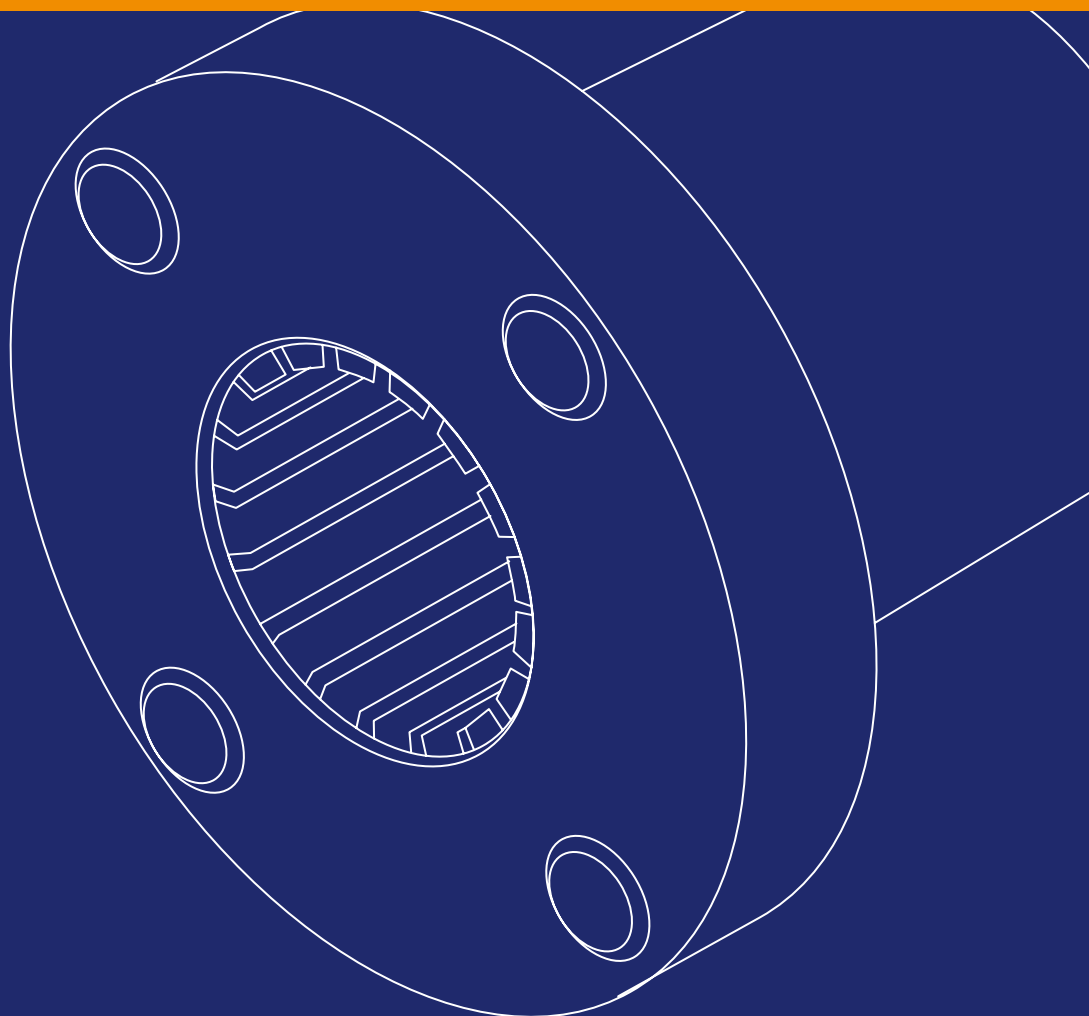




# PLASTIC BEARINGS TECHNOLOGY

## 嘉善萨维塑料轴承技术



# Polymer-tech Solutions™

## 聚合物技术 解决方案



### SAVJS-BLR工程塑料轴承 Plastic Plain Bearings

自润滑免维护、耐腐蚀、长服务寿命、轻量化；可选：极低摩擦系数、高载荷、抗静电、高温250°C、FDA食品安全等级。

Maintenance-free dry operation, Absolute corrosion resistance, Long service time and light; Multiple choices: Lowest friction coefficient, High load, Anti-static, High temperature 250°C, FDA food safety grade.



### SAVJS-BIN塑料直线轴承 Plastic Linear Bearings

干运行无需供油、抗粉尘、无噪音、耐腐蚀、长服务寿命、轻量化；可选：高温250°C、多种安装方式。

Dry operation without oil, Anti-dust, No noise, Corrosion resistance, Longer service time and light; Multiple Assemble types, Highest operation temperature 250°C.



### SAVJS-LMR直线驱动系统 Linear Motion Systems

自润滑免维护直线驱动系统，直线滑动原件及丝杆螺母均采用高耐磨BLR13材料制成，实现长期干摩擦，低噪音，长服务寿命，适合在粉尘或污水下运行。

Self-lubricating and maintenance-free linear motion system, Linear slider and screw nuts are made of high wear-resistant material BLR13, Dry operation for longer time, lower noise, longer service time and suitable for operation in dust or dirty water.



### SAVJS-BAR塑料关节轴承 Plastic Spherical Bearings

自润滑免维护、耐腐蚀、抗污垢、轻量化；可选：多种结构设计满足不同安装需求。

Self-lubricating and maintenance-free, Corrosion-resistant, Anti-fouling, lightweight; Multiple structural design to meet different installation requirements.



### SAVJS-PCR塑料电缆拖链 Plastic cable chains

采用高强度耐磨工程塑料制成，可实现多种运动方式与行程，模块化设计易于组装和维护，适用于各类环境下低噪音长寿命运行。

The cable chains are made of high strength and anti-wear plastics, The cable chains are used in a variety of motion modes and strokes, modular design is easy to assemble and maintain, and it is suitable for low noise long life in various environments.



### SAVJS-FWR纤维缠绕轴承 Filament-wound Bearings

连续长纤维复合材料、干摩擦性能更优越、极高的承载能力、最高静载荷240MPa，特别适合用于高载低速下的摆动。

Long fiber composite material, The best performance for dry operation, High load capacity and max. static load 240MPa, Especially suitable for swing with high load and low speed.



### SAVJS-PRR塑料滚动轴承 Plastic Ball Bearings

自润滑免维护、耐腐蚀、轻量化；可选：内外圈、保持架、滚珠多种材料可选。

Maintenance-free, corrosion-resistant, lightweight; Multiple choices: inner and outer ring, cage and ball can be designed different materials freely.



### SAVJS-SFR耐磨半成品 Semi-finished Products

采用SAVJS-BLR高耐磨材料制成，可实现非标轴承的快速加工、小批量制作降低成本；可选：棒材、板材、片材。

The semi-finished products are made of anti-wear and high performance materials SAVJS-BLR, It can be machined non-standard bearings in short time, saving cost for small quantity; Multiple choices: Bar, sheet and tribo-tape.

### SAVJS-BLR工程塑料轴承 Plastic Plain Bearings



### SAVJS-BIN塑料直线轴承 Plastic Linear Bearings



### SAVJS-PRR塑料滚动轴承 Plastic Ball Bearings



### SAVJS-BAR塑料关节轴承 Plastic Spherical Bearings



### SAVJS-LMR直线驱动系统 Linear Motion Systems



### SAVJS-SRR回转支撑轴承 Slewing Ring Bearings



### SAVJS-RPR回转支撑轴承 Slewing Ring Bearings



### SAVJS-ALR高速滑动轴承 High Speed Sliding Bearings



### RER转角轴承 Knife Edge Rollers



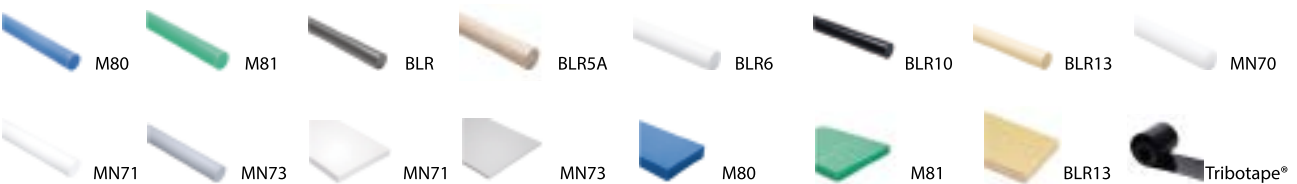
### SAVJS-PER扶梯回转链 Escalator Rotary Chains



### 工程塑料电缆拖链 Plastic Cable Chains



### SAVJS-SFR耐磨半成品 Semi-finished Products



### SAVJS-FWR纤维缠绕轴承 Filament-wound Bearings



### 金属自润滑轴承 Metal Sliding Bearings




# SAVJS-BLR Plastic Plain Bearings

## SAVJS-BLR 工程塑料轴承

### 基本功能

### Basic function

<p>通用型 General</p>	 <p>SAVJS-BLR 通用性更强 The most common material</p>	 <p>SAVJS-BLR1 特别适用于用于卡车尾箱铰链 Especially suitable for truck hinges</p>	 <p>SAVJS-BLR3 增强型 高承载 Enhanced type</p>
<p>高载型 High load</p>	 <p>SAVJS-BLR12 特别适合高载下摇摆运动 Especially suitable for oscillation</p>	 <p>SAVJS-BLR22 极高载荷耐磨材料 Good wear resistance under extremely high load</p>	 <p>SAVJS-BLR5 耐高温 抗化学性极佳 High temperature Excellent chemical resistance</p>
<p>耐高温 High temperature</p>	 <p>SAVJS-BLR4 耐温200°C Work consecutively at 200°C</p>	 <p>SAVJS-BLR24 耐温200°C 适用于燃油系统 Temperature up to 200°C For use in fuel oil</p>	 <p>SAVJS-BLR5 耐温250°C 高化学抗性 Work consecutively at 250°C, Good chemical resistance</p>
<p>低摩擦系数 Low friction coefficient</p>	 <p>SAVJS-BLR13 快慢速下保持较低的摩擦系数 Maintain low friction coefficient either at high or low speed</p>	 <p>SAVJS-BLR7 适合高速运动 高耐磨性 Suitable for high speed High wear resistance</p>	 <p>SAVJS-BLR11 不含PTFE和硅，轻载 耐磨性极好，高抗冲击性，适合软轴 Not PTFE and Silicon. Good wear resistance for low load. Suitable for soft shaft</p>
<p>耐腐蚀 Anti-corrosion</p>	 <p>SAVJS-BLR4 耐温200°C Work consecutively at 200°C</p>	 <p>SAVJS-BLR5 耐温250°C 耐腐蚀更强 Work consecutively at 250°C Highest corrosion resistance</p>	 <p>SAVJS-BLR8 耐温200°C 水下运行专用 Work consecutively at 200°C, Specialized underwater operation</p>
<p>潮湿环境 Humid environment</p>	 <p>SAVJS-BLR2 适合潮湿环境 Good for Humidity condition</p>	 <p>SAVJS-BLR4 高强度，耐化学腐蚀 High strength Good chemical resistance</p>	 <p>SAVJS-BLR8 适合水下运行 Underwater operation</p>
<p>食品安全等级FDA grade</p>	 <p>SAVJS-BLR5A 耐温250°C FDA食品等级认可 High temperature 250°C FDA grade</p>	 <p>SAVJS-BLR6 适合软轴 允许接触食品 Soft shaft available Food-classic</p>	 <p>SAVJS-BLR6A 用于食品或烟草行业， 适合低速运动 For the food and tobacco industry, Low speed</p>
<p>经济型 Economic</p>	 <p>SAVJS-BLRH 经济通用 General Type</p>	 <p>SAVJS-BLR2D 低摩擦系数，更经济 Low Friction coefficient Low cost</p>	 <p>SAVJS-BLR3G 高强度 High strength</p>

 <p>SAVJS-BLR7 高耐磨性, 电梯行业应用, 适合软轴 High wear resistance, Used in lift industry, Suitable for soft shaft</p>	 <p>SAVJS-BLR13 适合快慢速、适合软轴 Suitable for high and low speed with soft shaft</p>	 <p>SAVJS-BLR15 高耐磨 长寿命 High wear resistance Long service life</p>	 <p>SAVJS-BLR18 低吸水性, 高耐磨 Low water absorption, Good wear resistance</p>
 <p>SAVJS-BLR5Z 特别适合摇摆运动 Especially suitable for oscillation</p>	 <p>SAVJS-BLR10 耐高温, 高强度 抗化学性极好 High temperature Excellent chemical resistance</p>		
 <p>SAVJS-BLR10 耐温250°C, Work consecutively at 250°C High strength</p>	 <p>SAVJS-BLR21 高温耐磨材料 Good wear resistance for high temperature</p>	 <p>SAVJS-BLR26 适合高温和软轴应用 For soft shafts and high temperatures</p>	 <p>SAVJS-BLR8 耐温200°C 水下运行专用 Work consecutively at 200°C, Specialized underwater operation</p>
 <p>SAVJS-BLR18 低吸水性, 高耐磨 Low water absorption, Good wear resistance</p>	 <p>SAVJS-BLR15 高耐磨 长寿命 High wear resistance Long service life</p>	 <p>SAVJS-BLR5Z 特别适合摇摆运动 Especially suitable for oscillation</p>	 <p>SAVJS-BLR 通用性更强 The most common material</p>
 <p>SAVJS-BLR10 耐温250°C 高抗压强度 Work consecutively at 250°C, High compressive strength</p>	 <p>SAVJS-BLR26 适合高温和软轴应用 For soft shafts and high temperatures</p>	 <p>SAVJS-BLR5Z 特别适合摇摆运动 Especially suitable for oscillation</p>	
 <p>SAVJS-BLR16 适合高载荷 Suitable for high load</p>	 <p>SAVJS-BLR20 水下的自润滑材料 A self-lubricating material for applications in water</p>	 <p>SAVJS-BLR21 高温耐磨材料 Good wear resistance for high temperature</p>	 <p>SAVJS-BLR1 特别适合用于卡车尾箱铰链 Especially suitable for truck hinges</p>
 <p>SAVJS-BLR11 不含PTFE和硅, 轻载耐磨性极好, 高冲击性, 适合软轴 Not PTFE and Silicon. Good wear resistance for low load. Suitable for soft shaft</p>	 <p>SAVJS-BLR23 高温180°C食品行业应用 For use with temperatures up to 180°C</p>		
 <p>SAVJS-BLR3M 边缘载荷, 耐冲压, 适合低速运动 Marginal Load, Impact resistance, Low speed</p>			

# SAVJS-BLR Material Properties Data Table

## SAVJS-BLR 材料数据表

材料性能 Material properties	测试标准 Standard	单位 Unit	BLR	BLR1	BLR2	BLR2D	BLR3	BLR3G
一般性能 General properties								
颜色 Color	-	-	深灰 Dark grey	棕色 Brown	橄榄绿 Olive	绿色 Green	深灰 Dark grey	黑色 Black
密度 Density	ISO1183	g/cm <sup>3</sup>	1.46	1.53	1.39	1.40	1.46	1.37
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	0.3	0.2	0.2	0.3	0.7	1.3
最大吸水率 Max. water absorption	ISO62	%	1.2	0.5	0.4	1.2	4.0	5.5
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.05-0.15	0.08-0.20	0.07-0.20	0.05-0.25	0.08-0.18	0.05-0.15
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ·m/s	0.40	0.50	0.45	0.25	0.45	0.30
机械性能 Mechanical properties								
弯曲模量 Flexural modulus	ISO178	MPa	2300	2600	2400	2000	8500	7700
弯曲强度 Flexural strength	ISO178	MPa	60	65	60	65	210	190
最大静载荷 Max. static load	ITS027	MPa	35	55	50	30	80	75
最大动载荷 Max. dynamic load	ITS028	MPa	15	21	19	13	43	36
邵氏硬度 Shore hardness	ISO868	D	75	72	72	75	81	78
物理和热性能 Physical and thermal properties								
连续运行温度 Long-term application temperature	ITS029	°C	+80	+110	+100	+80	+130	+100
短时运行温度 Short-term application temperature	ITS029	°C	+120	+160	+150	+120	+220	+160
最低运行温度 Lowest application temperature	ITS029	°C	-40	-40	-40	-40	-40	-40
导热性 Thermal conductivity	ISO22007	W/m/K	0.20	0.26	0.25	0.25	0.24	0.24
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	10	8	10	11	9	11
阻燃等级 Flammability	UL94	Class	HB	HB	HB	HB	HB	HB
导电性能 Electrical properties								
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>13</sup>	>10 <sup>11</sup>	>10 <sup>12</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>12</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>12</sup>	>10 <sup>10</sup>	>10 <sup>11</sup>	>10 <sup>12</sup>	>10 <sup>11</sup>	>10 <sup>11</sup>

\*ITS: SAVJS 内部测试标准 SAVJS company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.



