

**KSS** Master Catalogue of KSS Products  
**综合产品目录** vol.11.3  
**Ball Screws & Actuators**

**KSS** 综合产品目录 Master Catalogue of KSS Products

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## 前言 Introduction

承蒙客户长期以来对KSS产品的惠顾,在此深表谢意。  
近几年来,随着机电一体化设备的飞速发展,  
对各种机械装置也同样提出了高精度化、小型化的要求。  
本公司自1960年成立以来,  
以在螺纹量规(标准)生产中培育起来的超精密仪器领域制造技术为基础,  
将生产范围扩大到了精密进给丝杠、微型精密滚珠丝杠的生产。  
随后,又率先把握时代需求,进一步将生产领域扩大到了微型标准滚珠丝杠的生产。  
这正是本公司对超精密技术不懈追求的精神与社会需求不谋而合,孜孜以求的结果。

Thank you for your interest in KSS products.  
With the recent rapid development of mechatronics products, there is an ever-increasing demand for greater precision and reduced size for a wide range of mechanisms.  
Since its founding in 1960, KSS has widened its manufacturing scope from a base of manufacturing technology in the ultra-precision field. Beginning with thread gauges, our product line has grown to include Precision Lead Screws, Precision Miniature Ball Screws, as well as Standard Miniature Ball Screws, that have anticipated later demand.  
We are confident that such developments have resulted from our diligence in the field of ultra precision technology, which has fulfilled the needs of society.

本次,我们全新编写了KSS综合产品目录。  
除了对以往标准库存品进行升级换代以外,  
还增加了一些新的产品型号,除了进给丝杠、树脂导程丝杠以外,滚珠丝杠的支架、模组、Z-Q复合执行器等成套产品等,  
大幅提高了客户的使用便利性。

希望您能够从这些丰富多彩的产品中找到最适合您使用的产品,  
也希望这些产品能够帮助您实现满足时代需求的高精密定位、驱动技术的小型化和降低成本,  
并为您各种产品的设计和开发助一臂之力!

今后,为了满足客户更高的需求,  
本公司将一如既往,不断积累各种技术、充分利用各种经验专长,  
为开发新技术和新产品而奋勇向前。  
欢迎广大客户惠顾!

With the release of this new Catalog, both standardized & customized new models have been added.  
In addition, Lead Screws, Resin Lead Screws have been combined as well as Unit-products.  
This catalogue is focused on the usability by including index table over the whole series.

We trust that you will be able to find all of the products you require among the comprehensive range of KSS products in this catalog, and we are sure that these products will play a vital role in meeting today's needs in precision positioning, further miniaturization in drive technology, cost reductions, and assisting in the design and development of a wide variety of products.

We will continue to apply our expertise and technology to the development of new technology and new products, as we work to satisfy our customers' most advanced needs.  
We hope you find our new catalog, featuring the latest products from KSS, be helpful.



公司标志的三条边表示:

### 制造部门

专业技术 (Know How)  
卓越品质 (Super Quality)  
安全运作 (Safety Motion)

### 营业部门

热情 (Kindness)  
速度 (Speed)  
服务 (Service)

KSS这三个字母凸出三角形之外,  
寓意打破陈规、锐意创新。  
企业标准色为**绿色**,  
体现了年轻、活泼、朝气蓬勃的企业的风貌。

What dose the KSS logo signify?

### Manufacturing Division:

Know-How  
Superior Quality  
Safety Motion

### Sales Division:

Kindness  
Speed  
Service

The letters KSS extend out from the triangular logo, symbolizing our constant technological breakthroughs.  
The **green** corporate color signifies a business that is youthful, bright, and active.



# KSS产品简介

## Outline of KSS Products

### ■滚珠丝杠 / Ball Screws



标准库存品  
精密滚珠丝杠 / 冷轧滚珠丝杠(A101~)  
Standard products  
Precision Ball Screws / Rolled Ball Screws (A101~)

齐备有标准滚珠丝杠(精密滚珠丝杠/冷轧滚珠丝杠),只需对轴端进行加工,即可按所需形状在短期内供货。轴端形状也根据安装方式不同而实现了标准化。

These series are KSS standard Ball Screws, Precision & Rolled type. These types of products can be delivered shortly with end-journal machining. End-journal profile is also standardized.



