200-T/L1000	N	Z1
品牌代号 Brand code	滑块类别 Slider category	公称编号 15~35 Nominal number 15~35	配对滑块总数 The total number of paired sliders	X轴长度/Y轴长度 T:底 部螺纹孔代号 X-axis length / Y-axis length T: Bottom thread hole code	精度 Accuracy	预压等级 Preload rating		
	C: 十字交叉型 Slider category C: Cross type			N: 普通级 N: ordinary level H: 高级 H: Advanced P: 精密级 P: precision grade	Z1: 微间隙 Zf: micro gap Z0: 零间隙 Z0: zero gap Z1: 轻预压 Z1: light preload Z2: 中预压 Z2: Preloading Z3: 重预压 Z3: heavy preload			

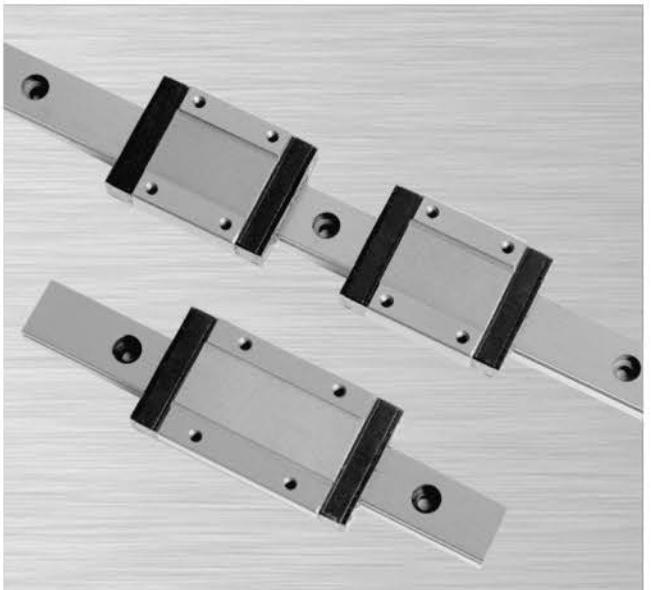
公称型号 Nominal model	组件尺寸 Component size			滑块尺寸 Slider size										
	M	M1	L	E	M2	J	J1	K	K1	K2	K3	安装孔 M×S	L1	E1
TRC15	47	42.6	61.8	39.8	38.2	20	9.9	34.8	11	-	-	M4×5	32	4.4
TRC20	57	52	77.6	51	47	30	10.5	42.5	13.5	-	-	M5×8	42.2	3.9
TRC20L	57	52	93.6	67	47	56	5.5	37	8	13	24	M5×8	42.2	3.9
TRC25	70	63	83.5	59.5	56	34	12.75	52	16.3	-	-	M6×10	47	5.9
TRC25L	70	63	102.5	78.5	56	64	7.25	44	8.3	18	26	M6×10	47	5.9
TRC30	82	74	100.5	70.5	66	40	15.25	61	19.2	-	-	M6×10	58.3	7.3
TRC30L	82	74	123	93	66	76	8.5	53	11.2	21	32	M6×10	58.3	7.3
*TRC35L	95	85.5	139.2	105.8	76	90	7.9	61	13.3	34	37	M8×14	68	8.2

公称型号 Nominal model	导轨尺寸 Rail size						基本额定载荷 Basic rated load		单个滑块容 许静力矩 Single slider capacity Xu Jing moment		重量 weight	
	W	W1	H	D×d×h	F	G (推荐) (recommend)	动载C (KN) Dynamic C	静载CO (KN) Static load CO	Mo (N·M)	滑块 (kg) Block	导轨 (kg/m) Rail (kg/m)	
TRC15	15	12.4	15	7.5×4.5×5.3	60	20	8.33	13.5	80.5	0.34	1.5	
TRC20	20	15.5	18	9.5×6×8.5	60	20	13.8	23.8	190	0.75	2.3	
TRC20L	20	23.5	18	9.5×6×8.5	60	20	21.3	31.8	270	1.3	2.3	
TRC25	23	18.25	22	11×7×9	60	20	19.9	34.4	307	1.2	3.3	
TRC25L	23	27.75	22	11×7×9	60	20	27.2	45.9	459	2.2	3.3	
TRC30	28	21.25	26	14×9×12	80	20	28	46.8	524	2	4.6	
TRC30L	28	32.5	26	14×9×12	80	20	37.3	62.5	751	3.6	4.6	
*TRC35L	34	35.9	29	14×9×12	80	20	50.2	81.5	1200	5.3	6.4	