	BLR3M	BLR4	BLR5	BLR5A	BLR5Z	BLR6	BLR6A	BLR7	BLR8	BLR9	BLR10	BLR11
	深灰 Dark grey	黑色 Black	黑色 Black	米色 Beige	棕色 Brown	白色 White	白色 White	米黄 Cream	深灰 Dark grey	黑色 Black	黑色 Black	白色 White
	1.14	1.70	1.44	1.28	1.40	1.45	1.10	1.25	1.55	1.28	1.42	0.96
	1.4	0.1	0.1	0.3	0.3	0.3	1.5	1.3	0.1	1.3	0.1	0.1
	7.6	0.3	0.5	0.5	1.1	1.2	7.6	6.5	0.1	6.5	0.5	0.1
	0.09-0.30	0.07-0.20	0.09-0.25	0.25-0.40	0.05-0.15	0.05-0.18	0.10-0.40	0.09-0.20	0.07-0.18	0.10-0.40	0.10-0.25	0.05-0.15
	0.15	1.35	1.40	0.25	1.00	0.30	0.10	0.50	0.80	0.35	1.35	0.20
	2700	12000	4800	3600	4200	2300	1300	3200	8000	10000	10000	1200
	100	165	165	140	150	60	55	75	150	250	210	25
	30	90	110	90	100	35	35	60	85	105	125	25
	15	50	61	46	51	14	12	25	47	58	80	6
	79	82	82	80	80	74	70	75	82	82	86	62
	+80	+200	+250	+250	+250	+80	+80	+90	+200	+140	+250	+70
	+170	+240	+315	+300	+310	+120	+170	+180	+240	+180	+315	+100
	-40	-40	-100	-100	-100	-40	-40	-40	-40	-40	-100	-100
	0.24	0.60	0.55	0.24	0.55	0.20	0.23	0.24	0.50	0.60	0.60	0.20
	10	4	6	9	5	10	11	9	5	11	5	19
	HB	V0	V0	V0	V0	HB	HB	HB	V0	HB	V0	HB
	>10 <sup>12</sup>	>10 <sup>5</sup>	>10 <sup>8</sup>	>10 <sup>14</sup>	>10 <sup>11</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>5</sup>	>10 <sup>3</sup>	>10 <sup>5</sup>	>10 <sup>13</sup>
	>10 <sup>11</sup>	>10 <sup>5</sup>	>10 <sup>7</sup>	>10 <sup>13</sup>	>10 <sup>11</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>5</sup>	>10 <sup>3</sup>	>10 <sup>5</sup>	>10 <sup>12</sup>

# SAVJS-BLR Material Properties Data Table

## SAVJS-BLR 材料数据表

材料性能 Material properties	测试标准 Standard	单位 Unit	BLR12	BLR13	BLR15	BLR16	BLR18	BLR19
一般性能 General properties								
颜色 Color	-	-	黑色 Black	黄色 Yellow	黄色 Yellow	黑色 Black	黄色 Yellow	深灰 Dark grey
密度 Density	ISO1183	g/cm <sup>3</sup>	1.32	1.48	1.30	1.60	1.40	1.27
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	0.9	0.3	1.3	0.2	0.3	1.3
最大吸水率 Max. water absorption	ISO62	%	4.9	1.3	6.5	0.4	0.5	4.5
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.05-0.20	0.05-0.15	0.05-0.15	0.06-0.20	0.05-0.18	0.05-0.20
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ·m/s	0.55	0.40	0.90	0.40	0.40	0.60
机械性能 Mechanical properties								
弯曲模量 Flexural modulus	ISO178	MPa	2200	2600	4000	4900	2700	2800
弯曲强度 Flexural strength	ISO178	MPa	100	60	130	140	65	80
最大静载荷 Max. static load	ITS027	MPa	75	35	70	75	50	60
最大动载荷 Max. dynamic load	ITS028	MPa	43	14	35	38	21	22
邵氏硬度 Shore hardness	ISO868	D	83	74	79	80	75	72
物理和热性能 Physical and thermal properties								
连续运行温度 Long-term application temperature	ITS029	°C	+135	+90	+90	+130	+100	+150
短时运行温度 Short-term application temperature	ITS029	°C	+155	+120	+180	+200	+160	+200
最低运行温度 Lowest application temperature	ITS029	°C	-40	-50	-40	-40	-40	-40
导热性 Thermal conductivity	ISO22007	W/m/K	0.24	0.25	0.24	0.25	0.25	0.25
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	5	10	8	4	8	10
阻燃等级 Flammability	UL94	Class	HB	HB	HB	HB	HB	HB
导电性能 Electrical properties								
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>11</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>12</sup>	>10 <sup>13</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>11</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>11</sup>	>10 <sup>11</sup>

\*11S: SAVJS 内部测试标准 SAVJS company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.



	BLR20	BLR21	BLR22	BLR23	BLR24	BLR25	BLR26	BLRH	MN2	MN3	MN9	MN4
	黑色 Black	米色 Beige	浅棕色 Light brown	蓝色 Blue	棕色 Brown	黄色 Yellow	米色 Beige	黑色 Black	深灰 Dark grey	浅黄色 Light yellow	黑色 Black	灰色 Grey
	1.53	1.53	1.49	1.42	1.72	1.44	1.51	1.43	1.65	1.42	1.45	1.48
	0.2	0.1	1.1	0.6	0.1	0.3	0.1	0.3	0.2	0.3	0.2	0.3
	0.8	0.3	4.6	1.9	0.2	1.6	0.2	1.2	0.7	1.3	0.4	1.3
	0.15-0.35	0.05-0.20	0.15-0.35	0.10-0.20	0.08-0.25	0.08-0.20	0.15-0.20	0.05-0.20	0.10-0.18	0.05-0.20	0.15-0.25	0.05-0.20
	0.15	0.80	0.70	0.40	0.60	0.45	0.50	0.30	0.30	0.50	0.40	0.30
	7200	2800	9000	2000	10000	4500	4500	2000	2400	2700	2000	2350
	120	55	240	110	210	100	95	60	53	70	70	60
	70	80	95	60	110	60	55	30	30	45	65	35
	35	37	49	26	58	30	22	12	12	24	29	19
	79	77	80	76	81	79	74	74	73	73	76	74
	+90	+200	+150	+180	+200	+180	+200	+80	+90	+90	+120	+90
	+110	+240	+220	+210	+240	+220	+240	+120	+120	+120	+165	+120
	-50	-40	-40	-100	-40	-100	-40	-40	-50	-50	-40	-50
	0.60	0.24	0.24	0.24	0.24	0.24	0.24	0.20	0.24	0.25	0.60	0.25
	6	6	8	8	5	7	3	10	8	13	5	10
	HB	V0	HB	V0	V0	V0	V0	HB	HB	HB	HB	HB
	>10 <sup>5</sup>	>10 <sup>12</sup>	>10 <sup>13</sup>	>10 <sup>11</sup>	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>12</sup>	>10 <sup>13</sup>	>10 <sup>8</sup>	>10 <sup>12</sup>	<10 <sup>9</sup>	>10 <sup>13</sup>
	>10 <sup>5</sup>	>10 <sup>11</sup>	>10 <sup>11</sup>	>10 <sup>11</sup>	>10 <sup>12</sup>	>10 <sup>10</sup>	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>8</sup>	>10 <sup>12</sup>	<10 <sup>9</sup>	>10 <sup>12</sup>

# SAVJS-BLR Plastic Plain Bearings

## SAVJS-BLR 工程塑料轴承

### BLR 工程塑料轴承 Plastic plain bearings



直筒轴承、法兰轴承、垫片  
Sleeve bearings, Flange bearings, Thrust washers  
内径 Inner diameters:  $\varnothing$ 2mm- $\varnothing$ 150mm

### 产品特性 Product features

- SAVJS-BLR 工程塑料轴承采用高性能的工程塑料为基础原料，通过高分子材料改性复合技术添加高强度纤维和特种固体润滑脂提升复合材料的耐磨性能；高强度纤维网状结构加强了材料的强度，特种固体润滑脂的复合使得 BLR 工程塑料轴承具有极好的自润滑性能和耐磨性能。
- 无论是耐久性要求很高的汽车工业、高速应用、水下应用、高温和抗腐蚀应用或是要求符合 FDA 标准的食品工业 SAVJS 总能为客户提供不同的解决方案。

- SAVJS-BLR Plastic plain bearings use high-performance plastics as the raw material, and filled high-strength fibers and special solid lubricants by the polymer compound technology to improve the anti-wear resistance of composite materials.

- In the automotive industry with high durability requirements, high-speed applications, underwater applications, high temperature and anti-corrosion applications, or the food industry with FDA requirement, SAVJS can always provide different solutions for customers.

### PCR 塑料卡箍轴承 Plastic clip bearings



内径 Inner diameters:  $\varnothing$ 3mm- $\varnothing$ 25mm

### 产品特性 Product features

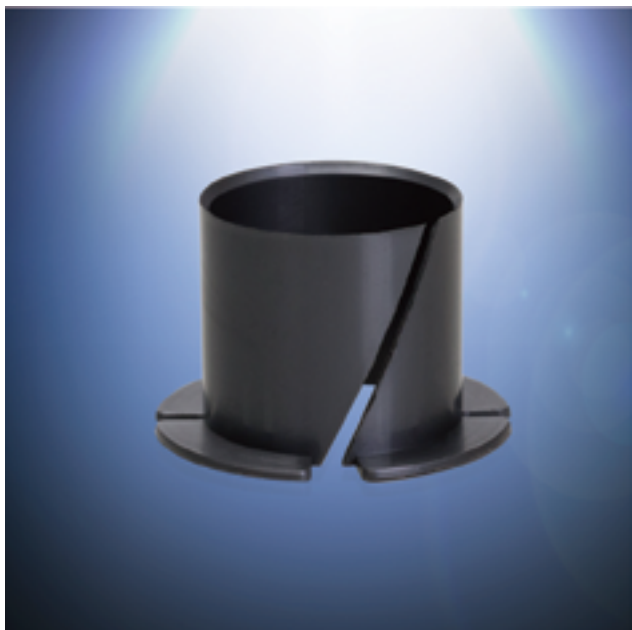
- 专门为金属薄板配合开发的自润滑塑料轴承。安装简易。使用避震和耐磨性能相结合的 SAVJS-BLR3M 材料制成。可提供耐高温和耐腐蚀材料 SAVJS-BLR5 制成的轴承

- 免维护，自润滑
- 侧面开槽设计，易于安装
- 开槽设计可补偿材料膨胀
- 双法兰设计更安全
- 适用于旋转和直线运动
- 对安装孔精度要求较低

- The self-lubricated bearing is developed specially for the metal plate fitting. It is made with the SAVJS-BLR3M material which is good at shock absorption and wear resistance. Alternative material SAVJS-BLR5 is also available for high temperature application and corrosion resistance requirement

- Maintenance free, self-lubricated
- Side groove designation for easy assembly
- Groove design reserves the material expansion allowance
- Safety double flanges designation
- Suitable for rotation and sliding motions
- Lower tolerance requirement for the mounting holes

## PYR 薄壁塑料轴承 Plastic bearings



内径 Inner diameters: Ø4mm-Ø25mm

### 产品特性 Product features

- 快速安装的薄壁塑料轴承。采用尺寸适应性较好的SAVJS-BLR3M 材料制成。同样可提供耐磨性能更为出色的SAVJS-BLR7 材料
  - 免维护，自润滑
  - 侧面开槽设计，易于安装
  - 开槽设计可补偿材料膨胀
  - 适用于旋转、摇摆运动
  - 对安装孔精度要求较低
- Plastic bearing for quick installation. It is made with SAVJS-BLR3M material which is flexible for dimension variation. Alternative material SAVJS-BLR7 is also available for special wear resistance requirement
  - Maintenance free, self-lubricated
  - Side groove designation for easy assembly
  - Groove design reserves the material expansion allowance
  - Suitable for rotation and sliding motions
  - Lower tolerance requirement for the mounting holes

## CPR 无间隙预紧塑料轴承 Clearance-free and preloaded bearings



内径 Inner diameters: Ø6mm-Ø14mm

### 产品特性 Product features

- 无间隙预紧设计
  - 自动调节装配间隙
  - 自润滑免维护
  - 消除振动和噪音
  - BLR13 耐磨材料制成
- Clearance-free and preload design
  - Adjustable fitting gap
  - Maintenance-free
  - Shock absorbing and no noise
  - Material BLR13

# SAVJS-BLR Plastic Plain Bearings

## SAVJS-BLR 工程塑料轴承

### FLR 法兰轴承 Flange bearings



内径 Inner diameters:  $\varnothing$ 10mm- $\varnothing$ 30mm

#### 产品特性 Product features

- 应用于 PCB 塑料卡箍轴承无法被定位的场合。对配合孔的精度要求较低。螺栓固定无滑落风险
  - 免维护，自润滑
  - 螺丝固定安全可靠
  - 适用于旋转、摇摆、直线运动
  - 对安装孔精度无要求
  - BLR3 或 BLR13 耐磨材料制成
- 
- Suitable for the application where the plastic clip bearing is hard to be located. The requirement of the fitting hole is not critical and the set screw could be secured without any risk of moving
  - Maintenance free, self-lubricated
  - Bolt fixture ensures safe and reliability
  - Suitable for rotation, oscillation and sliding motions
  - Low tolerance requirement for the mounting holes
  - Material BLR3 or BLR13

### PER 塑料板簧 Plastic flat springs



内径 Inner diameters:  $\varnothing$ 5mm- $\varnothing$ 20mm

#### 产品特性 Product features

- 工程塑料耐磨调整垫片。应用于轴向配合存在不可控间隙的调整。降低运动过程中的振动和噪音
  - 补偿轴向间隙和加工公差
  - 吸震和降低噪音
  - 免维护，自润滑
  - 耐腐蚀、质量轻
  - BLR13 耐磨材料制成
- 
- Engineering plastic wear resistance washer. Suitable for a fitting to the uncontrollable axial space in order to reduce the vibration and noise during the operation
  - Compensate the axial clearance and machining tolerance
  - Shock absorbing and noise optimization
  - Maintenance free and self-lubricated
  - Corrosion resistance and light weight
  - Material BLR13

## PPK 塑料活塞环 Plastic piston rings



内径 Inner diameters: Ø10mm-Ø70mm

### 产品特性 Product features

- 专门为气缸行业开发的耐磨活塞环。比 PTFE 制成的活塞环安装更简易。可提供 SAVJS 标准材料 BLR13、BLR19 等制成的高耐磨活塞环
  - 耐磨性能极好
  - 装配简易
  - 免维护，自润滑
  - 耐腐蚀、质量轻
- Wear resistance piston ring specially developed for the pneumatic pump industrial application. It is easier to be installed comparing with the PTFE piston ring. Standard materials available are BLR13, BLR19 and so on
  - Good wear resistance
  - Easy assembly
  - Maintenance free and self-lubricated
  - Corrosion resistance and light weight

## LCR 塑料卡箍直线轴承 Plastic clip linear bearings



内径 Inner diameters: Ø6mm-Ø12mm

### 产品特性 Product features

- 高耐磨材料 BLR13 制成
  - 自润滑、免维护
  - 耐腐蚀，可用于液体介质环境
  - 抵抗灰尘和无噪音运行
  - 易安装
  - 压装后内孔 E10
  - 推荐座孔 H7，轴 h6-h9
- Made of high anti-wear material BLR13
  - Maintenance-free, self lubricating
  - Chemical resistant
  - Dust resistant and quit running
  - Installation by force fitting
  - Inner tolerance E10 ensues only after the press fit
  - Recommended housing bore H7, shaft: h6-h9

# SAVJS-BLR Plastic Plain Bearings

## SAVJS-BLR 工程塑料轴承

### ALR 高速滑动轴承 High speed sliding bearings



内径 Inner diameters:  $\varnothing$ 8mm- $\varnothing$ 30mm

#### 产品特性 Product features

- 滑动层标准材料 TEFPLAS<sup>®</sup> B, 可选高耐磨与低启动摩擦料 TEFPLAS<sup>®</sup> G 及符合 FDA 等级 TEFPLAS<sup>®</sup> E 与 TEFPLAS<sup>®</sup> P
  - 外壳材料铝合金, 可选不锈钢
  - 自润滑, 免维护
  - 运行平稳, 无噪音
  - 高速运行, 长寿命
  - 工作温度  $\pm$ 200 $^{\circ}$ C
- Standard material of sliding layer: TEFPLAS<sup>®</sup> B, Available materials: Lower starting friction TEFPLAS<sup>®</sup> G and FDA grade TEFPLAS<sup>®</sup> E & TEFPLAS<sup>®</sup> P
  - Shell made of aluminum, available stainless steel
  - Self-lubricating, maintenance-free
  - Smooth operation, no noise
  - High-speed operation and long life
  - Operation temperature  $\pm$ 200 $^{\circ}$ C

### RER 转角轴承 Knife edge rollers



内径 Inner diameters:  $\varnothing$ 3.1mm- $\varnothing$ 10.1mm

#### 产品特性 Product features

- 自润滑、免维护
  - 低驱动力
  - 抗灰尘、无噪音
  - 抗化学腐蚀, 可用于液体环境
  - 紧凑的偏转半径
  - 延长传输带寿命
  - 高性价比
- Self-lubricating, maintenance-free
  - Low driving force
  - Resistant to dust, no noise
  - Resistant to chemical corrosion, available in liquid environment
  - Compact deflection radius
  - Extend the life of the belt
  - Cost-effective

### 高性能塑料关节轴承 High polymer-tech for plastic spherical bearings



#### 产品特性 Product features

- 自润滑、免维护
- 耐腐蚀，可用于液体介质环境
- 抵抗灰尘和污垢
- 无噪音运行
- 承受边缘载荷
- 易安装、成本低
- 壳体采用高强度材料 M163，球体采用高耐磨材料 BLR15
- Maintenance-free dry operation
- Absolute corrosion resistance, media resistant
- Dirt-resistant and no noise
- Compensation of misalignment errors
- Compensation of edge loads
- Easy installation and low cost
- Housing made of high strength material M163, ball made of anti-wear material BLR15

#### SAVJS-BAR 球体 Spherical balls

标准球体采用高耐磨 BLR15 材料制成，它在干运行时具有较高的承载和极低的摩擦系数，特别适用于高载低速运动场合。SAVJS 还可以采取其它标准耐磨材料制成球体，从而提高关节轴承的特殊使用性能。

In standard spherical ball is made from BLR15 material, which is known for its high strength and low coefficient of friction while running dry. This is especially important for low loads and very slow movements. Further to the standard material BLR15, spherical balls are now available in other materials presenting particular advantages.