接单生产  
精密滚珠丝杠 / 冷轧滚珠丝杠(A501~)  
Customized products  
Precision Ball Screws / Rolled Ball Screws (A501~)

为了满足客户的各种设计需求,除标准品以外,本公司还承接接单生产。为节省客户的设计时间,我们对各种螺母类型进行了标准化。

In order to meet the needs of customer's requested design, we offer customized products. To reduce design process at customer, each Nut type is standardized.

### ■油脂 / Grease



微型滚珠丝杠专用油脂 (B101~)  
Original Grease for Miniature Ball Screws (B101~)

无损微型滚珠丝杠的动作性、润滑性能卓越的原装油脂。还备有无尘室专用油脂。

This grease has high lubrication performance without deteriorating Ball Screw function. The original Grease for Clean room usage is also available.

### ■精密进给丝杠 / Precision Lead Screws



精密进给丝杠(C301~)  
Precision Lead Screws (C301~)

可选择进给丝杠特有的小间距产品。螺纹面采用精密加工技术,是一款表面粗糙度低、导程误差小,低扭矩和低磨损的三角丝杠。

Ultra Fine Pitch is available, which only Lead Screws achieve. With precise grinding technology on flank surface, fine surface roughness and low wobble become reality. This is the triangular Screw with low torque and less wear.

### ■树脂螺母滑动丝杠 / Lead Screws with Plastic Nuts



树脂导程丝杠(D101~)  
Resin Lead Screws(D101~)

该系列采用不锈钢轴与树脂螺母的组合,实现了卓越的耐腐蚀性。是最适于轻负载搬运的经济型产品。

This series have good corrosion resistance by a combination of Stainless Shaft and Plastic Nut. It is reasonable price and suitable for transport with light Load.

### ■滚珠丝杠花键 / Ball Screw with Ball Spline



微型滚珠丝杠花键(F101~)  
Miniature Ball Screw with Ball Spline(F101~)

仅使用单件产品,即可实现直线运动(Z)、旋转(θ)、吸附的复合产品。通过微型滚珠丝杠和微型滚珠花键的重叠,最大限度地实现了小型化。

This is a combined product which is possible for linear and rotary motion as well as suction at the same time with one unit. Achieved developing very compact product as "Overlap type" using Miniature Ball Screws and Miniature Ball Splines .

### ■执行器 / Actuator



滚珠丝杠线性执行器(P101~)  
Ball Screw Linear Actuators(P101~)

步进电机与滚珠丝杠一体的紧凑型电动线性执行器。推出了External、Captive、Non-Captive三种类型的产品。

This is a Ball Screw type compact electric Linear Actuator which combined with Stepping Motor. 3 types of Linear Actuators, External, Captive and Non-Captive type are available for customer usage.



单轴执行器(Q101~)  
Single axis Actuators(Q101~)

KSS单轴执行器是安装有微型滚珠丝杠、导轨的滑台式紧凑型执行器。具有充实的外装光电传感器及刹车单元等可选功能。

Single axis Actuator is the stage-type compact Actuator which is made of small sized Ball Screw and Linear Guide. Variety of options are available such as External photo-sensor or Brake unit.



V-Z-θ 执行器(R101~)  
V-Z-θ Actuators(R101~)

配备微型滚珠丝杠花键(BSSP),仅使用单件产品,即可实现直线运动(Z)、旋转(θ)、吸附(Vacuum)3项功能的成套产品。

V-Z-θ执行器有直接驱动型、混合驱动型、传送带驱动型3种类型。

This is our state of the art product which applied the KSS miniature Ball Screw with Ball Spline(BSSP), and realized three functions, linear (Z), rotary (θ) and vacuum (V) with one product.

KSS provides 3-types of multi-functional VZθ Actuator, which are Direct Drive type, Hybrid Drive type and Belt Drive type.