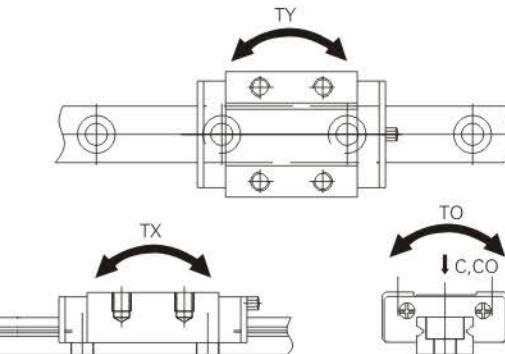
型号前加*表示此型号为开发中产品

TRN,TRW线性滑轨规格参数（微型）

Specification of TRN,TRW Series Linear guide(Mini Type)

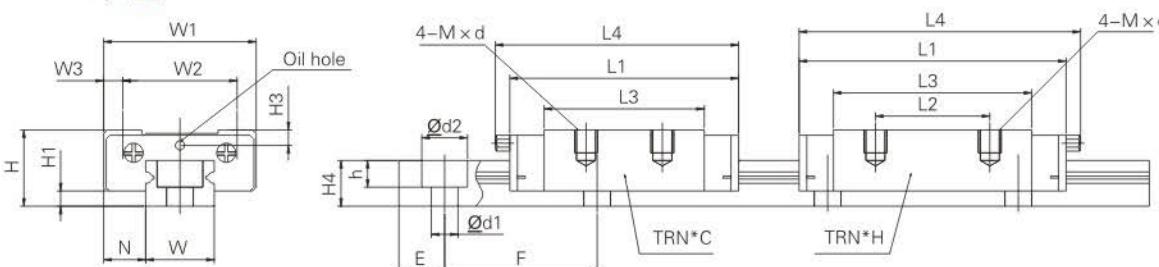


• TRN-C,H型 TRW-C,H型

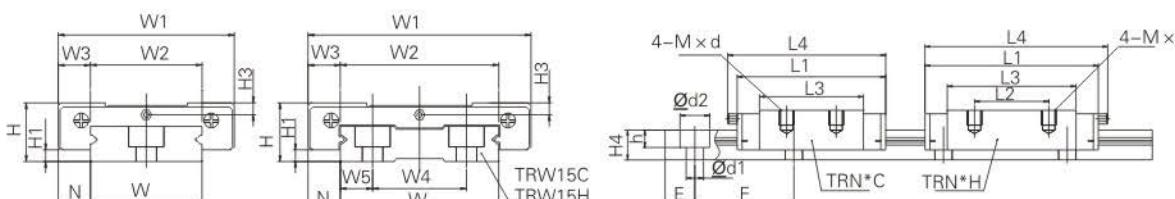


注：C,Co,Ta,Tx,Ty负荷，扭矩参数详见型号尺寸表
Note: Specification of C,Co,Ta,Tx,Ty refer to Page A29

• TRN-C,H型



• TRW-C,H型



型号说明

Model Code

TRN	15	C	UU	2	L240	N	Z1
		公称编号 Code				预压等级 Preload Class	
标准型(TRN): Basic Series(TRN)	加宽型(TRW): Widened Series(TRW)	标准型(C): Standard Block(C)	加长型(H): Lengthened Block(H)	单根导轨上滑块数 Number of Block for Each Rail	导轨长度 Rail Length	精度: Accuracy 普通级(N): Normal 高级(H): High 精密度(P): Precision	
		特殊规格带密封 Special Block with Seal					

型号 Model	组件尺寸 Component Demension			滑块尺寸 Block Dimension								滑轨使用螺栓尺寸 Rail Bolt Size	
	H	H1	N	W1	W2	W3	L1	L2	L3	L4	Mxd	H3	尺寸×长度 Size×Length
TRN7C	8	1.5	5	17	12	2.5	23.5	8	14.3	—	M2x2.5	1.5	M2X6
TRN7H	8	1.5	5	17	12	2.5	31	12	21.6	—	M2x2.6	1.5	M2X6
TRN9C	10	2	5.5	20	15	2.5	30	10	20.8	—	M3x3	2.2	M3X8
TRN9H	10	2	5.5	20	15	2.5	40.5	15	30.9	—	M3x3	2.2	M3X8
TRN12C	13	3	7.5	27	20	3.5	34	15	21.6	—	M3X3.5	2.7	M3X8
TRN12H	13	3	7.5	27	20	3.5	44	20	32	—	M3X3.5	2.7	M3X8
TRN15C	16	4	8.5	32	25	3.5	42	20	27.8	—	M3X4	3.1	M3X10
TRN15H	16	4	8.5	32	25	3.5	57	25	42.7	62	M3X4	3.1	M3X10
TRW7C	9	1.9	5.5	25	19	3	31.2	10	21	—	M3X3	1.8	M3X6
TRW7H	9	1.9	5.5	25	19	3	41	19	30.8	—	M3X3	1.8	M3X6
TRW9C	12	2.9	6	30	21	4.5	39.3	12	27.5	—	M3X3	2.4	M3X8
TRW9H	12	2.9	6	30	23	3.5	50.7	24	38.5	—	M3X3	2.4	M3X8
TRW12C	14	3	8	40	28	6	44	15	31	—	M3X3.5	3.2	M4X10
TRW12H	14	3	8	40	28	6	59	28	46.3	—	M3X3.5	3.2	M4X10
TRW15C	16	4	9	60	45	7.5	55	20	39	60	M4X4.5	3.2	M4X12
TRW15H	16	4	9	60	45	7.5	74.5	35	58.3	79	M4X4.5	3.2	M4X12