#### SAVJS-BAR 基座 Housings

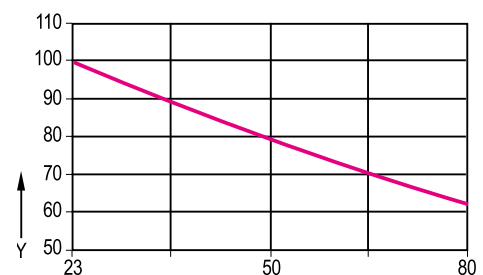
标准基座采用高强度 M163 材料制成，它是纤维增强聚合物材料，具有较好的抗冲击性能，使用温度 -30°C 至 +80°C。SAVJS 还可以采取其它材料制成基座，比如镁铝合金和不锈钢材料等，请联系我们。

Standard housings made from M163, a long-fiber reinforced and extremely shock resistant polymer. Operation temperatures from -30°C to +80°C, It is available other materials for the housing such as aluminum alloy and stainless steel, please ask us for other materials.

#### 载荷和温度 Loads and temperatures

标准基座采用高强度 M163 材料制成，它是纤维增强聚合物材料，具有较好的抗冲击性能，使用温度 -30°C 至 +80°C。SAVJS 还可以采取其它材料制成基座，比如镁铝合金和不锈钢材料等，请联系我们。

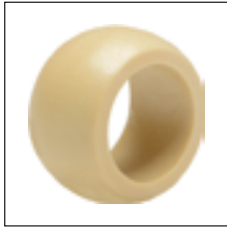
Standard housings made from M163, a long-fiber reinforced and extremely shock resistant polymer. Operation temperatures from -30 °C to +80 °C, It is available other materials for the housing such as aluminum alloy and stainless steel, please ask us for other materials.



X → X = 温度 Temperature [°C]  
Y = 抗拉强度百分比 Percentage tensile strength [%]  
Trends indicate the effect of temperature on the max. load capacity of SAVJS-BAR bearings

# SAVJS-BAR Plastic Spherical Bearings

## SAVJS-BAR 塑料关节轴承



BAR  
[Ø4mm-Ø30mm]



GLR  
[Ø4mm-Ø30mm]



GLRF  
[Ø20mm]



GIR  
[Ø6mm-Ø12mm]



GOR  
[Ø6mm-Ø10mm]



GFR  
[Ø4mm-Ø30mm]



GFR-ALG  
[Ø6mm-Ø30mm]



GSR  
[Ø4mm-Ø30mm]



GSR-ALG  
[Ø6mm-Ø30mm]



GBR  
[Ø16mm-Ø30mm]



GBR-ALG  
[Ø16mm-Ø30mm]



GNR  
[Ø8mm-Ø30mm]



GDR  
[Ø4mm-Ø12mm]



GVRE  
[Ø6mm-Ø12mm]



GVRJ  
[ØM8]



GSR-OP  
[Ø6mm-Ø10mm]



GSR-IP  
[Ø6mm-Ø10mm]



GC  
[Ø6mm-Ø12mm]



GTR  
[Ø5mm-Ø20mm]





## 产品特性 Product features

- 自润滑免维护塑料直线轴承。无噪音运行。适合在极其恶劣的粉尘环境中连续使用。允许被食品药品包装机械清洗液清洗。对轴材料硬度以及安装孔的精度要求较低
- 免维护、长期干运行、无噪音
- 适合灰尘中长期运行
- 耐腐蚀，适合用消毒液清洗
- 直槽设计易将灰尘排出摩擦面
- 安装和替换简易
- 适合轻量化设计
- Maintenance free plastic linear bearing. Low noise operation is suitable for continuously application under the extremely dusty environment. It is washable by the clean detergent of the food machine. There is no critical requirement about the shaft hardness or the mounting holes of the housing
- Maintenance-free, dry operation, low noise
- Suitable for long-time running in dusty environments
- Corrosion resistance; Cleaning with disinfectant lotion
- Straight grooves design removed the dust from the friction surface
- Easy installation and replacement
- Suitable for lightweight design

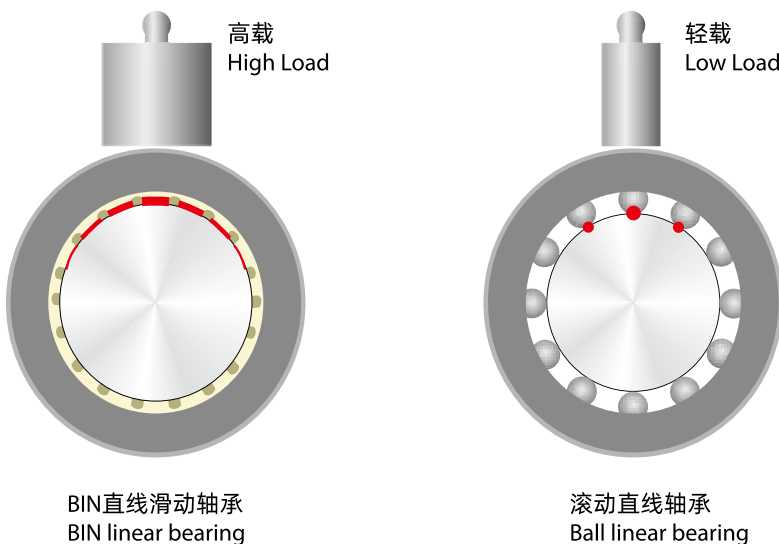
塑料直线轴承  
Plastic Linear Bearings

## SAVJS-BIN 球体 Spherical balls

### SAVJS-BIN linear bearings with high loading capability

SAVJS-BIN 塑料直线轴承作为一种直线滑动轴承，工作面是以面形式与轴表面接触，而传动的滚珠直线轴承是以点线的形式和轴表面接触；这就决定了较大接触面的 BIN 塑料直线轴承具有比滚珠直线轴承更高的承载能力。

As a linear sliding bearings, the contacting of the bearing and the shaft is a surface instead of point contact of the traditional ball bearings. So it results in that the surface contacting SAVJS-BIN plastic linear bearings are with better loading capability than the sliding ball bearings.



# SAVJS-BIN Plastic Linear Bearings

## SAVJS-BIN 塑料直线轴承

### SAVJS-BIN直线轴承在污垢、灰尘中干运行

#### SAVJS-BIN linear bearings used in extremely conditions of sands and dusts



SAVJS-BIN 直线轴承滑动膜是由高耐磨标准材料 BLR13 制成；特殊的直槽结构设计允许轴承在污垢、灰尘或沙粒中平稳运行，直槽能使得脏物很快速的落入到设计的凹槽中，并通过不断的直线运动最终被从凹槽中带出直线轴承系统。而传统的金属滚动直线轴承在有污垢、灰尘或沙粒存在的情况下会很容易出现卡死、跑珠等现象而卡死，甚至会因卡死现象导致轴被拉伤。

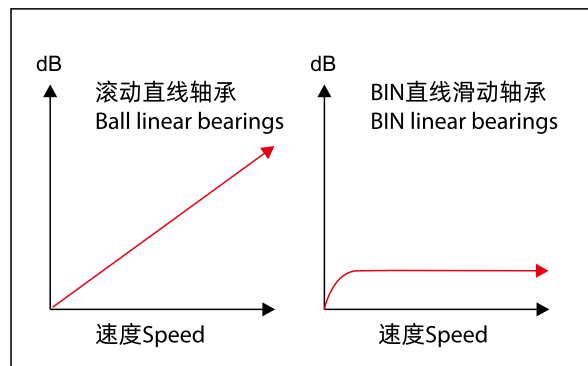
SAVJS-BIN liners is made from high anti-wear material BLR13. The straight grooves design allows the bearing to be used in the extremely conditions such as in sands and dusts. The straight grooves design allows the sands or dusts entering the grooves and be brought out of the bearing system finally ,but the traditional ball bearings will be blocked by the entered sands or dusts, then the ball bearings moving system and the shaft surface will be damaged.

### SAVJS-BIN直线轴承低噪音运行

#### SAVJS-BIN linear bearings operation with low noise

金属滚珠直线轴承由于滚珠在运动过程中与保持架体之间的撞击所发出的噪音，而且这种噪音会随着速度的加快而增高。但 SAVJS-BIN 直线轴承的工作面为滑动摩擦设计，所以在运行过程中只能发出较低的摩擦声，运行噪音非常低。

Metal ball bearings generates high noise by the crashing of balls to the shafts during the operation and the noise will be sharply increased when the operation speed goes higher while the SAVJS-BIN plastic linear bearings are with the surface contacting structure which ensures a lower operation noise level.



■ 噪音曲线对比图 Comparison of noise development

### SAVJS-BIN直线轴承允许经常接触清洗液

#### SAVJS-BIN linear bearings allows the access of cleaning solution

SAVJS-BIN 直线轴承被经常用于食品包装机械的导向机构中，经常受到清洗液的冲刷；多年的使用证明 SAVJS-BIN 直线轴承正如所设计的那样足够抵抗各类碱性清洗液的腐蚀，甚至能整体浸泡在液体介质中运行。

The SAVJS-BIN plastic linear bearings are used in the food packing machine guiding system so it is easily access to the cleaning solutions. Years of application experience proves that the SAVJS-BIN plastic linear bearings are corrosion resistant to most kinds of Alkaline cleaning solutions or could be even immersed into the solutions.

**滑动膜技术数据表 Liners technical data table**

材料性能 Material properties	测试标准 Standard	单位 Unit	SAVJS- BLR13	SAVJS-BLR5	SAVJS-MN2
颜色 Color	-	-	黄色 Yellow	黑色 Black	深灰 Dark grey
密度 Density	ISO1183	g/cm <sup>3</sup>	1.48	1.44	1.65
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	0.3	0.1	0.2
最大吸水率 Max. water absorption	ISO62	%	1.3	0.5	0.7
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.05-0.15	0.09-0.25	0.10-0.18
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ×m/s	0.40	1.40	0.30
弯曲模量 Flexural modulus	ISO178	MPa	2600	4800	2400
弯曲强度 Flexural strength	ISO178	MPa	60	165	53
最大静载荷 Max. static load	ITS027	MPa	35	110	30
最大动载荷 Max. dynamic load	ITS028	MPa	14	61	12
邵氏硬度 Shore hardness	ISO868	D	74	82	73
连续运行温度 Long-term application temperature	ITS029	°C	+90	+250	+90
短时运行温度 Short-term application temperature	ITS029	°C	+120	+315	+120
最低运行温度 Lowest application temperature	ITS029	°C	-50	-100	-50
导热性 Thermal conductivity	ISO22007	W/m/K	0.25	0.55	0.24
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	10	6	8
阻燃等级 Flammability	UL94	Class	HB	V0	HB
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>13</sup>	>10 <sup>8</sup>	>10 <sup>8</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>12</sup>	>10 <sup>7</sup>	>10 <sup>8</sup>

\*ITS: SAVJS 内部测试标准 SAVJS company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.

**SAVJS-BIN直线轴承承载能力 Load capacity**

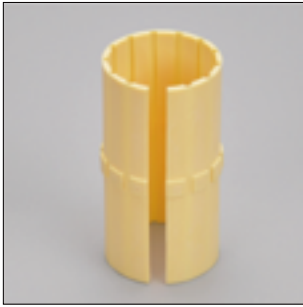
■ 滑动膜材料: SAVJS-BLR13  
Liner material: SAVJS-BLR13

内径 Inner diameter	最大许可动载荷 [N] Dynamic Load P=5MPa		最大许可静载荷 [N] Max. Static Load P=35MPa	
	BIN-11 滑动膜 BIN-11 Liners	BIN-12 滑动膜 BIN-12 Liners	BIN-11 滑动膜 BIN-11 Liners	BIN-12 滑动膜 BIN-12 Liners
10	870	780	6090	5460
12	1152	1008	8064	7056
16	1728	1440	12096	10080
20	2700	1800	18900	12600
25	4350	3000	30650	21000
30	6120	4500	42840	31500
40	9600	7200	67200	50400
50	15000	10500	105000	73500

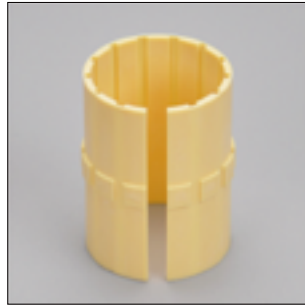
# SAVJS-BIN Plastic Linear Bearings

## SAVJS-BIN 塑料直线轴承

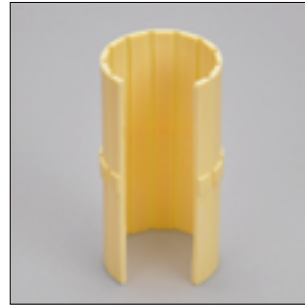
塑料直线轴承  
Plastic Linear Bearings



BIN-11  
[Ø10mm-Ø50mm]



BIN-12  
[Ø10mm-Ø50mm]



BIN-11K  
[Ø10mm-Ø50mm]



BIN-00  
[Ø6mm-Ø30mm]



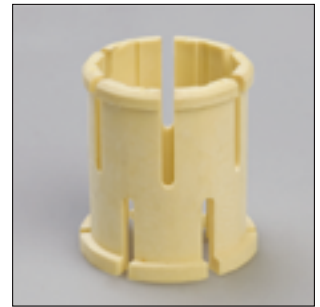
BIN-01  
[Ø6mm-Ø30mm]



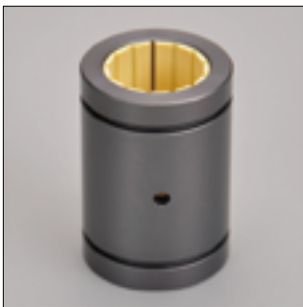
BIN-01-MR4  
[Ø6mm-Ø30mm]



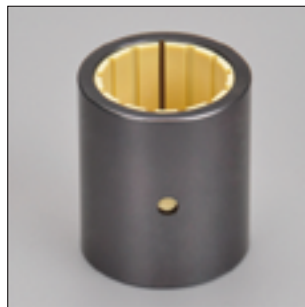
BIN-02  
[Ø6mm-Ø30mm]



ELR  
[Ø6mm-Ø30mm]



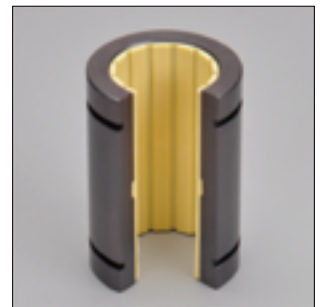
BIN-11R  
[Ø6mm-Ø50mm]



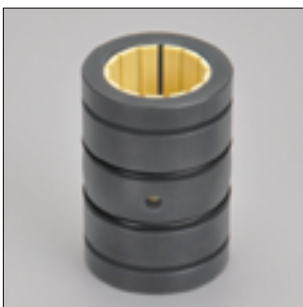
BIN-12R  
[Ø6mm-Ø50mm]



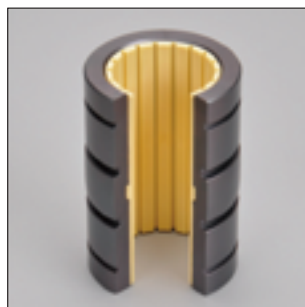
BIN-12RL  
[Ø10mm-Ø30mm]



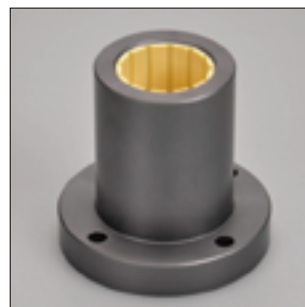
BIN-11RK  
[Ø10mm-Ø50mm]