### ■外围设备 / Attachments related KSS products



滚珠丝杠支撑单元 (E101~)  
Ball Screw Support Units (E101~)

KSS推出了最适合微型滚珠丝杠轴端的支撑单元系列产品。请务必与滚珠丝杠配合使用。

KSS Support Units are suitable for Miniature Ball Screw end journal. Several types of Support Units are available with Ball Screws.

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# 滚珠丝杠 轴径与导程速查表

## Table of Shaft dia. and Lead combination

【表中各符号的含义 / Description】

Lead / 导程(mm)		0.5	
Shaft dia. / 轴径	1.8	A505 FBS	
	3	A205 SG	A505 FBS

Standard Products in stock / 标准库存品  
 Customized Products / 接单生产  
 Model No. / 型号  
 page / 刊载页码

按螺母形状分类的精密滚珠丝杠及冷轧滚珠丝杠的型号一览表 / Nut style list for Precision Ball Screws & Rolled Ball Screws.

Nut style/螺母形状	Precision Ball Screws 精密滚珠丝杠				Precision Rolled Ball Screws 精密冷轧滚珠丝杠		Rolled Ball Screws 冷轧滚珠丝杠			
	Standard Products 标准库存品		Customized Products 接单生产		Standard Products 标准库存品		Standard Products 标准库存品		Customized Products 接单生产	
Single Nut with Flange/带法兰单螺母	SG		FKB FBS FDB FEB		PSR PSRT		SR SSR SRT SSRT		MRB	
Sleeve type Single Nut/套筒型单螺母	—		BS		—		—		BSR	
Single Nut with M-thread/带公制螺纹单螺母	—		MS		—		—		MSR	
Square type Single Nut/方型单螺母	—		KS		—		—		—	
Bi-directional Nut with Flange/双向螺母	SD		FBS* FKB*		—		—		—	

※标准库存品的详情请参照第A201页。 注)\*表示双向螺母。

※Please refer to page A201 regarding the detail of Standard Products Note)\* means Bi-directional Nut with Flange.