型号 Model	导轨尺寸 Rail Dimension							基本额定负荷 Basic Load Rating		静态瞬间扭矩 Static Instantaneous Torque			滑轨使用螺栓尺寸 Rail Bolt Size	
	W	H4	E	F	W4	W5	d1xd2xh	C (N)	Co (N)	To (N·m)	Tx (N·m)	Ty (N·m)	Block (g)	Rail (g/10cm)
TRN7C	7	5	7.5	15	—	—	2.4x4.2x2.3	1200	1960	7.2	4.9	4.1	10	22
TRN7H	7	5	7.5	15	—	—	2.4x4.2x2.3	1510	2750	10	9.1	7.7	14	22
TRN9C	9	6	10	20	—	—	3.5x6x3.5	1610	2860	13.3	9.4	7.9	19	35
TRN9H	9	6	10	20	—	—	3.5x6x3.5	2080	4180	19.4	19.4	16.3	28	35
TRN12C	12	8	12.5	25	—	—	3.5x6.5x4.5	2960	4450	27.6	16	13.4	35	65
TRN12H	12	8	12.5	25	—	—	3.5x6.5x4.5	3780	6430	39.9	31.8	26.7	52	65
TRN15C	15	10	20	40	—	—	3.5x6.5x4.5	4390	6730	51.8	30.8	25.9	64	107
TRN15H	15	10	20	40	—	—	3.5x6.5x4.5	5750	10100	77.7	66.2	55.6	95	107
TRW7C	14	5.2	10	30	—	—	3.5x6x3.2	1370	2060	15.7	7.14	7.14	20	51
TRW7H	14	5.2	10	30	—	—	3.5x6x3.2	1770	3140	23.45	15.53	15.53	29	51
TRW9C	18	7	10	30	—	—	3.5x6x4.5	2750	4120	40.12	18.96	18.96	40	91
TRW9H	18	7	10	30	—	—	3.5x6x4.5	3430	5890	54.54	34	34	57	91
TRW12C	24	8	20	40	—	—	3.5x8x4.5	3780	6430	78.4	31.8	26.7	76	139
TRW12H	24	8	20	40	—	—	3.5x8x4.5	4870	9400	115	65.6	55	111	139
TRW15C	42	10	20	40	23	9.5	3.5x8x4.5	6150	10200	216	63.6	53.3	140	294
TRW15H	42	10	20	40	23	9.5	3.5x8x4.5	7910	14900	316	131	110	204	294