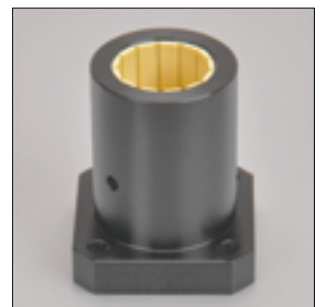
BIN-11RS  
[Ø10mm-Ø50mm]



BIN-11RSK  
[Ø10mm-Ø50mm]



BIN-11RF  
[Ø6mm-Ø50mm]



BIN-11RT  
[Ø6mm-Ø50mm]



BIN-12RFL  
[Ø10mm-Ø50mm]



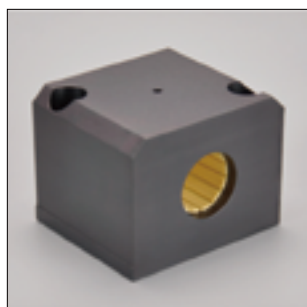
BIN-12RTL  
[Ø10mm-Ø50mm]



BIN-12RFM  
[Ø10mm-Ø50mm]



BIN-12RTM  
[Ø10mm-Ø50mm]



BIN-11B  
[Ø12mm-Ø50mm]



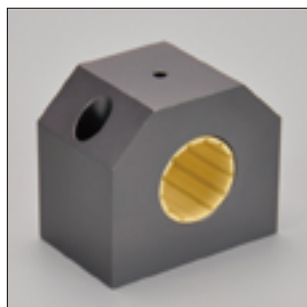
BIN-11BH  
[Ø10mm-Ø30mm]



BIN-11BK  
[Ø12mm-Ø50mm]



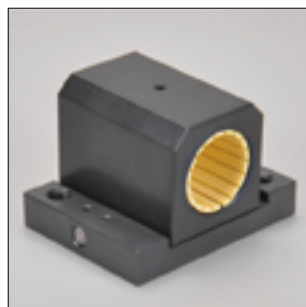
BIN-11BKE  
[Ø12mm-Ø50mm]



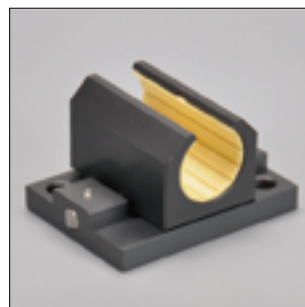
BIN-12B  
[Ø12mm-Ø50mm]



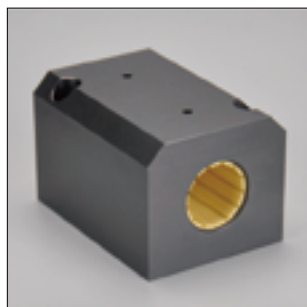
BIN-12BE  
[Ø12mm-Ø50mm]



BIN-11BF  
[Ø12mm-Ø50mm]



BIN-11BFK  
[Ø12mm-Ø50mm]



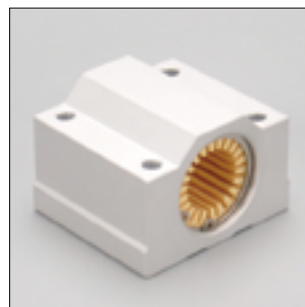
BIN-12BL  
[Ø12mm-Ø50mm]



BIN-12BHL  
[Ø10mm-Ø30mm]



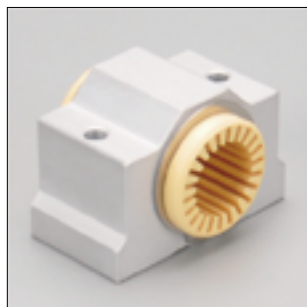
BIN-12BLP  
[Ø12mm-Ø30mm]



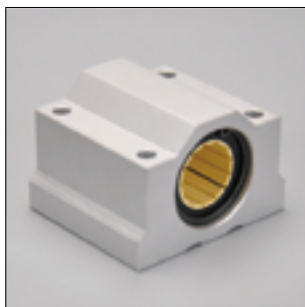
BIN-01G  
[Ø12mm-Ø30mm]

# SAVJS-BIN Plastic Linear Bearings

## SAVJS-BIN 塑料直线轴承



BIN-01GN  
[Ø12mm-Ø30mm]



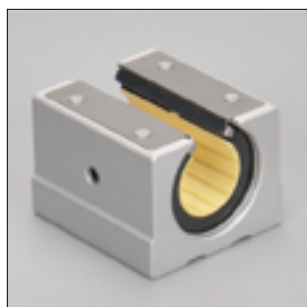
BIN-11G  
[Ø12mm-Ø50mm]



BIN-11GN  
[Ø12mm-Ø50mm]



BIN-11GL  
[Ø12mm-Ø50mm]



BIN-11GK  
[Ø12mm-Ø30mm]



BIN-11GKL  
[Ø16mm-Ø30mm]

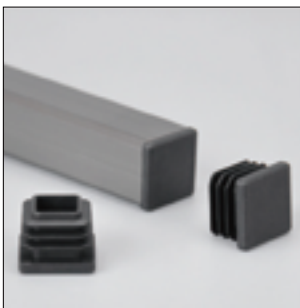
## 方轴直线导向系统 Square Linear Guides



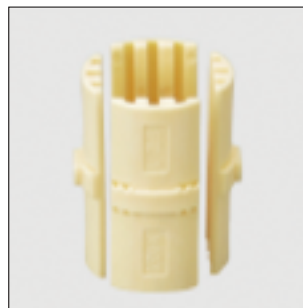
### 产品特性 Product features

- SAVJS-BIN Q 方形直线导向系统确保线性、抗扭转运动，非常适用于架空的应用。由于表面硬质氧化铝合金方轨采用空心设计，中间可穿置并保护电缆。配合 BIN-12Q 塑料直线轴承实现免维护和灵活的安装。
- 自润滑，高耐磨
- 低噪音、易安装
- 用于抗扭转直线运动
- 适用于污垢或灰尘环境
- SAVJS-BIN Q square linear guide system ensures linear, torque-resistant motion are ideally suited for the unsupported applications. Due to the hollow design of the surface hard anodized aluminum alloy square rail, the cables can be inserted and protected in hollow profile. and installed with BIN-12Q plastic linear bearing will be maintenance-free and flexible installation.
- Maintenance-free, high wear resistance
- Low noise and fitted very easy
- Linear movement with torque resistance
- Resistance to dirt and dust

塑料直线轴承  
Plastic Linear Bearings



QAR / QAR-EC01  
[尺寸 size: 20mm]



BIN-12Q  
[内孔尺寸 Inner dimension: 20mm]



BIN-12QRF  
[内孔尺寸 Inner dimension: 20mm]



BIN-12QRFL  
[内孔尺寸 Inner dimension: 20mm]



BIN-12QRT  
[内孔尺寸 Inner dimension: 20mm]



BIN-12QRTL  
[内孔尺寸 Inner dimension: 20mm]



BIN-12QB  
[内孔尺寸 Inner dimension: 20mm]

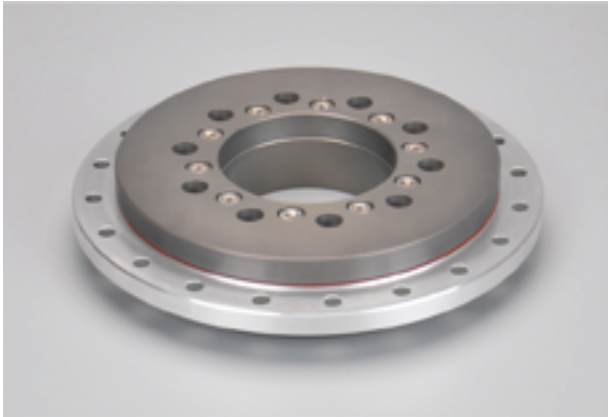


BIN-12QBL  
[内孔尺寸 Inner dimension: 20mm]

# SAVJS-SRR Slewing Ring Bearings

## SAVJS-SRR 回转支撑轴承

### SRR-01 高速型回转支撑轴承 High speed slewing ring bearings

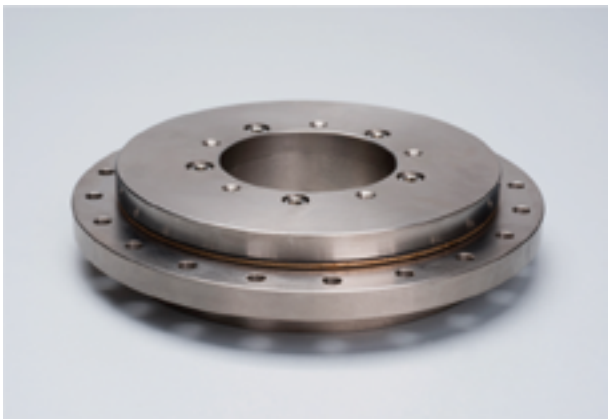


内径 Inner diameters:  $\varnothing 20\text{mm}$ - $\varnothing 100\text{mm}$

#### 产品特性 Product features

- 自润滑，免维护
- 运行平稳，无噪音
- 高速运行，长寿命
- 标准滑动材料 TEFPLAS™ G
- 可选符合 FDA 标准材料 TEFPLAS™ E
- 转盘材料硬质氧化铝合金，可选不锈钢
- 工作温度： $\pm 200^{\circ}\text{C}$
- Self-lubricating, maintenance-free
- Smooth operation, no noise
- High-speed operation and long life
- Standard material of sliding layer: TEFPLAS™ G
- Available FDA grade material: TEFPLAS™ E
- Disc made of anodized aluminum, available stainless steel
- Operation temperature  $\pm 200^{\circ}\text{C}$

### SRR-02 高载型回转支撑轴承 High load slewing ring bearings

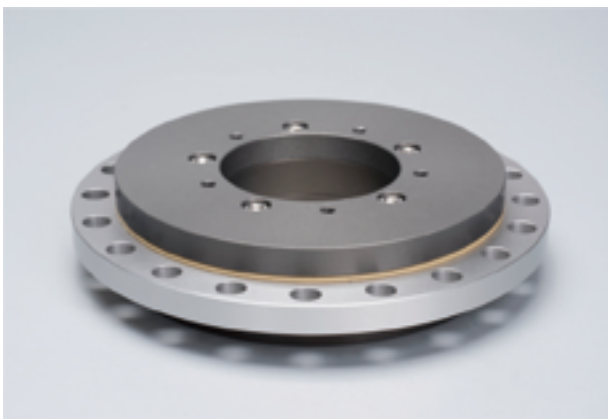


内径 Inner diameters:  $\varnothing 20\text{mm}$ - $\varnothing 100\text{mm}$

#### 产品特性 Product features

- 滑动单元均采用高载低摩擦材料
- 内外环均采用优质碳钢表面镀铬处理
- 极高载荷和扭矩
- 工作温度： $-196^{\circ}\text{C}$  /  $+260^{\circ}\text{C}$
- 易安装、免维护
- The sliding element is a standard bearing with high load and low friction factor
- Inside and outside of the bearing are made with carbon steel and with chrome hard coated
- The part is with extremely high load capacity and torque
- Working temperature  $-196^{\circ}\text{C}$  /  $+260^{\circ}\text{C}$
- Easy installation and maintenance free

### SRR-03 回转支撑轴承 Slewing ring bearings

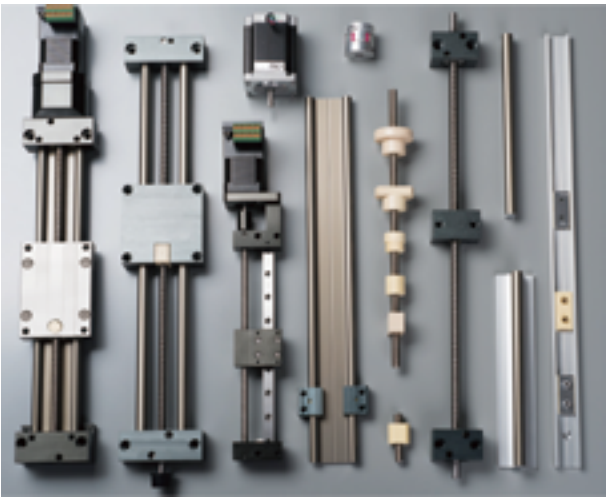


内径 Inner diameters:  $\varnothing 20\text{mm}$ - $\varnothing 100\text{mm}$

#### 产品特性 Product features

- 自润滑、免维护
- 滑动原件采用高耐磨材料 BLR13 制成
- 回转环表面硬化处理
- 工作温度： $-50^{\circ}\text{C}$  /  $+90^{\circ}\text{C}$
- 可选铝合金或不锈钢 304 材料
- Maintenance-free, self lubricating
- Sliding elements made of high wear resistance BLR13
- Slewing ring with high stiffening
- Working temperature  $-50^{\circ}\text{C}$  /  $+90^{\circ}\text{C}$
- Available as aluminum or stainless steel version 304





### 产品特性 Product features

- SAVJS-LMR 直线驱动系统均是采用免维护的滑动结构设计，所有滑动单元均采用经过耐磨优化的 SAVJS-BLR 材料制成，而所有的轴或导轨均采用表面硬化处理的铝合金或不锈钢制成。合理的材料和结构设计实现了 SAVJS-LMR 直线驱动系统长期免维护、耐灰尘、抗腐蚀和低噪音。
- SAVJS-LMR linear motion system is designed with a maintenance-free sliding structure. All sliding units are made of wear-resistant material SAVJS-BLR. All shafts or rails are Made of anodized aluminum alloy or stainless steel. Duo to the reasonable design of the material and structure, SAVJS-LMR linear motion system is maintenance-free, resistant to dust, anti-corrosion and low noise.

### 精密轴 Precision shafts



直径 Diameters: Ø6mm-Ø50mm

#### AS 精密铝轴 Precision aluminum shafts

- BLR13 材料制成的直线轴承更佳配合轴材料
- 材料: EN AW 6061/6060
- 直线度: EN 754-3
- 硬度: 75 HB
- 表面: 硬质氧化
- 表面硬度: 450-550 HV
- The recommended shaft material for all linear plain bearings made of BLR13
- Material: EN AW 6061/6060
- Straightness: EN 754-3
- Hardness: 75 HB
- Surface: hard anodized
- Surface hardness: 450-550 HV



直径 Diameters: Ø6mm-Ø30mm

#### CS 精密钢轴 Precision steel shafts

- 高性价比轴材料
- 可配合铝支撑底座
- 45 钢，表面镀铬
- 硬度: 60 HRC
- Cost-effective steel shafts
- Also completely supported and assembled with standard aluminium support
- C45 steel, hard-chromed
- Hardness: 60 HRC



直径 Diameters: Ø6mm-Ø30mm

#### ES 精密不锈钢轴 Precision stainless steel shafts

- 高耐腐蚀
- 可配合铝支撑底座
- 适用于潮湿场合
- 304 不锈钢，硬化
- High corrosion-resistance
- Also completely supported and assembled with standard aluminium support
- Ideal solution for the wet area
- 304 Stainless steel, hardened

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

**BH 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 10\text{mm}-\varnothing 50\text{mm}$

**BHF 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 10\text{mm}-\varnothing 50\text{mm}$

**WAF 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 12\text{mm}-\varnothing 50\text{mm}$

**WA 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 8\text{mm}-\varnothing 50\text{mm}$

**WAC 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 6\text{mm}-\varnothing 50\text{mm}$

**BAN 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 8\text{mm}-\varnothing 30\text{mm}$

**BARF 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 8\text{mm}-\varnothing 50\text{mm}$

**BAQF 轴端支撑座**  
Shaft end blocks



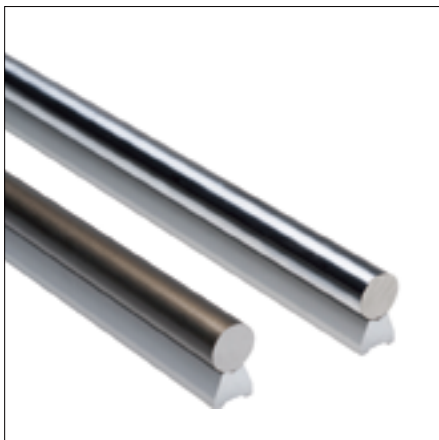
直径 Diameters:  $\varnothing 8\text{mm}-\varnothing 50\text{mm}$

**BANF 轴端支撑座**  
Shaft end blocks



直径 Diameters:  $\varnothing 8\text{mm}-\varnothing 50\text{mm}$

### 微型窄支撑轴 Small supported shafts



直径 Diameters: Ø12mm-Ø30mm

#### 产品特性 Product features

- 窄矮型设计铝支撑
- 交货范围不包括安装螺丝
- 可用轴材料：AS 精密铝轴，CS 精密硬铬钢轴，ES 精密 304 不锈钢轴
- 轴和支撑件未组装
- 最大许可长度 2000mm
- Completely supported with aluminum low support
- Scope of delivery doesn't include mounting screws
- Available shaft materials: Aluminum, hard anodized C45, hard-chromed Stainless steel (304), hardened
- Shafts and supports are supplied unassembled
- The long of supports max. 2000 mm