### 轴径-导程速查表(按型号分类) / Table of Shaft dia. and Lead combination(Model distinction)

Shaft dia. / 轴径	Lead / 导程(mm)								Lead / 导程(mm)											
	0.5	1	1.5	2	2.5	3	4	5	6	8	10	12	15	20	30					
1.8	A505 FBS																			
3	A207 SG	A505 FBS	A208 SG	A505 FBS A529 BS																
4	A505 FBS	A209 SG A239 SD A247 SR A248 SR(K) A289 SRT A290 SRT(K) A323 PSR A324 PSRT A325 PSR(K) A326 PSRT(K)	A505 FKB A505 FBS A529 BS A539 MS A545 FKB* A551 MRB A551 MRB(K) A559 BSR A563 MSR	A210 SG A249 SR A291 SRT	A505 FBS A529 BS A551 MRB A559 BSR		A505 FEB			A505 FEB										
5	A507 FBS	A507 FKB A507 FBS A529 BS A545 FKB*				A211 SG A250 SR A292 SRT	A507 FBS A529 BS A551 MRB A559 BSR													
6	A509 FBS	A212 SG A240 SD A251 SR A252 SR(K) A281 SSR A293 SRT A294 SRT(K) A315 SSRT A327 PSR A328 PSRT A329 PSR(K) A330 PSRT(K)	A509 FKB A509 FBS A529 BS A543 KS A545 FKB* A551 MRB A551 MRB(K) A559 BSR	A509 FBS A529 BS	A213 SG A253 SR A295 SRT	A509 FBS A529 BS A543 KS A551 MRB A559 BSR	A214 SG A529 BS		A215 SG A254 SR A296 SRT	A509 FEB A551 MRB	A216 SG A255 SR A297 SRT	A509 FEB A551 MRB	A509 FEB							
8	A511 FBS	A217 SG A241 SD A256 SR A257 SR(K) A282 SSR A298 SRT A299 SRT(K) A316 SSRT A331 PSR A332 PSRT A333 PSR(K) A334 PSRT(K)	A511 FKB A511 FBS A531 BS A543 KS A545 FKB* A553 MRB A553 MRB(K) A559 BSR	A511 FKB A511 FBS A531 BS A539 MS A545 FKB*	A218 SG A242 SD A258 SR A283 SSR A300 SRT A301 SRT(K) A317 SSRT A335 PSR A336 PSRT A337 PSR(K) A338 PSRT(K)	A511 FKB A511 FBS A531 BS A539 MS A543 KS A545 FKB* A553 MRB A553 MRB(K) A559 BSR A563 MSR	A219 SG A260 SR A302 SRT	A513 FDB A513 FBS A531 BS A539 MS A513 FBS A531 BS A539 MS	A220 SG	A513 FBS A531 BS A539 MS	A221 SG A261 SR A303 SRT	A513 FBS A531 BS A539 MS A553 MRB A559 BSR A563 MSR	A222 SG A262 SR A304 SRT	A513 FEB A553 MRB	A263 SR A513 FEB A553 MRB	A223 SG A264 SR A305 SRT A339 PSR A340 PSRT	A513 FEB A553 MRB			
10	A224 SG	A515 FKB A515 FBS A533 BS A543 KS A545 FKB*	A515 FKB A515 FBS A533 BS A545 FKB*	A225 SG A243 SD A265 SR A266 SR(K) A284 SSR A306 SRT A307 SRT(K) A318 SSRT A341 PSR(K) A342 PSRT(K)	A515 FKB A515 FBS A533 BS A541 MS A543 KS A545 FKB* A555 MRB A555 MRB(K) A561 BSR A563 MSR	A515 FKB A515 FBS A545 FKB*	A517 FBS A533 BS A545 FBS* A555 MRB A561 BSR A563 MSR	A226 SG A267 SR	A517 FBS A533 BS A545 FBS* A555 MRB A561 BSR		A227 SG A268 SR A308 SRT	A517 FDB A517 FBS A533 BS A545 FBS* A555 MRB A561 BSR	A555 MRB A561 BSR	A228 SG A269 SR A309 SRT	A517 FEB A555 MRB	A555 MRB	A229 SG A270 SR A310 SRT	A517 FEB A555 MRB	A271 SR A517 FEB A555 MRB	A517 FEB A555 MRB
12	A519 FKB A519 FBS A535 BS A547 FKB*	A519 FKB A519 FBS A535 BS A547 FKB*	A230 SG A244 SD A272 SR A273 SR(K) A312 SRT A313 SRT(K) A343 PSR(K) A344 PSRT(K)	A519 FKB A519 FBS A535 BS A541 MS A547 FKB* A555 MRB A555 MRB(K) A561 BSR A563 MSR	A519 FKB A519 FBS A535 BS A547 FKB*	A519 FKB A519 FBS A535 BS A547 FKB*	A519 FBS A535 BS A541 MS A547 FBS*		A519 FBS A535 BS		A231 SG A274 SR A314 SRT	A521 FEB A521 FBS A555 MRB								
13													A521 FEB A557 MRB		A521 FEB A557 MRB				A521 FEB A557 MRB	
14	A523 FBS A535 BS A547 FBS*	A523 FBS A535 BS A547 FBS*	A232 SG A275 SR	A523 FKB A523 FBS A535 BS A541 MS A547 FKB* A557 MRB A561 BSR A563 MSR	A523 FKB A523 FBS A535 BS A547 FKB*	A523 FKB A523 FBS A535 BS A547 FKB*	A233 SG A276 SR	A523 FKB A523 FBS A535 BS A541 MS A547 FKB* A547 MRB A561 BSR A563 MSR		A523 FBS A535 BS A547 FBS*										
15							A525 FBS	A234 SG A277 SR	A525 FEB A525 FBS A557 MRB		A235 SG A278 SR	A525 FEB A525 FBS A557 MRB			A236 SG A279 SR	A525 FEB A525 FBS A557 MRB			A525 FEB A525 FBS A557 MRB	A525 FEB
16		A527 FBS A537 BS A549 FBS*		A527 FKB A527 FBS A537 BS A549 FKB*		A527 FKB A527 FBS A537 BS A549 FKB*	A527 FKB A527 FBS A537 BS A549 FKB*			A527 FBS A537 BS A549 FBS*										