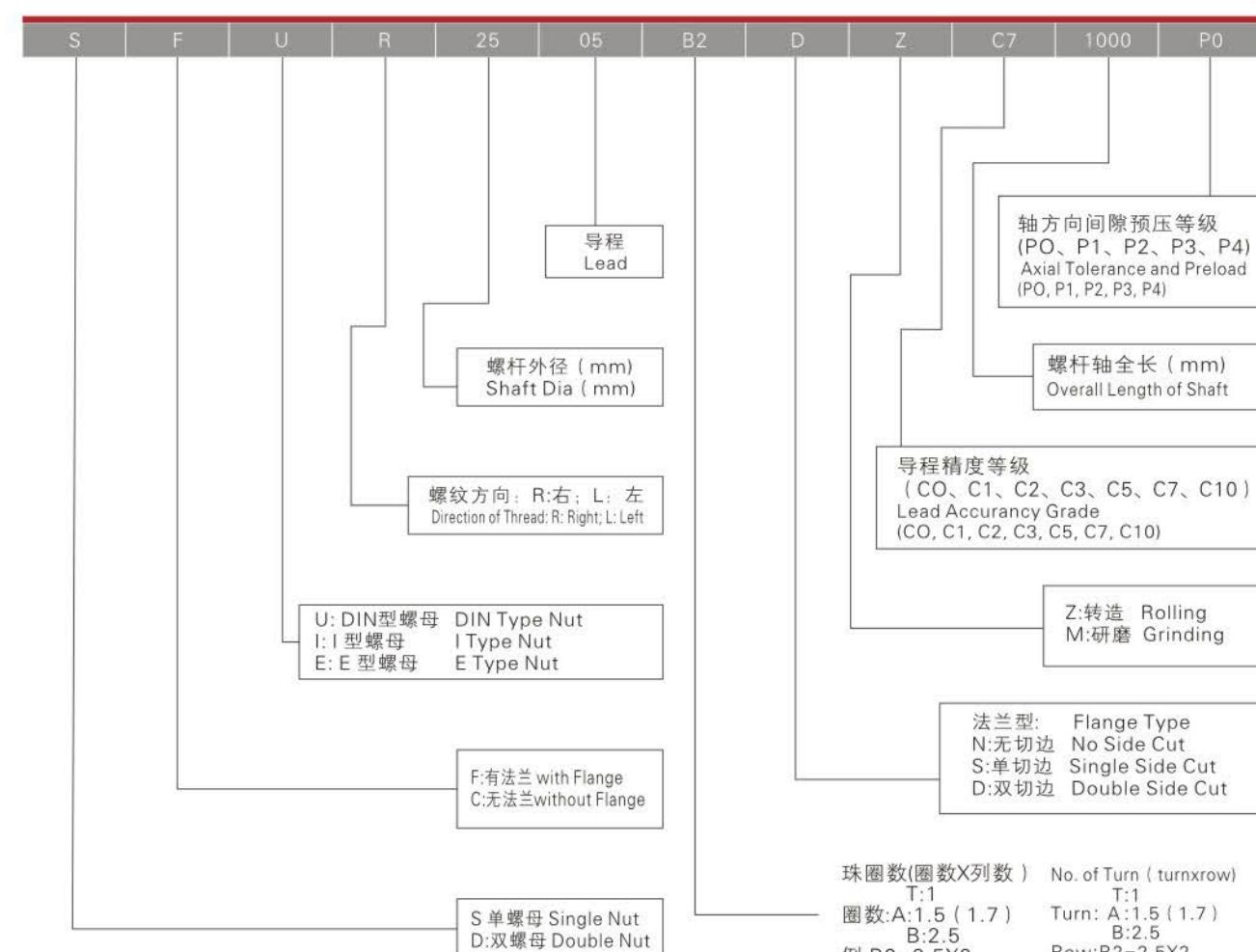


B

滚珠螺杆系列 Ball Screw Series



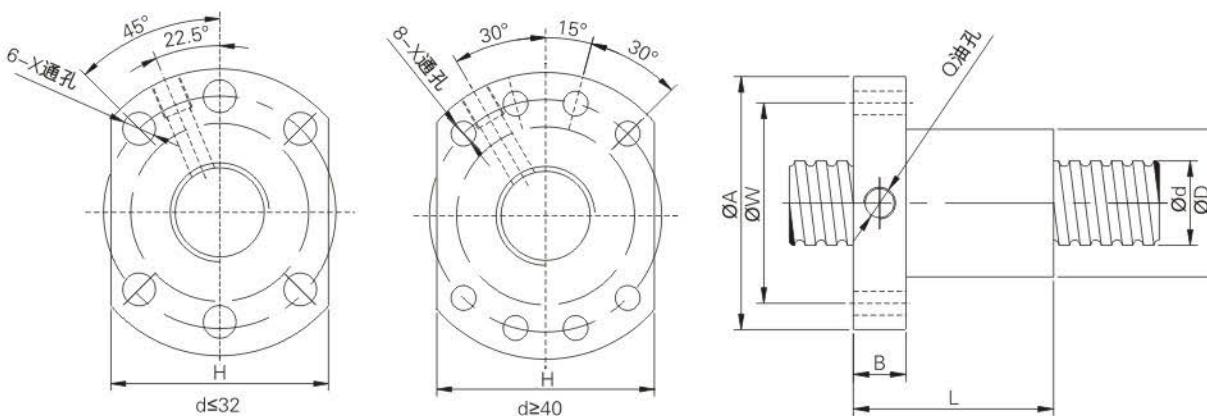
滚珠螺杆公称型号组成
Ball Screw Model-number Code



SFU型滚珠丝杆尺寸表

SFU Type Ball Screw Size Table

SFU型



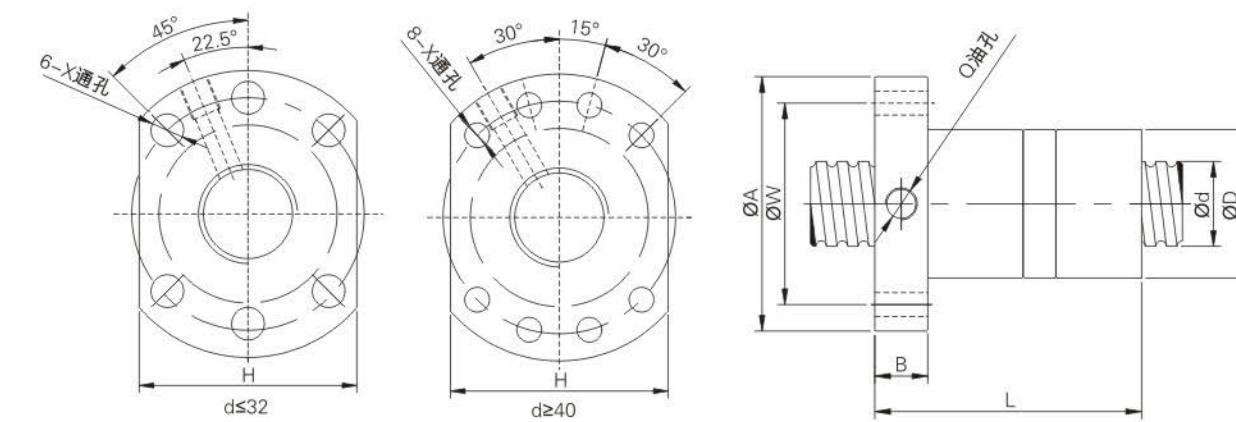
I: 导程；Da: 珠径；N: 珠圈数；K: 刚性；Ca: 动额定负荷；Coa: 静额定负荷
I: Lead; Da: Ball Dia.; N: No. of Turn; K: Rigidity; Ca: Basic Dynamic Load Rating; Coa: Basic Static Load Rating