### 标准支撑轴 Standard supported shafts



直径 Diameters: Ø12mm-Ø30mm

#### 产品特性 Product features

- 标准设计支撑轴
- 可用轴材料：AS 精密铝轴，CS 精密硬铬钢轴，ES 精密 304 不锈钢轴
- 轴和支撑件组装
- 最大许可长度 2500mm
- Standard support shafts
- Available shaft materials: Aluminum, hard anodized C45, hard-chromed Stainless steel (304), hardened
- Shafts and supports are supplied assembled
- The long of supports max. 2500 mm

### BR01单圆直线导轨 Linear guides, single round rail



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 铝合金制成的导轨，硬质氧化滑动表面
- 免维护的线性滑动导轨提供几乎无限的设计自由度
- 免润滑、抗污
- 重量轻和静音
- 安装简单，免维护
- 通过干摩擦消除对污物的敏感性
- 自由设计安装宽度
- Aluminum alloy material, Hard anodized surface of sliding
- Maintenance-free linear slide guides providing virtually limitless design freedom
- Lubrication-free and dirt-resistant
- Weight saving and silent
- Simple installation, maintenance-free
- Insensitivity to dirt through dry operation
- Variable width can be fitted

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### BR01单圆不锈钢直线导轨 Stainless steel linear guides, single round rail



直径 Diameters:  $\varnothing 10\text{mm}$ ,  $\varnothing 16\text{mm}$ ,  $\varnothing 20\text{mm}$

#### 产品特性 Product features

- 316Ti 不锈钢单圆导轨
- 较强的抗腐蚀能力
- 配合 LIN 滑动膜抵抗污物
- 免维护与无噪音运行
- 自由设计安装宽度
- Single guide rails made of stainless steel 316Ti
- Good corrosion resistance
- Resistance to dirt with LIN liners
- Maintenance-free and no noise
- Variable width can be fitted

### BR02双圆直线导轨 Linear guides, double round rail

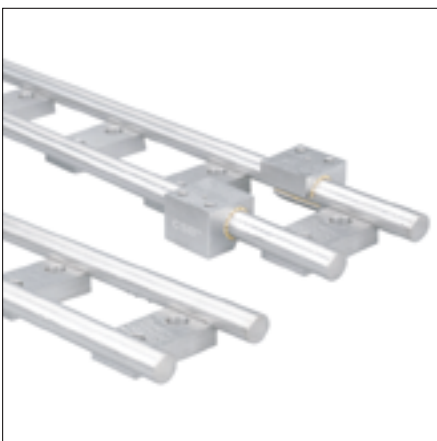


直径 Diameters:  $\varnothing 10\text{mm}$ ,  $\varnothing 16\text{mm}$ ,  $\varnothing 20\text{mm}$

#### 产品特性 Product features

- 铝合金制成的导轨，硬质氧化滑动表面
- 免维护的线性滑动导轨提供几乎无限的设计自由度
- 免润滑、抗污
- 重量轻和静音
- 安装简单，免维护
- 通过干摩擦消除对污物的敏感性
- 标准安装宽度
- Aluminum alloy material, Hard anodized surface of sliding
- Maintenance-free linear slide guides providing virtually limitless design freedom
- Lubrication-free and dirt-resistant
- Weight saving and silent
- Simple installation, maintenance-free
- Insensitivity to dirt through dry operation
- Standard fitting width

### BR02双圆不锈钢直线导轨 Stainless steel linear guides, double round rail

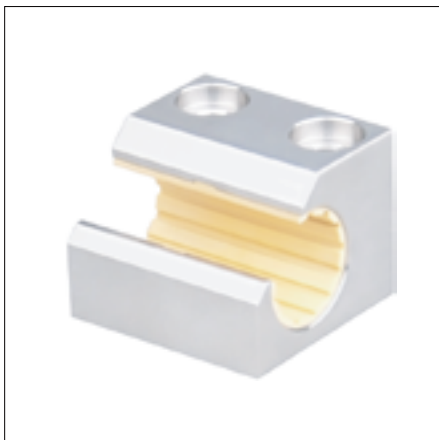


直径 Diameters:  $\varnothing 10\text{mm}$ ,  $\varnothing 16\text{mm}$ ,  $\varnothing 20\text{mm}$

#### 产品特性 Product features

- 316Ti 不锈钢双圆导轨
- 较强的抗腐蚀能力
- 配合 LIN 滑动膜抵抗污物
- 免维护与无噪音运行
- 标准安装宽度
- Dual guide rails made of stainless steel 316Ti
- Good corrosion resistance
- Resistance to dirt with LIN liners
- Maintenance-free and no noise
- Standard fitting width

### BRU01 不锈钢导轨滑块 Stainless steel guide rail sliding blocks

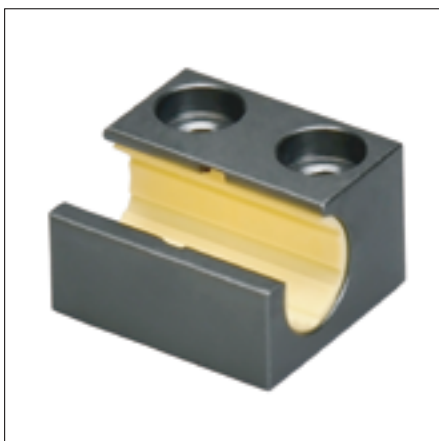


直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 安装标准滑动膜 BLR13
  - 316Ti 不锈钢轴承座
  - 抗腐蚀能力强
  - 自润滑、免维护
  - 抵抗灰尘，无噪音运行
  - 可用于 WR 不锈钢单轨和双轨
- Fitted standard liners BLR13
  - Housing made of stainless steel 316Ti
  - Good corrosion resistance
  - Self-lubricating and maintenance-free
  - Resistant dust and no noise
  - For WR ES single and dual guide rails

### BRU01 圆导轨滑块 Round rail sliding blocks

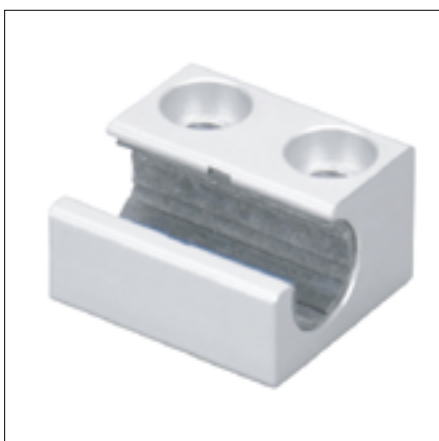


直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 安装标准滑动膜 BLR13
  - 自润滑、免维护
  - 重量轻、快速装配
  - 可用于 WR 系列单轨和双轨
  - 抵抗灰尘
  - 无噪音运行
- Fitted standard liners BLR13
  - Maintenance-free, dry-running
  - Fast assembly and light weight
  - For WR single and dual guide rails
  - Resistant Dust and silent
  - Silent operation

### BRU01 圆导轨滑块 Round rail sliding blocks



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

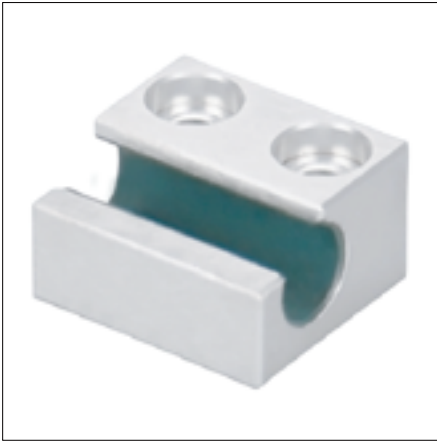
#### 产品特性 Product features

- 安装铝轴滑动膜 MN2
  - 自润滑、免维护
  - 重量轻、快速装配
  - 可用于 WR 系列单轨和双轨
  - 抵抗灰尘
  - 无噪音运行
- Fitted MN2 liners for aluminum shafts
  - Maintenance-free, dry-running
  - Fast assembly and light weight
  - For WR single and dual guide rails
  - Resistant Dust and silent
  - Silent operation

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### BRU01多用型圆导轨滑块 Round rail sliding blocks(High-performance)

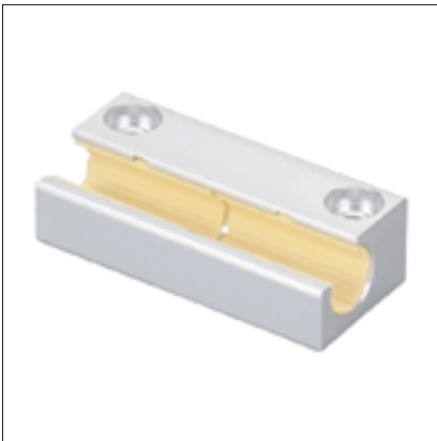


直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 耐磨层材料 TEFPLAS® B
- 使用温度  $\pm 200^{\circ}\text{C}$
- 最高连续速度 1.5m/s
- 重量轻、快速装配
- 可用于 WR 系列单轨和双轨
- 无噪音运行
- Wear layer material: TEFPLAS® B
- Operation temperature  $\pm 200^{\circ}\text{C}$
- Max. continuous running speed 1.5m/s
- Fast assembly and light weight
- For WR single and dual guide rails
- Silent operation

### BRU01加长型圆导轨滑块 Round rail sliding blocks(long design)



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 安装 2 个标准滑动膜 BLR13, 可选铝轴滑动膜 MN2
- 承载能力是标准型的 2 倍
- 自润滑、免维护
- 重量轻、快速装配
- 可用于 WR 系列单轨和双轨
- 抵抗灰尘
- 无噪音运行
- Assembled 2pcs standard liners BLR13, MN2 liners for aluminum shafts
- Carrying capacity is twice that of the standard type
- Maintenance-free, dry-running
- Fast assembly and light weight
- For WR single and dual guide rails
- Resistant dust
- Silent operation

### BRU02圆导轨混合滑块 Round rail hybrid blocks



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 标准滚动与滑动混合滑块
- 顺畅运动且驱动力比标准型下降 45%
- 导向滑动膜标准材料 EPB13
- 抵抗灰尘与无噪音运行
- 可用于 WR 系列单轨和双轨
- 多种安装方式可选
- Rolling and sliding hybrid blocks
- Smooth moving and driving force reduced 45%
- Sliding liners material: EPB13
- Resistant dust and quiet operation
- For WR single and dual guide rails
- Various installation options are available

### BRU02加长型圆导轨混合滑块 Round rail hybrid blocks, long design

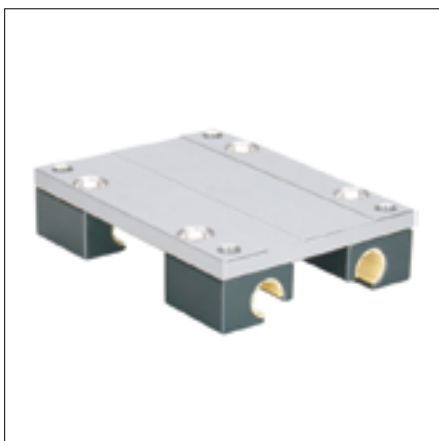


直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 滚动与滑动混合加长设计滑块
- 顺畅运动且驱动力比标准型下降 45%
- 导向滑动膜标准材料 BLR13
- 承载能力是标准型的 2 倍
- 抵抗灰尘与无噪音运行
- 可用于 WR 系列单轨和双轨
- 多种安装方式可选
- Rolling and sliding hybrid blocks and long design
- Smooth moving and driving force reduced 45%
- Sliding liners material: BLR13
- Carrying capacity is twice that of the standard type
- Resistant dust and quiet operation
- For WR single and dual guide rails
- Various installation options are available

### BRC01圆导轨滑台 Assembled guide carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 安装标准滑动膜 BLR13
- 自润滑、免维护
- 重量轻、快速装配
- 用于 WR 系列双轨
- 抵抗灰尘
- 无噪音运行
- Fitted standard liners BLR13
- Maintenance-free, dry-running
- Fast assembly and light weight
- For WR dual guide rails
- Resistant Dust and silent
- Silent operation
- Variable length can be fitted

### BRC01圆导轨滑台 Assembled guide carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

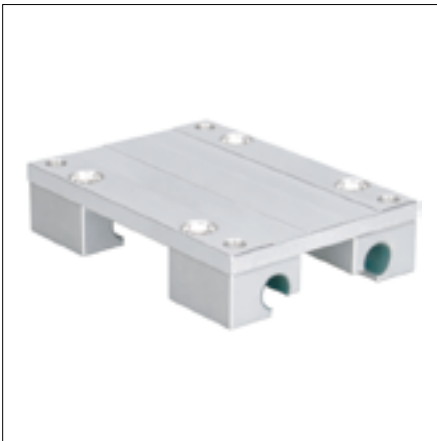
#### 产品特性 Product features

- 铝轴滑动膜 MN2
- 自润滑、免维护
- 重量轻、快速装配
- 用于 WR 系列双轨
- 抵抗灰尘
- 无噪音运行
- MN2 liners for aluminum shafts
- Maintenance-free, dry-running
- Fast assembly and light weight
- For WR dual guide rails
- Resistant Dust and silent
- Silent operation
- Variable length can be fitted

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### BRC01圆导轨滑台 Assembled guide carriages

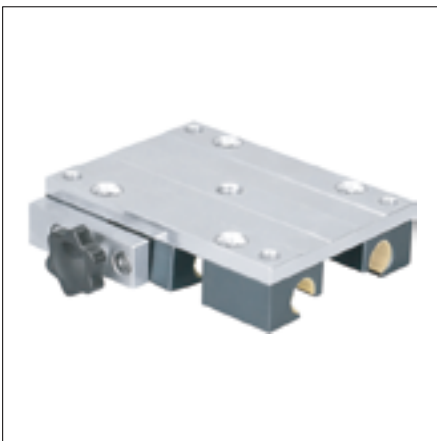


直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 耐磨层材料 TEFPLAS® B
- 使用温度  $\pm 200^{\circ}\text{C}$
- 最高连续运行速度 1.5m/s
- 重量轻、快速装配
- 用于 WR 系列双轨
- 抵抗灰尘
- 无噪音运行
- Wear layer material: TEFPLAS® B
- Operation temperature  $\pm 200^{\circ}\text{C}$
- Max. continuous running speed 1.5m/s
- Fast assembly and light weight
- For WR dual guide rails
- Resistant dust and silent
- Silent operation

### BRC01圆导轨滑台 Assembled guide carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 标准滑动膜 BLR13
- 带夹紧手轮设计
- 相机固定 3/8" 螺纹孔
- 自润滑、免维护
- 重量轻、抵抗灰尘
- Sliding liners material: BLR13
- With locking handwheel design
- 3/8" threaded hole for camera
- Self-lubricating, maintenance-free
- Lightweight and resistant to dust

### BRC02圆导轨混合滑台 Assembled hybrid carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 滚动与滑动混合滑台
- 顺畅滑动，驱动力比标准型下降 45%
- 导向滑动膜标准材料 BLR13
- 配合 WR02 导轨侧向安装
- 自润滑、免维护
- 抗灰尘、无噪音
- Rolling and sliding hybrid carriages
- Smooth moving and driving force reduced 45% than the standard carriages
- Sliding liners material: BLR13
- For side installation of WR02 guide rails
- Maintenance-free, dry-running
- Resistant dust and no noise



### BRC02圆导轨混合滑台 Assembled hybrid carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 滚动与滑动混合滑台
- 顺畅滑动，驱动力比标准型下降 45%
- 导向滑动膜标准材料 BLR13
- 配合 WR02 导轨水平安装
- 自润滑、免维护
- 抗灰尘、无噪音
- Rolling and sliding hybrid carriages
- Smooth moving and driving force reduced 45% than the standard carriages
- Sliding liners material: BLR13
- For horizontal installation of WR02 guide rails
- Maintenance-free, dry-running
- Resistant dust and no noise

### BRC03圆导轨滑台 Assembled guide carriages



直径 Diameters: Ø10mm, Ø16mm, Ø20mm

#### 产品特性 Product features

- 安装 BIN-11 标准滑动膜
- 自润滑、免维护
- 整体式设计、低成本
- 用于 WR 系列双圆轨
- 抵抗灰尘、无噪音
- Fitted BIN-11 standard liners
- Maintenance-free, dry-running
- Mono-design and low cost
- For WR double round guide rails
- Resistant dust and quiet

### BQ01方型单轨 Single square guide rails



尺寸 Size: 06mm, 10mm, 16mm, 20mm

#### 产品特性 Product features

- 方型铝合金单轨
- 硬质氧化滑动表面
- 免维护的线性滑动导轨
- 免润滑、抗污
- 重量轻和静音
- 自由设计安装宽度
- Square single guide rails made of aluminum
- Hard anodized the sliding surface
- Maintenance-free linear sliding guide rails
- Lubrication-free and dirt-resistant
- Light weight and quiet
- Variable width can be fitted

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### BQ02方型双轨 Double square guide rails

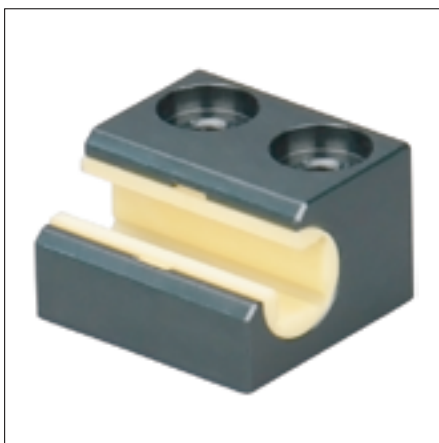


尺寸 Size: 06mm, 10mm, 16mm, 20mm

#### 产品特性 Product features

- 方型铝合金双轨
- 硬质氧化滑动表面
- 免维护的线性滑动导轨
- 免润滑、抗污
- 重量轻和静音
- 标准安装宽度
- Square double guide rails made of aluminum
- Hard anodized the sliding surface
- Maintenance-free linear sliding guide rails
- Lubrication-free and dirt-resistant
- Light weight and quiet
- Standard fitting width

### BQU01方型导轨滑块 Square guide rail blocks



尺寸 Size: 06mm, 10mm, 16mm, 20mm

#### 产品特性 Product features

- 安装 BIN-11Q 方型滑动膜
- 自润滑、免维护
- 用于 BQ 系列方型导轨
- 抗灰尘、无噪音
- Fitted BIN-11Q square liners
- Maintenance-free, dry-running
- For BQ square guide rails
- Resistant dust and quiet

### BQC01方型导轨滑台 Square guide rail carriages



尺寸 Size: 06mm, 10mm, 16mm, 20mm

#### 产品特性 Product features

- 安装 BIN-11Q 方型滑动膜
- 自润滑、免维护
- 重量轻、快速装配
- 用于 BQ 系列方型双轨
- 抵抗灰尘、无噪音
- Fitted BIN-11Q square liners
- Maintenance-free, dry-running
- Fast assembly and light weight
- For BQ double square guide rails
- rails Resistant dust and quiet

## BQC02方型导轨滑台 Square guide rail carriages



尺寸 Size: 06mm, 10mm, 16mm, 20mm

### 产品特性 Product features

- 安装 BIN-11Q 方型滑动膜
- 自润滑、免维护
- 整体式设计、低成本
- 用于 BQ 系列方型双轨
- 抵抗灰尘、无噪音
- Fitted BIN-11Q square liners
- Maintenance-free, dry-running
- Mono-design and low cost
- For BQ double square guide rails
- Resistant dust and quiet

## YR01微型直线导轨 Small linear guides



宽度 Width: 17mm, 27mm, 40mm

### 产品特性 Product features

- 很小安装高度 6-12mm
- 轻量级
- 较多的滑块选项 - 有带预张力设计
- 免维护，自润滑
- 耐腐蚀
- 低磨损，摩擦系数低
- 银色阳极氧化处理
- Small installation height from 6 to 12 mm
- Lightweight
- Numerous carriage options – also with preload design
- Maintenance-free, self lubricating
- Corrosion-resistant
- Low wear with low coefficient of friction
- Rails in silver anodized

## YRU01导轨滑块 Guide rail sliders



宽度 Width: 17mm, 27mm

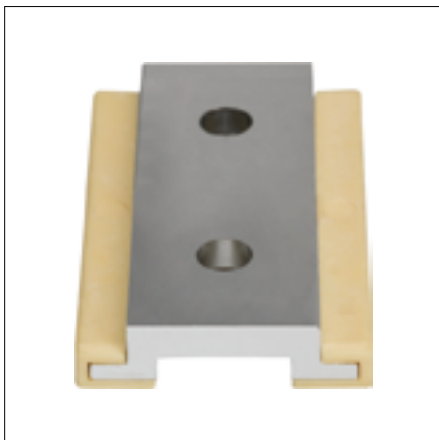
### 产品特性 Product features

- 标准耐磨材料 BLR13 制成
- 多种选择：标准和带预紧设计
- 极小重量和无噪音运行
- 自润滑、免维护
- 重配合导轨 YR01-17 和 YR01-27
- 最大载荷为 50N 和 500N
- Made of high anti-wear material BLR13
- Variants: Standard, Preload (P)
- extrem low weight quiet running
- Maintenance-free, self lubricating
- Installation for YR01-17 and YR01-27
- Max. load 50N and 500N

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### YRU02导轨滑块 Guide rail sliders



宽度 Width: 27mm, 40mm

#### 产品特性 Product features

- 标准耐磨材料 BLR13 制成
- 极小重量和无噪音运行
- 自润滑、免维护
- 配合导轨 YR01-27 和 YR01-40
- 最大载荷为 500N 和 700N
- Made of high anti-wear material BLR13
- extrem low weight quiet running
- Maintenance-free, self lubricating
- Installation for YR01-27 and YR01-40
- Max. load 500N and 700N

### YRU03导轨滑块 Guide rail sliders



宽度 Width: 27mm, 40mm

#### 产品特性 Product features

- 标准耐磨材料 BLR13 制成
- 多种选择：标准和带预紧设计
- 极小重量和无噪音运行
- 自润滑、免维护
- 配合导轨 YR01-27 和 YR01-40
- 最大载荷为 500N 和 700N
- Made of high anti-wear material BLR13
- Variants: Standard, Preload (P)
- extrem low weight quiet running
- Maintenance-free, self lubricating
- Installation for YR01-27 and YR01-40
- Max. load 500N and 700N

### YCAP导轨端盖 Guide rail end caps



宽度 Width: 17mm, 27mm, 40mm

#### 产品特性 Product features

- 易安装
- 低成本
- 可拆卸
- 高压紧力
- Easy installation
- Low-priced
- Dismantling possible
- High retention force

## HR01直线导轨 Linear guide rails

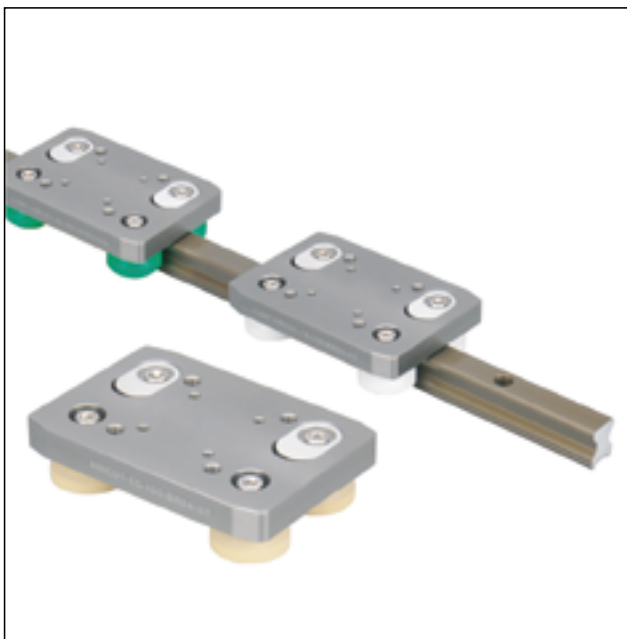


宽度 Width: 15mm, 20mm, 25mm

### 产品特性 Product features

- 很小的导轨安装宽度 15-23mm
- 安装宽度与孔距与标准滚珠导轨保持一致
- 表面经过硬质氧化铝合金
- 可拼接实现超长导轨设计
- 配合 HRC 免维护滑台使用
- 轻量化设计
- Small installation width from 15 to 23 mm
- The installation width and the holes are consistent with the standard ball guide rails
- Made of hard anodized surface of aluminum alloy
- Available longer design by the guide rails connection
- Maintenance-free with HRC roller carriages
- Lightweight design

## HRC01滚轮滑台 Roller carriages



宽度 Width: 15mm, 20mm, 25mm

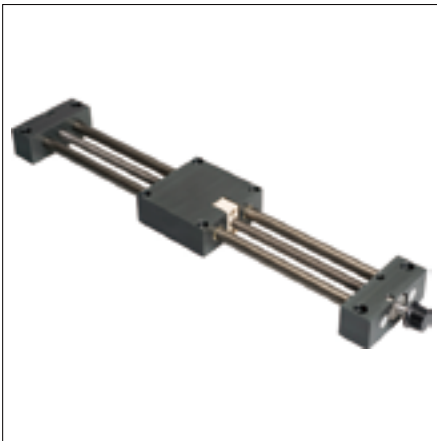
### 产品特性 Product features

- 滚轮滑台带除尘与防撞缓冲片设计
  - 非常适合高速应用，最高速度 10m/s
  - 顺畅运动，驱动力约为滑动滑台的 10%
  - 安装螺纹孔与标准滚珠滑块保持一致
  - 带间隙补偿调节功能
- 多版本可选：ST- 标准高耐磨，HT- 耐高温，VQ- 低噪音
- 最高长期使用温度：ST-90°C，HT-120°C，VQ-70°C
  - 自润滑、免维护，抗灰尘、无噪音
  - With dust removal and anti-collision buffer elastic plate design
  - Very suitable for high speed applications, the speed up to 10m/s
  - Smooth moving, Driving force is about 10% of sliding carriages
  - Installation threaded holes are consistent with the standard ball sliders
  - Clearance adjustment, multi-version available: ST-standard anti-wear carriages, HT-high temperature carriages, VQ-very quiet carriages
  - Max. long-term temperature: ST-90°C , HT-120°C , VQ-70°C
  - Maintenance-free, dry-running, Resistant dust and no noise

# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### LMR01直线模组 Linear modules



最大行程 Max. stroke: 1250mm

#### 产品特性 Product features

- 标准设计模组
- 可选不同轴材料和丝杆
- 免维护，耐腐蚀
- 可选丝杆 TR10x2, TR18x4, TR24x5
- 可在 +60 °C环境中长期使用
- Standard design
- Various materials for shaft and lead screw
- Maintenance-free and optionally corrosion resistant
- TR10x2, TR18x4, TR24x5
- Temperature resistant up to +60 °C

### LMR01PL直线模组 Linear modules



最大行程 Max. stroke: 1250mm

#### 产品特性 Product features

- 预紧梯形丝杠螺母，预紧力：50N
- 可选不同轴材料和丝杆
- 可选丝杆 TR10x2, TR18x4, TR24x5
- 手动和连续可调的径向游隙
- 免维护且重量轻
- 耐高温高达 +60°C
- Preloaded trapezoidal lead screw nuts, preload force: 50 N
- Various materials for shaft and lead screw
- TR10x2, TR18x4, TR24x5
- Manually and continuously adjustable radial clearance
- Lubrication-free and lightweight
- Temperature resistant up to +60 °C

### LMR02直线模组 Linear modules



最大行程 Max. stroke: 1000mm

#### 产品特性 Product features

- 经凑型设计
- 稳定传动
- 表面硬化处理铝制 WR 导轨
- 可在 +60 °C环境中长期使用
- Flat and compact
- High torsional stability
- Aluminium WR guide rails, hard anodized
- Temperature resistant up to +60 °C

### LMR02BB直线模组 Linear modules



最大行程 Max. stroke: 900mm

#### 产品特性 Product features

- 较低的驱动力
- 表面硬化处理铝制 WR 导轨
- 降低了系统振动，噪音低
- 丝杆两端采用滚珠轴承支撑
- 多种滑块长度可选
- 可在 +60 °C 环境中长期使用
- Lower drive force
- Aluminum WR guide rails, hard anodized
- Quiet operation – reduced vibration of the overall system
- Ball bearings in both lead screw end supports
- Linear carriages available in different lengths
- Temperature resistant up to +60 °C

### LMR03直线模组 Linear modules



最大行程 Max. stroke: 3000mm

#### 产品特性 Product features

- 轻载快速定位
- 紧凑型无噪音设计
- 驱动轴单边或双边设计
- 多种滑块长度可选
- 可在 +60 °C 环境中长期使用
- Fast positioning of small loads
- Quiet operation and flat design
- Drive shaft on one or both sides
- Linear carriages available in different lengths
- Temperature resistant up to +60 °C

### LMR04直线模组 Linear modules



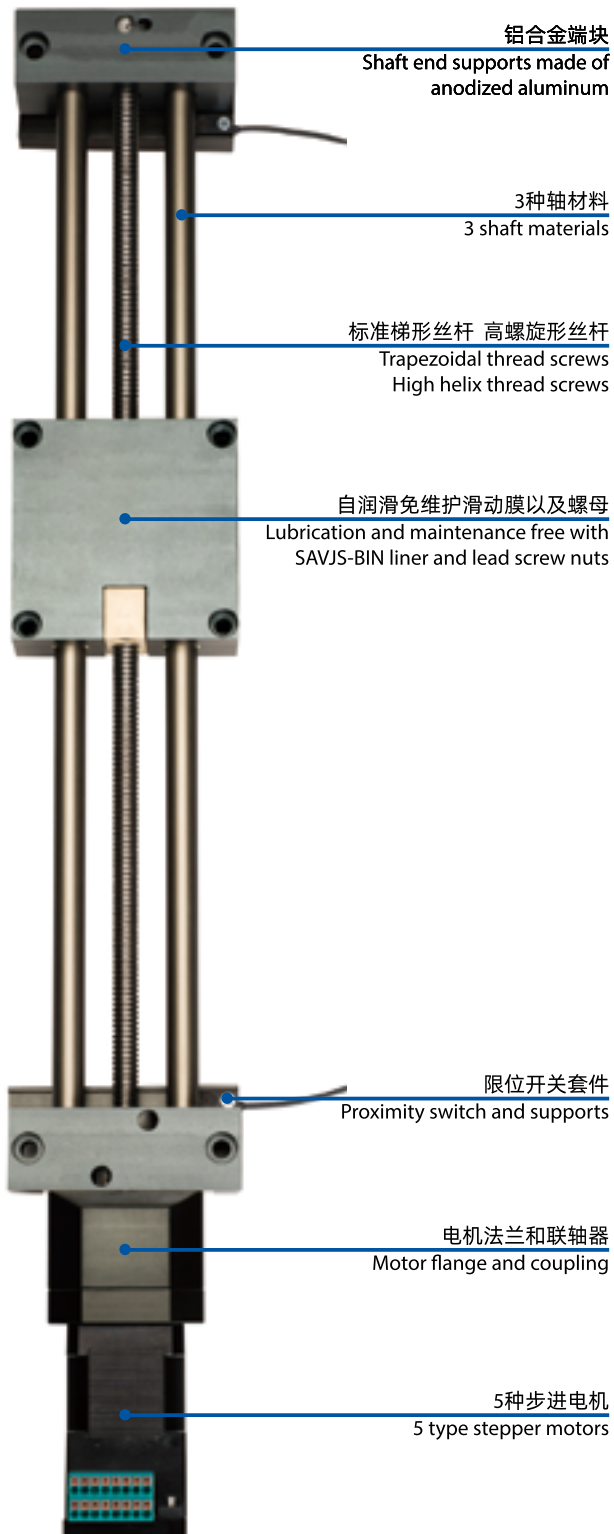
#### 产品特性 Product features

- 薄型设计，采用梯形丝杆和导轨平行安装
- 自润滑，高效能，重量轻
- 可自由设计间距和长度
- 可选右旋或左旋丝杆
- 可在 +60 °C 环境中长期使用
- Low profile structure through lateral lead screw arrangement
- Lubrication-free, high efficiency, lightweight
- Variable pitch and length
- Lead screw arrangement can be selected either left or right
- Temperature resistant up to +60 °C