型号 Model	滚珠螺杆、螺母基本参数 Specification of Ballscrew Shaft and Nut														
	d	I	Da	D	A	B	L	W	X	H	Q	n	Ca	Coa	K
SFU01605-4	16	5	3.175	28	48	10	50	38	5.5	40	M6	4	780	1790	20
SFU02005-4	20	5	3.175	36	58	10	51	47	6.6	44	M6	4	1130	2380	25
SFU02505-4	25	5	3.175	40	62	10	51	51	6.6	48	M6	4	1280	3110	35
SFU02510-4		10	4.762	40	62	12	85	51	6.6	48	M6	4	1944	3877	33
SFU03205-4	32	5	3.175	50	80	12	52	65	9	62	M6	4	1450	4150	40
SFU03210-4		10	6.350	50	80	12	90	65	9	62	M6	4	3390	7170	79
SFU04005-4	40	5	3.175	63	93	14	55	78	9	70	M6	4	1610	5330	49
SFU04010-4		10	6.350	63	93	14	93	78	9	70	M8	4	3910	9520	50
SFU05010-4	50	10	6.350	75	110	16	93	93	11	85	M8	4	4450	12500	65
SFU05020-4		20	7.144	75	110	16	138	93	11	85	M8	4	4644	14327	59.5
SFU06310-4	63	10	6.350	90	125	18	98	108	11	95	M8	4	5070	16000	80
SFU06320-4		20	9.525	95	135	20	149	115	13.5	100	M8	4	7573	23860	84.1

DFU型滚珠丝杆尺寸表

DFU Type Ball Screw Size Table

DFU型



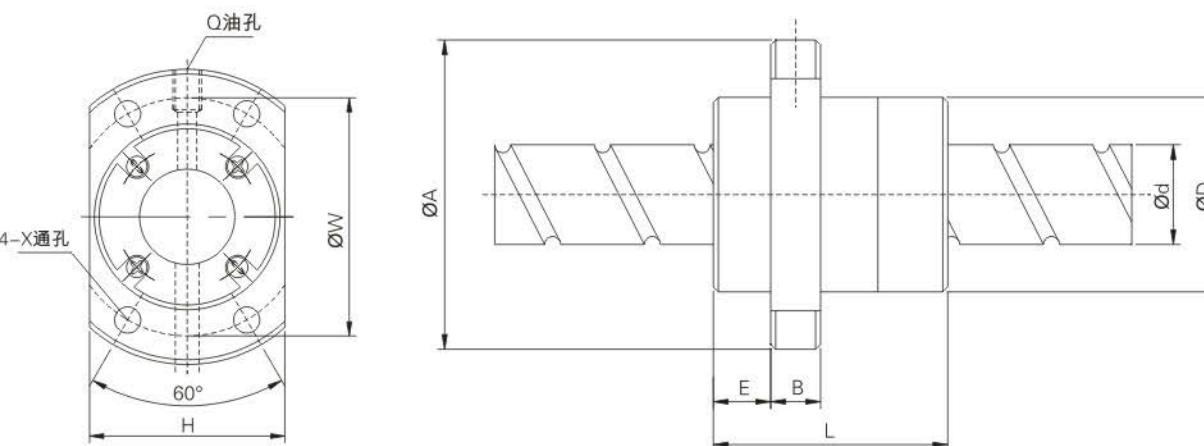
I: 导程；Da: 珠径；N: 珠圈数；K: 刚性；Ca: 动额定负荷；Coa: 静额定负荷
I: Lead; Da: Ball Dia.; N: No. Of Turn; K: Rigidity; Ca: Basic Dynamic Load Rating; Coa: Basic Static Load Rating