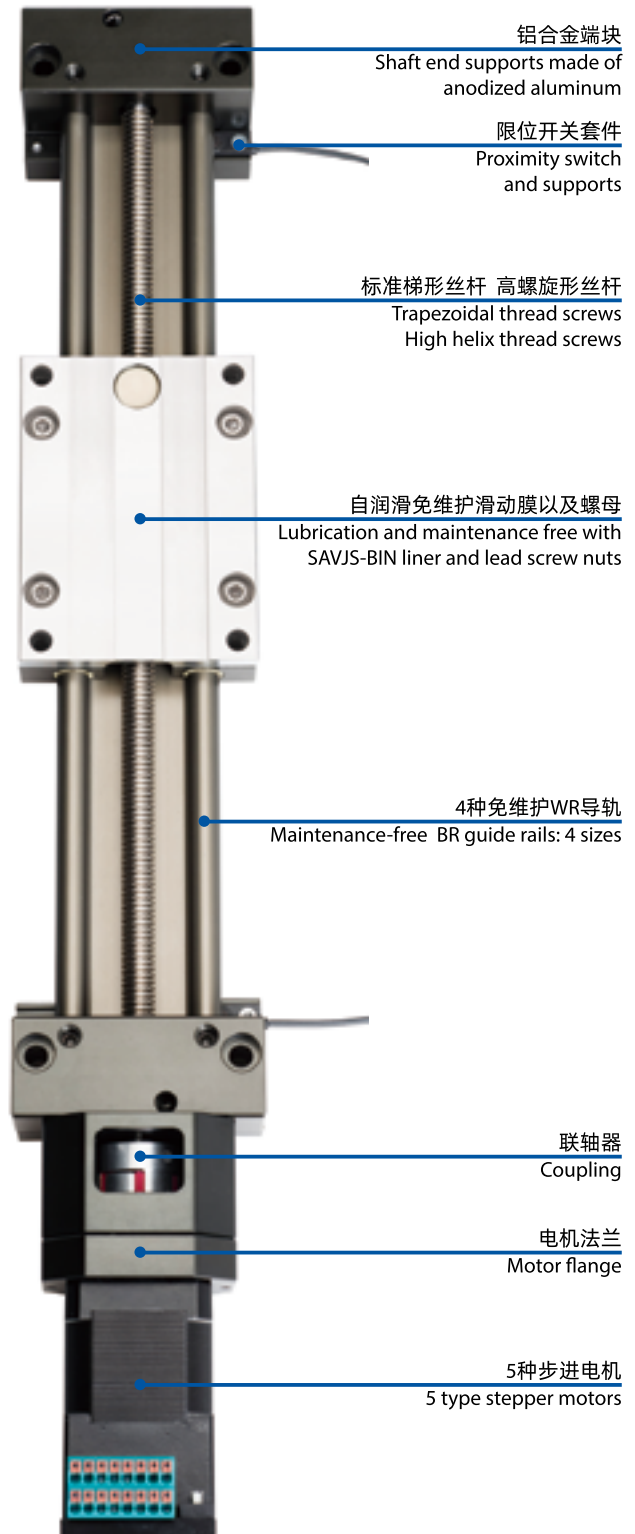
# SAVJS-LMR Linear Motion Systems

## SAVJS-LMR 直线驱动系统

### LMR01-E直线模组 Linear modules

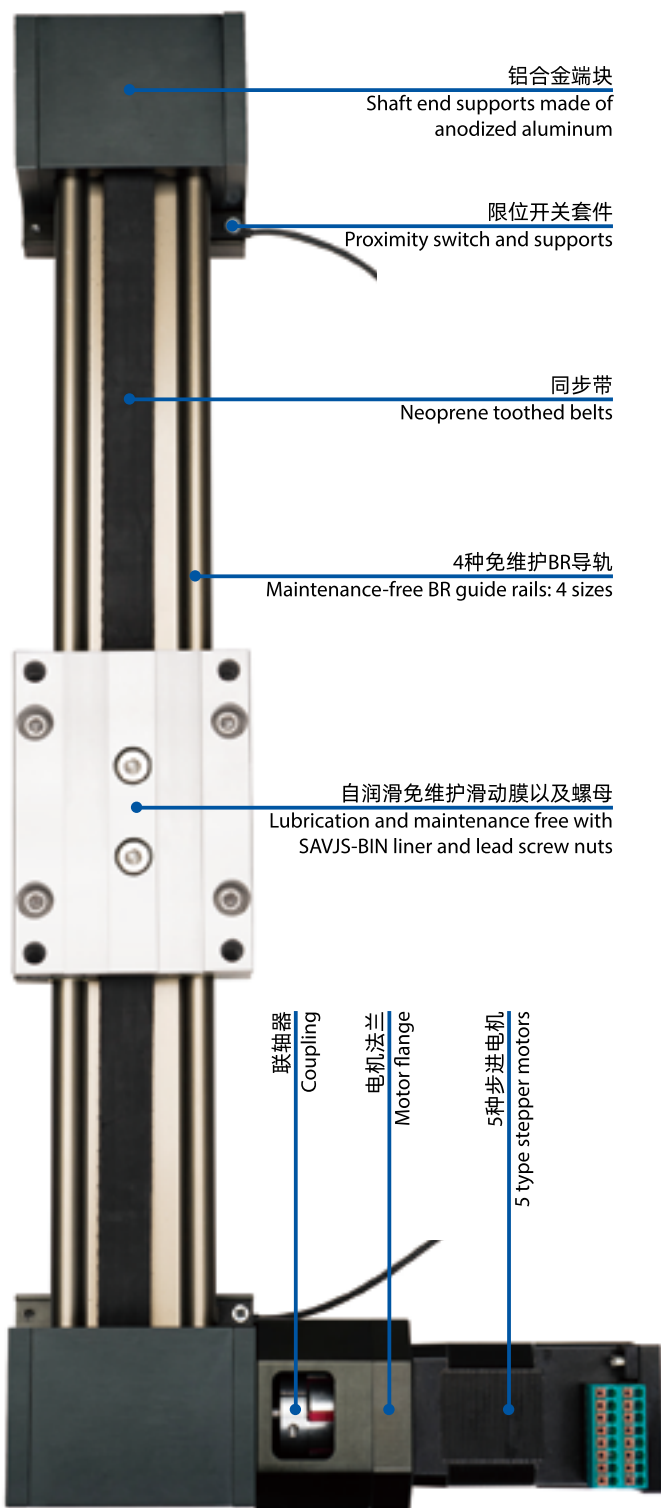


### LMR02-E直线模组 Linear modules

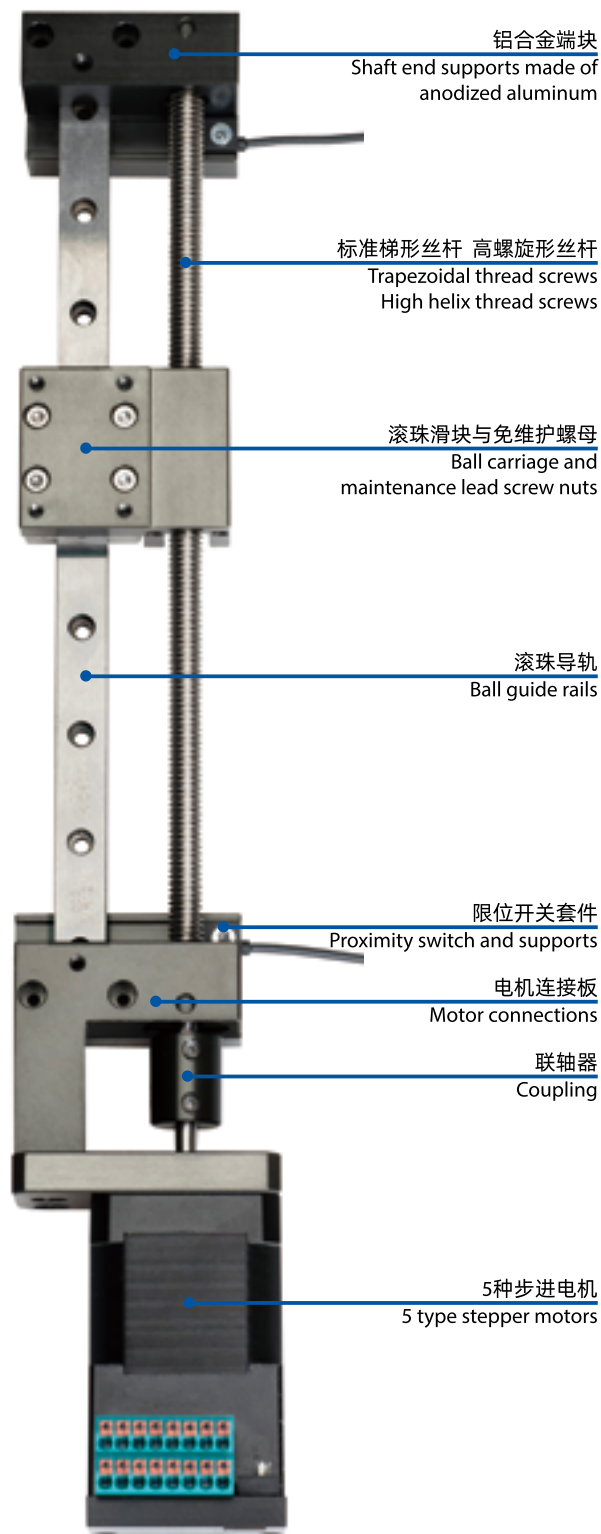




### LMR03-E直线模组 Linear modules



### LMR04-E直线模组 Linear modules



# SAVJS-LMR Lead Screw Drivers

## SAVJS-LMR 丝杆驱动



### 产品特性 Product features

- 丝杆传动组件是将旋转运动转换成直线运动的机器元件。SAVJS-LMR 丝杆传动组件采用 SAVJS-LMR 材料制成的自润滑的塑料螺母，因此无需外部润滑就可实现长期运转。
- 高效耐用快速螺纹
- 标准梯形自锁螺纹
- 免维护，干运行
- 耐腐蚀、耐脏污、低噪音
- Screw drives are machine elements that convert rotary motion into linear motion. SAVJS-LMR screw drives are always based on SAVJS-LMR self-lubricating plastic nuts, thus enabling long-lasting operation without external lubrication.
- Efficient and durable SAVJS-LMR high helix threads
- Self-locking trapezoidal standard threads
- Maintenance-free, dry operation
- Corrosion resistant、Resistant to dirt and Low-noise

### 梯形螺纹丝杆 Lead screws with trapezoidal thread

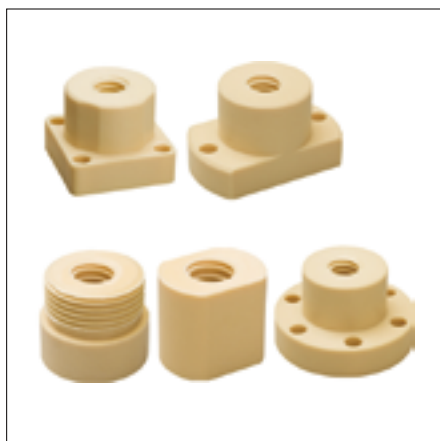


直径 Diameters: Ø8mm-Ø30mm

### 产品特性 Product features

- 左旋和右旋螺纹可选
- 可选材料：C45 钢和不锈钢
- 可以根据客户图纸加工
- 螺旋线偏差 0.1mm/300mm
- 直线度 0.3mm/300mm
- 标准 DIN103 7e
- Thread: right- or left-hand
- Available materials: C45 steel /304 stainless steel
- Length and machining according to customer drawing
- Helix deviation 0.1mm/300mm
- Straightness 0.3mm/300mm
- Tolerance DIN103 7e

### 圆柱螺母 Lead screw nuts, round



直径 Diameters: Ø8mm-Ø30mm

### 产品特性 Product features

- 自润滑、低磨损
- 极低的摩擦系数
- 耐腐蚀，可用于液体介质环境
- 抵抗灰尘和无噪音运行
- 可选材料：BLR13, BLR5A
- Self lubricating and lower wear
- Best coefficient of friction
- Chemical resistant
- Dust resistant and quit running
- Available materials: BLR13 and BLR5A

## 高螺旋线丝杆 Lead screws with high helix

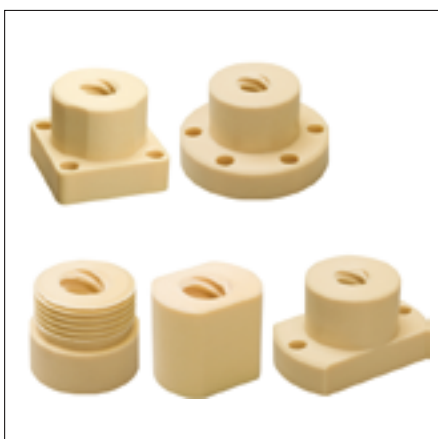


直径 Diameters: Ø6.35mm-Ø20mm

### 产品特性 Product features

- 左旋和右旋螺纹可选
- 可选材料: 304 不锈钢
- 可以根据客户图纸加工
- 螺旋线偏差 0.1mm/300mm
- 直线度 0.3mm/300mm
- 标准 DIN103 7e
- Thread: right- or left-hand
- Available materials: 304 stainless steel
- Length and machining according to customer drawing
- Helix deviation 0.1mm/300mm
- Straightness 0.3mm/300mm
- Tolerance DIN103 7e

## 高螺旋线圆柱螺母 High helix nuts, round



直径 Diameters: Ø6.35mm-Ø20mm

### 产品特性 Product features

- 自润滑、低磨损
- 高效率传动
- 极低的摩擦系数
- 耐腐蚀, 可用于液体介质环境
- 抵抗灰尘和无噪音运行
- 可选材料: BLR13, BLR5A
- Self lubricating and lower wear
- High efficiency drive
- Best coefficient of friction
- Chemical resistant
- Dust resistant and quit running
- Available materials: BLR13 and BLR5A

## 特殊螺母 Special nuts



直径 Diameters: Ø10mm, Ø14mm, Ø18mm

### 产品特性 Product features

- 为 LMS 直线运动系统而特殊设计的丝杆螺母
- 自润滑、低磨损
- 极低的摩擦系数
- 耐腐蚀, 可用于液体介质环境
- 抵抗灰尘和无噪音运行
- 节约安装空间, 易装配
- 可选材料: BLR13, BLR5A
- Special design nuts for LMS linear motion system
- Self lubricating and lower wear
- Best coefficient of friction
- Chemical resistant
- Dust resistant and quit running
- Save space and Easy installation
- Available materials: BLR13 and BLR5A

# SAVJS-LMR Lead Screw Drivers

## SAVJS-LMR 丝杆驱动

### 丝杆支撑，固定式 Lead screw supports, fixed bearing side



直径 Diameters: Ø10mm, Ø18mm, Ø24mm

#### 产品特性 Product features

- 阳极氧化铝轴承座
- 灵活安装丝杠
- 丝杠直径: 10, 18 和 24 mm
- 通过内置塑料轴承实现自润滑
- Anodized aluminum bearing blocks
- Flexible mounting of the leadscrew
- Leadscrew Diameters: 10, 18 and 24 mm
- Lubricant-free through built-in plastic bearing

### 丝杆支撑，浮动式 Lead screw supports, floating bearing side



直径 Diameters: Ø10mm, Ø18mm, Ø24mm

#### 产品特性 Product features

- 阳极氧化铝轴承座
- 灵活安装丝杠
- 丝杠直径: 10, 18 和 24 mm
- 通过内置塑料轴承实现自润滑
- Anodized aluminum bearing blocks
- Flexible mounting of the leadscrew
- Leadscrew Diameters: 10, 18 and 24 mm
- Lubricant-free through built-in plastic bearing

### 丝杆支撑，滚动轴承 Lead screw supports, ball bearing-faster



直径 Diameters: Ø10mm, Ø18mm, Ø24mm

#### 产品特性 Product features

- 自润滑、免维护
- 快速连接安装
- 传输高转速
- 低摩擦
- 精准无间隙配合
- Lubricant- and maintenance-free
- Quick connection
- Transmission of high rotation speed
- Low friction
- Accurate and clearance-free

### CR01丝杆夹环，带螺纹 Lead screw clamping rings with thread



直径 Diameters: Ø8mm-Ø24mm

#### 产品特性 Product features

- 直接与丝杆螺纹配合安装
- 配合梯形丝杆支撑客户解决方案
- 承受较高的轴向力
- 采用表面硬质氧化铝合金制成
- 带锁紧螺丝
- Ready to install in the screw
- Custom solutions for lead screw support
- Can absorb even high axial forces
- Clamping rings made from coated aluminum
- Screw included in delivery

### CR02丝杆夹环，无螺纹 Lead screw clamping rings without thread



直径 Diameters: Ø10mm-Ø24mm

#### 产品特性 Product features

- 直接与丝杆端安装
- 承受较高的轴向力
- 采用表面硬质氧化铝合金制成
- 带锁紧螺丝
- Ready to install in the end of screw
- Can absorb even high axial forces
- Clamping rings made from coated aluminum
- Screw included in delivery

### 系统附件 Accessories



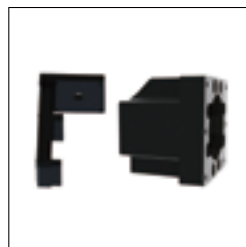
步进电机  
Stepper motors



步进电机控制器  
Stepper motor controllers



联轴器  
Flexible jaw couplings



电机法兰  
Motor flange



限位开关  
Proximity switches

# SAVJS-SFR Semi-finished Products

## SAVJS-SFR 耐磨半成品

### SAVJS-SFR 耐磨半成品 Semi-finished products



SAVJS 自润滑工程塑料半成品为客户特殊尺寸轴承少量快速制作提供了可能；节省了额外的模具费用和提高了交货速度。而且可以直接用来加工尺寸或形状非标准件产品，为用户提供各种自润滑部件的解决方案。

SAVJS self-lubricated plastic semi-finished products are customized materials available by the customer special requirement of uncommon bearing sizes. It is possible for the mold cost saving and improves the delivery time. The non-standard bearings are available with this flexible solution.