型号 Model	滚珠螺杆、螺母基本参数 Specification of Ballscrew Shaft and Nut														
	d	I	Da	D	A	B	L	W	X	H	Q	n	Ca	Coa	K
DFU01605-4	16	5	3.175	28	48	10	100	38	5.5	40	M6	4	780	190	20
DFU02005-4	20	5	3.175	36	58	10	101	47	6.6	44	M6	4	1130	2380	25
DFU02505-4	25	5	3.175	40	62	10	101	51	6.6	48	M6	4	1280	3110	35
DFU02510-4		10	4.762	40	62	12	145	51	6.6	48	M6	4	1944	3877	33
DFU03205-4	32	5	3.175	50	80	12	102	65	9	62	M6	4	1450	4150	40
DFU03210-4		10	6.350	50	80	12	162	65	9	62	M6	4	3390	7170	79
DFU04005-4	40	5	3.175	63	93	14	105	78	9	70	M6	4	1610	5330	49
DFU04010-4		10	6.350	63	93	14	165	78	9	70	M8	4	3910	9520	50
DFU05010-4	50	10	6.350	75	110	16	171	93	11	85	M8	4	4450	12500	65
DFU05020-4		20	7.144	75	110	16	280	93	11	85	M8	4	4644	14327	59.5
DFU06310-4	63	10	6.350	90	125	18	182	108	11	95	M8	4	5070	16000	80
DFU06320-4		20	9.525	95	135	20	290	115	13.5	100	M8	4	7573	23860	84.1

注: d≤32为6个通孔; d≥40为8个通孔
Note: d≤32, nut with six hole; d≥40, nut with eight hole

SFY型滚珠丝杆尺寸表
SFE type ball screw size table

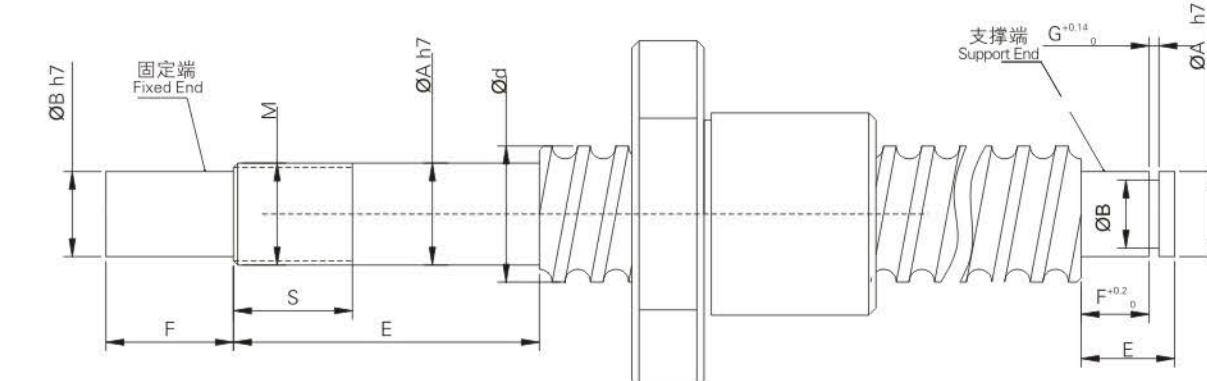
SFY型



I: 导程; Da: 珠径; N: 珠圈数; K: 刚性; Ca: 动额定负荷; Coa: 静额定负荷
I: Lead; Da: Ball Dia.; N: No. Of Turn; K: Rigidity; Ca: Basic Dynamic Load Rating; Coa: Basic Static Load Rating

型号 Model	滚珠螺杆、螺母基本参数 Specification of Ballscrew Shaft and Nut															
	d	I	Da	D	A	B	E	L	W	X	H	Q	n	动额定 负荷	静额定 负荷	Kgf
SFY01616-3.6	16	16	2.778	32	53	10	9	43	42	4.5	34	M6	1.8X2	1073	2551	31
SFY02020-3.6	20	20	3.175	39	62	10	12.5	51	50	5.5	41	M6	1.8X2	1387	3515	37
SFY02525-3.6	25	25	3.969	47	74	12	14	62	60	6.6	49	M6	1.8X2	2074	5494	45
SFY03232-3.6	32	32	4.762	58	92	12	15.5	75	74	9	60	M6	1.8X2	3021	8690	58
SFY04040-3.6	40	40	6.350	73	114	15	19.5	99	93	11	75	M6	1.8X2	4831	14062	70
SFY05050-3.6	50	50	7.938	90	135	20	21.5	117	112	14	92	M6	1.8X2	7200	21974	60

建议轴端尺寸
Suggestion of Shaft End Size

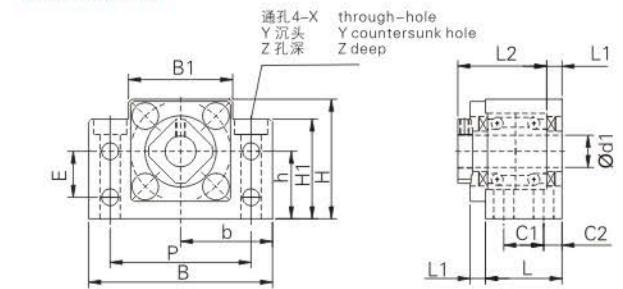


型号 (固定端) Model (fixed end)	滚珠丝杆轴外径 Shaft Dia	轴承部轴外径 Bearing End Dia	-	-	-	公称螺纹 Thread Size
BK型	d	A	B	E	F	M S
BK10	12/14/15	10	8	36	15	M10X1 16
BK12	14/15/16	12	10	36	15	M12X1 14
BK15	18/20	15	12	40	20	M15X1 12
BK17	20/25	17	15	53	23	M17X1 17
BK20	25/28	20	17	53	25	M20X1 15
BK25	32/36	25	20	65	30	M25X1.5 18
BK30	36/40	30	25	72	38	M30X1.5 25
BK35	45	35	30	81	45	M35X1.5 28
BK40	50	40	35	93	50	M40X1.5 35

型号 (支撑端) Model (support end)	滚珠丝杆轴外径 Shaft Dia	轴承部轴外径 Bearing End Dia	扣环沟槽 Groove of buckle			
FF型 EF型 BF型	d	A	E	B	F	G
FF10 EF10 BF10	12/14/15	8	10	7.6	7	0.9
FF12 EF12 BF12	14/15/16	10	11	9.6	8	1.15
FF15 EF15 BF15	18/20	15	13	14.3	9	1.15
FF17 — BF17	20/25	17	16	16.2	12	1.15
FF20 EF15 BF20	25/28	20	19(16)	19	14(12)	1.35
FF25 — BF25	32/36	25	20	23.9	15	1.35
FF30 — BF30	36/40	30	21	28.6	16	1.75
— — BF35	45	35	22	33	17	1.75
— — BF40	50	40	23	38	18	1.75



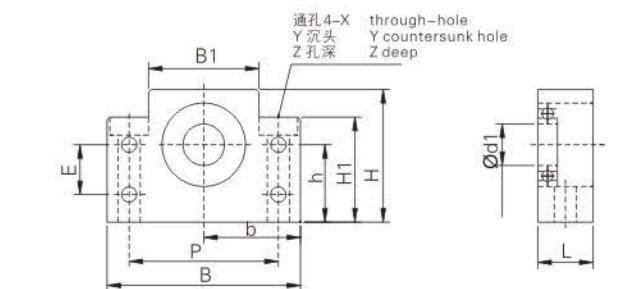
BK 固定端
BK Fixed End



型号 Model	d1	L	L1	L2	L3	C1	C2	B	H	b±0.02	h±0.02	B1	H1	E	P	d2	X	Y	Z
BK 10	10	25	5	29	5	13	6	60	39	30	22	34	32.5	15	46	5.5	6.6	10.8	5
BK 12	12	25	5	29	5	13	6	60	43	30	25	34	32.5	18	46	5.5	6.6	10.8	5
BK 15	15	27	6	32	6	15	6	70	48	35	28	40	38	18	54	5.5	6.6	11	6.5
BK 17	17	35	9	44	7	19	8	86	64	43	39	50	55	28	68	6.6	9	14	8.5
BK 20	20	35	8	43	8	19	8	88	60	44	34	52	50	22	70	6.6	9	14	8.5
BK 25	25	42	12	54	9	22	10	108	80	53	48	64	70	33	85	9	11	17.5	11
BK 30	30	45	14	61	9	23	11	128	89	64	51	76	78	33	102	11	14	20	13
BK 35	35	50	14	67	12	26	12	140	96	70	52	88	79	35	114	11	14	20	13
BK 40	40	61	18	76	15	33	14	160	110	80	60	100	90	37	130	14	18	26	17.5



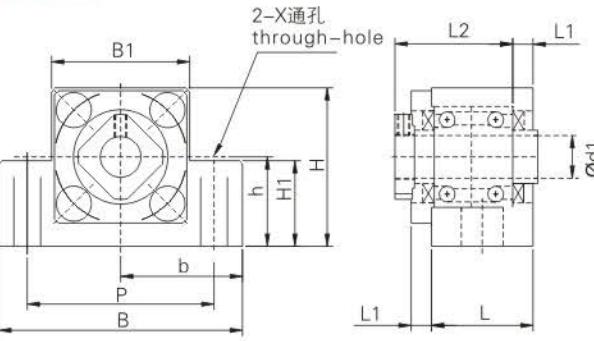
BF 支撑端
BF Support End



型号 Model	d1	L	B	H	b±0.02	h±0.02	B1	H1	E	P	d2	X	Y	Z
BF 10	8	20	60	39	30	22	34	32.5	15	46	5.5	6.6	10.8	5
BF 12	10	20	60	43	30	25	34	32.5	18	46	5.5	6.6	10.8	5
BF 15	15	20	70	48	35	28	40	38	18	54	5.5	6.6	11	6.5
BF 17	17	23	86	64	43	39	50	55	28	68	6.6	9	14	8.5
BF 20	20	26	88	60	44	34	52	50	22	70	6.6	9	14	8.5
BF 25	25	30	106	80	53	48	64	70	33	85	9	11	17.5	11
BF 30	30	32	128	89	64	51	76	78	33	102	11	14	20	13
BF 35	35	32	140	96	70	52	88	79	35	114	11	14	20	13
BF 40	40	37	160	110	80	60	100	90	37	130	14	18	26	17.5



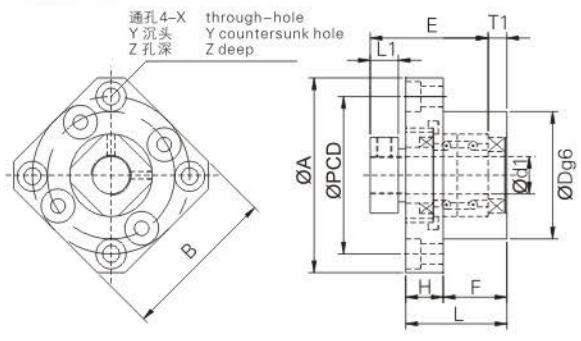
EK 固定端
EK Fixed End



型号 Model	d1	L	L1	L2	L3	B	H	b ₊ 0.02	h ₊ 0.02	B1	H1	P	X
EK 10	10	24	6	29.5	6	70	43	35	25	36	24	52	9
EK 12	12	24	6	29.5	6	70	43	35	25	36	24	52	9
EK 15	15	25	6	35	5	80	49	40	30	41	25	60	11
EK 20	20	42	10	50	10	95	58	47.5	30	56	25	75	11



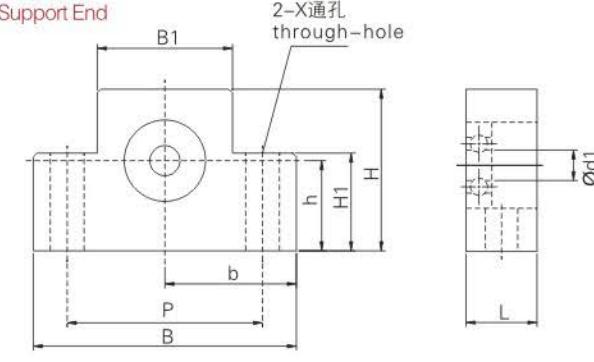
FK 固定端
FK Fixed End



型号 Model	d1	L	H	F	E	Dg6	A	PCD	B	L1	T1	X	Y	Z
FK 10	10	27	10	17	29.5	34	52	42	42	7.5	5	4.5	8	4
FK 12	12	27	10	17	29.5	36	54	44	44	7.5	5	4.5	8	4
FK 15	15	32	15	17	36	40	63	50	52	10	6	5.5	9.5	6
FK 20	20	52	22	30	50	57	85	70	68	8	10	6.6	11	10
FK 25	25	57	27	30	60	63	98	80	79	13	10	9	15	13
FK 30	30	62	30	32	61	75	117	95	93	11	12	11	17.5	15



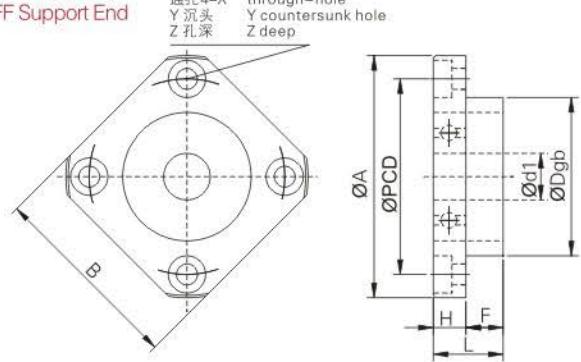
EF 支撑端
EF Support End



型号 Model	d1	L	B	H	b ₊ 0.02	h ₊ 0.02	B1	H1	P	X	Y	Z
EF 10	8	20	70	43	35	25	36	24	52	9	—	—
EF 12	10	20	70	43	35	25	36	24	52	9	—	—
EF 15	15	20	80	49	40	30	41	25	60	9	—	—
EF 20	20	26	95	58	47.5	30	56	25	75	11	—	—



FF 支撑端
FF Support End



型号 Model	d1	L	H	F	Dg6	A	PCD	B	X	Y	Z
FF 10	8	12	7	5	28	43	35	35	3.4	6.5	4
FF 12	10	15	7	8	34	52	42	42	4.5	8	4
FF 15	15	17	9	8	40	63	50	52	5.5	9.5	5.5
FF 20	20	20	11	9	57	85	70	68	6.6	11	6.5
FF 25	25	24	14	10	63	98	80	79	9	14	8.5
FF 30	30	27	18	9	75	117	95	93	11	17.5	11