### 技术数据表 Technical data table

材料性能 Material properties	标准 Standard	单位 Unit	M80	M81	M82	M83	MN73
颜色 Color	-	-	蓝色 Blue	绿色 Green	棕色 Brown	紫色 Purple	灰色 Grey
密度 Density	ISO1183	g/cm <sup>3</sup>	1.15	0.94	1.45	1.10	1.48
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	2.5	0.01	0.3	0.65	0.3
最大吸水率 Max. water absorption	ISO62	%	7.0	0.05	1.3	6.3	1.3
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.10-0.30	0.05-0.15	0.05-0.15	0.10-0.18	0.05-0.20
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ×m/s	0.25	0.20	0.40	0.40	0.30
弯曲模量 Flexural modulus	ISO178	MPa	3000	650	2400	2750	2350
弯曲强度 Flexural strength	ISO178	MPa	90	20	65	60	60
最大静载荷 Max. static load	ITS027	MPa	70	25	40	65	35
最大动载荷 Max. dynamic load	ITS028	MPa	36	6	17	33	14
邵氏硬度 Shore hardness	ISO868	D	80	62	75	70	74
连续运行温度 Long-term application temperature	ITS029	°C	+90	+80	+90	+90	+90
短时运行温度 Short-term application temperature	ITS029	°C	+180	+120	+120	+180	+120
最低运行温度 Lowest application temperature	ITS029	°C	-40	-100	-50	-40	-50
导热性 Thermal conductivity	ISO22007	W/m/K	0.24	0.40	0.25	0.30	0.25
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	9	19	9	10	10
阻燃等级 Flammability	UL94	Class	HB	HB	HB	HB	HB
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>13</sup>	>10 <sup>14</sup>	>10 <sup>13</sup>	>10 <sup>14</sup>	>10 <sup>13</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>12</sup>	>10 <sup>14</sup>	>10 <sup>12</sup>	>10 <sup>14</sup>	>10 <sup>12</sup>

\*ITS: SAVJS 内部测试标准 SAVJS company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.

材料性能 Material properties	标准 Standard	单位 Unit	MN70	MN71	MN73	BLR	BLR5A
颜色 Color	-	-	白色 White	白色 White	灰色 Grey	深灰 Dark grey	米色 Beige
密度 Density	ISO1183	g/cm <sup>3</sup>	1.42	1.38	1.40	1.46	1.28
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	0.3	0.3	0.3	0.3	0.3
最大吸水率 Max. water absorption	ISO62	%	1.4	0.5	0.5	1.2	0.5
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.10-0.35	0.15-0.40	0.10-0.30	0.05-0.15	0.25-0.40
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ·m/s	0.30	0.25	0.35	0.40	0.25
弯曲模量 Flexural modulus	ISO178	MPa	2300	5000	4200	2300	3600
弯曲强度 Flexural strength	ISO178	MPa	60	130	120	60	140
最大静载荷 Max. static load	ITS027	MPa	30	85	80	35	90
最大动载荷 Max. dynamic load	ITS028	MPa	13	45	41	15	46
邵氏硬度 Shore hardness	ISO868	D	76	81	80	75	80
连续运行温度 Long-term application temperature	ITS029	°C	+90	+110	+110	+80	+250
短时运行温度 Short-term application temperature	ITS029	°C	+110	+180	+180	+120	+300
最低运行温度 Lowest application temperature	ITS029	°C	-50	-40	-40	-40	-100
导热性 Thermal conductivity	ISO22007	W/m/K	0.25	0.25	0.25	0.20	0.24
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	11	6	6	10	9
阻燃等级 Flammability	UL94	Class	HB	HB	HB	HB	V0
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>13</sup>	>10 <sup>14</sup>	>10 <sup>14</sup>	>10 <sup>12</sup>	>10 <sup>14</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>12</sup>	>10 <sup>14</sup>	>10 <sup>14</sup>	>10 <sup>12</sup>	>10 <sup>13</sup>

\*ITS: CSB 内部测试标准 CSB company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.

材料性能 Material properties	标准 Standard	单位 Unit	BLR6	BLR7	BLR10	BLR13
颜色 Color	-	-	白色 White	米黄 Cream	黑色 Black	黄色 Yellow
密度 Density	ISO1183	g/cm <sup>3</sup>	1.45	1.25	1.42	1.48
最大吸湿率 Max. moisture absorption, 50%RH	ISO62	%	0.3	1.3	0.1	0.3
最大吸水率 Max. water absorption	ISO62	%	1.2	6.5	0.5	1.3
对钢动摩擦系数 Coefficient of sliding friction(steel)	ITS025	μ	0.05-0.18	0.09-0.20	0.10-0.25	0.05-0.15
极限 PV 值 Max. PV value	ITS026	N/mm <sup>2</sup> ·m/s	0.30	0.50	1.35	0.40
弯曲模量 Flexural modulus	ISO178	MPa	2300	3200	10000	2600
弯曲强度 Flexural strength	ISO178	MPa	60	75	210	60
最大静载荷 Max. static load	ITS027	MPa	35	60	125	35
最大动载荷 Max. dynamic load	ITS028	MPa	14	25	80	14
邵氏硬度 Shore hardness	ISO868	D	74	75	86	74
连续运行温度 Long-term application temperature	ITS029	°C	+80	+90	+250	+90
短时运行温度 Short-term application temperature	ITS029	°C	+120	+180	+315	+120
最低运行温度 Lowest application temperature	ITS029	°C	-40	-40	-100	-50
导热性 Thermal conductivity	ISO22007	W/m/K	0.20	0.24	0.60	0.25
线性热膨胀系数 Coefficient of thermal expansion	ISO11359	K <sup>-1</sup> ×10 <sup>-5</sup>	10	9	5	10
阻燃等级 Flammability	UL94	Class	HB	HB	V0	HB
体电阻率 Volume resistance	IEC60093	Ω·cm	>10 <sup>13</sup>	>10 <sup>13</sup>	>10 <sup>5</sup>	>10 <sup>13</sup>
面电阻率 Surface resistance	IEC60093	Ω	>10 <sup>12</sup>	>10 <sup>12</sup>	>10 <sup>5</sup>	>10 <sup>12</sup>

\*ITS: SAVJS 内部测试标准 SAVJS company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.

# SAVJS-SFR Semi-finished Products

## SAVJS-SFR 耐磨半成品

### M80 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 25mm- $\varnothing$ 100mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+90^{\circ}\text{C}$
- 自润滑、免维护
- 通用性较强
- 适合中高载荷
- 低成本选择
- Continuous working temperature:  $-40/+90^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Suitable for most application
- Suitable for medium and high load operation
- Low cost

### M81 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 15mm- $\varnothing$ 65mm

#### 产品特性 Product features

- 连续使用温度:  $-100/+80^{\circ}\text{C}$
- 自润滑、免维护
- 低摩擦、耐磨损
- 抗冲击、低噪音
- 极低吸水性
- Continuous working temperature:  $-100/+80^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Low friction, anti-wear
- Impact resistance, low noise
- Low water absorption

### M82 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 10mm- $\varnothing$ 100mm

#### 产品特性 Product features

- 连续使用温度:  $-50/+90^{\circ}\text{C}$
- 自润滑、免维护
- 特种润滑耐磨
- 低摩擦系数
- 长寿命
- Continuous working temperature:  $-50/+90^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Special lubricant and wear resistant
- Low friction coefficient
- Long service time

### BLR 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 15mm- $\varnothing$ 65mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+80^{\circ}\text{C}$
- 自润滑、免维护
- 特种润滑耐磨
- 低摩擦系数
- 长寿命
- Continuous working temperature:  $-40/+80^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Special lubricant and wear resistant
- Low friction coefficient
- Long service time



### BLR3M 耐磨棒 Round rods



直径 Diameters: Ø40mm

#### 产品特性 Product features

- 连续使用温度: -40/+80°C
- 自润滑、免维护
- 特种润滑耐磨
- 低摩擦系数
- 长寿命
- Continuous working temperature: -40/+80°C
- Maintenance-free, self-lubricated
- Special lubricant and wear resistant
- Low friction coefficient
- Long service time

### BLR5A 耐磨棒 Round rods



直径 Diameters: Ø10mm-Ø65mm

#### 产品特性 Product features

- 连续使用温度: -100/+250°C
- 适合高载荷低速运用
- 高温下保持较高的承载能力
- 较广泛的化学抗性
- 符合 FDA 等级
- Continuous working temperature: -100/+250°C
- Suitable for high load and lovo speed operation
- High load capacity at higher temperature
- Good chemical resistance
- FDA grade

### BLR6 耐磨棒 Round rods



直径 Diameters: Ø15mm-Ø65mm

#### 产品特性 Product features

- 连续使用温度: -40/+80°C
- 自润滑、免维护
- 极低摩擦系数
- 耐磨性能优越
- FDA 食品安全等级
- Continuous working temperature: -40/+80°C
- Maintenance-free, self-lubricated
- Low friction coefficient
- Good wear resistant
- FDA grade

### BLR7 耐磨棒 Round rods



直径 Diameters: Ø40mm

#### 产品特性 Product features

- 连续使用温度: -40/+90°C
- 自润滑、免维护
- 耐磨性能优越
- 极低摩擦系数
- Continuous working temperature: -40/+90°C
- Maintenance-free, self-lubricated
- Good wear resistant
- Low friction coefficient

# SAVJS-SFR Semi-finished Products

## SAVJS-SFR 耐磨半成品

### BLR10 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 10mm- $\varnothing$ 65mm

#### 产品特性 Product features

- 连续使用温度:  $-100/+250^{\circ}\text{C}$
- 自润滑、免维护
- 非常耐磨长寿命
- 极好的耐腐蚀性
- Continuous working temperature:  $-100/+250^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Good wear resistance with long service life
- Good chemical resistance

### BLR13 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 15mm- $\varnothing$ 80mm

#### 产品特性 Product features

- 连续使用温度:  $-50/+90^{\circ}\text{C}$
- 适合于运行、免维护
- 不同轴材料磨损很小
- 较低的摩擦系数
- 适用于软轴
- 吸水性较低
- Continuous working temperature:  $-50/+90^{\circ}\text{C}$
- Maintenance-free dry operation
- Small wear off amount against various shaft materials
- Lower friction
- Suitable for soft shaft
- Low water absorption

### MN70 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 15mm- $\varnothing$ 65mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+90^{\circ}\text{C}$
- 自润滑、免维护
- 低摩擦系数
- 长寿命
- 符合 FDA 标准
- Continuous working temperature:  $-40/+90^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Low friction coefficient
- Long service time
- FDA grade

### MN71 耐磨棒 Round rods



直径 Diameters:  $\varnothing$ 15mm- $\varnothing$ 80mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+110^{\circ}\text{C}$
- 自润滑、免维护
- 适合在灰尘中运行
- 适合在潮湿环境中运行
- Continuous working temperature:  $-40/+110^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Suitable for operation in dusty environment
- Suitable for working in humid environment

### MN73 耐磨棒 Round rods



直径 Diameters: Ø15mm-Ø150mm

#### 产品特性 Product features

- 连续使用温度: -40/+110°C
- 适合干运行、免维护
- 较低的摩擦系数
- 适合在潮湿环境中运行
- Continuous working temperature: -40/+110°C
- Maintenance-free dry operation
- Low friction coefficient
- Suitable for working in humid environment

### MR4 耐磨棒 Round rods



直径 Diameters: Ø30mm-Ø40mm

#### 产品特性 Product features

- 连续使用温度: -50/+90°C
- 适合干运行、免维护
- 较低的摩擦系数
- 适用于软轴
- 吸水性较低
- 低成本
- Continuous working temperature: -50/+90°C
- Maintenance-free dry operation
- Low friction coefficient
- Suitable for soft shaft
- Low water absorption
- Low cost

### MN70 耐磨板 Anti-wear plates



厚度 Thickness: 8mm-30mm

#### 产品特性 Product features

- 连续使用温度: -40/+90°C
- 自润滑、免维护
- 极低摩擦系数
- 耐磨性能优越
- FDA 食品安全等级
- Continuous working temperature: -40/+90°C
- Maintenance-free, self-lubricated
- Low friction coefficient
- Good wear resistant
- FDA grade

### MN71 耐磨板 Anti-wear plates



厚度 Thickness: 3mm-30mm

#### 产品特性 Product features

- 连续使用温度: -40/+110°C
- 自润滑、免维护
- 适合在灰尘中运行
- 适合在潮湿环境中运行
- Continuous working temperature: -40/+110°C
- Maintenance-free, self-lubricated
- Suitable for operation in dusty environment
- Suitable for working in humid environment

# SAVJS-SFR Semi-finished Products

## SAVJS-SFR 耐磨半成品

### MN73 耐磨板 Anti-wear plates



厚度 Thickness: 8mm-30mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+110^{\circ}\text{C}$
- 适合干运行、免维护
- 较低的摩擦系数
- 适合在潮湿环境中运行
- Continuous working temperature:  $-40/+110^{\circ}\text{C}$
- Maintenance-free dry operation
- Low friction coefficient
- Suitable for working in humid environment

### M80 耐磨板 Anti-wear plates

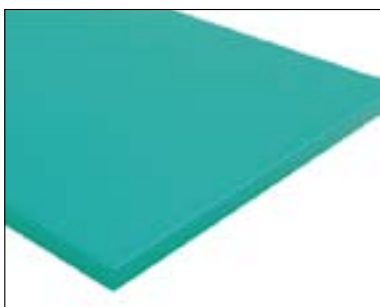


厚度 Thickness: 20mm-40mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+90^{\circ}\text{C}$
- 自润滑、免维护
- 通用性较强
- 适合中高载荷
- 低成本选择
- Continuous working temperature:  $-40/+90^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Suitable for most application
- Suitable for medium and high load operation
- Low cost

### M81 耐磨板 Anti-wear plates



厚度 Thickness: 8mm-40mm

#### 产品特性 Product features

- 连续使用温度:  $-100/+80^{\circ}\text{C}$
- 自润滑、免维护
- 低摩擦、耐磨损
- 抗冲击、低噪音
- 极低吸水性
- Continuous working temperature:  $-100/+80^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Low friction, anti-wear
- Impact resistance, low noise
- Low water absorption

### M83 耐磨板 Anti-wear plates



厚度 Thickness: 10mm-30mm

#### 产品特性 Product features

- 连续使用温度:  $-40/+90^{\circ}\text{C}$
- 自润滑、免维护
- 低摩擦、耐磨损
- 抗冲击、低噪音
- 极小蠕变性
- Continuous working temperature:  $-40/+90^{\circ}\text{C}$
- Maintenance-free, self-lubricated
- Low friction, anti-wear
- Impact resistance, low noise
- Excellent dimensional stability

### BLR5A 耐磨板 Anti-wear plates



厚度 Thickness: 5mm-30mm

#### 产品特性 Product features

- 连续使用温度: -100/+250°C
- 自润滑、免维护
- 非常耐磨长寿命
- 极好的耐腐蚀性
- Continuous working temperature: -100/+250°C
- Maintenance-free, self-lubricated
- Good wear resistance with long service life
- Good chemical resistance

### BLR6 耐磨板 Anti-wear plates



厚度 Thickness: 8mm-30mm

#### 产品特性 Product features

- 连续使用温度: -40/+80°C
- 自润滑、免维护
- 极低摩擦系数
- 耐磨性能优越
- FDA 食品安全等级
- Continuous working temperature: -40/+80°C
- Maintenance-free, self-lubricated
- Low friction coefficient
- Good wear resistant
- FDA grade

### BLR13 耐磨板 Anti-wear plates



厚度 Thickness: 6mm-30mm

#### 产品特性 Product features

- 连续使用温度: -50/+90°C
- 适合干运行、免维护
- 不同轴材料磨损很小
- 较低的摩擦系数
- 适用于软轴
- 吸水性较低
- Continuous working temperature: -50/+90°C
- Maintenance-free dry operation
- Small wear off amount against various shaft materials
- Lower friction
- Suitable for soft shaft
- Low water absorption

### Tribotape® 摩擦带 Tribo-tape liners



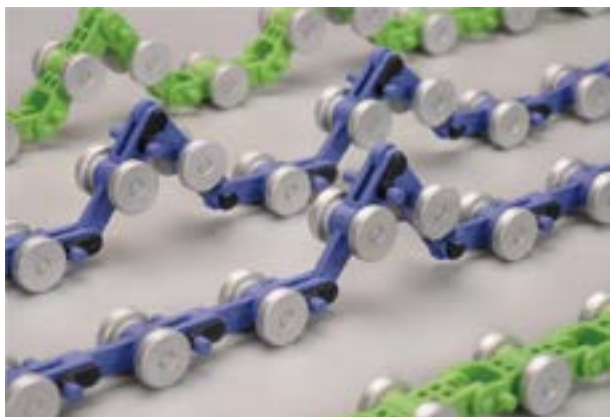
厚度 Thickness: 0.5mm  
宽度 Width: 20mm-100mm

#### 产品特性 Product features

- 连续使用温度: -196/+80°C
- 低摩擦系数
- 可用于水下环境
- 容易切割
- 标准宽度库存
- 宽度从 20 到 100 毫米
- Continuous working temperature: -196/+80°C
- Low coefficients of friction
- Available underwater
- Easy to cut
- Standard width from stock
- Individual widths from 20 to 100 mm

# SAVJS-PER Self-lubricated Rotary Chains

## SAVJS-PER 扶梯端部自润滑回转链



### 滚动轴承回转链 Rolling bearing rotary chains

扶梯回转链一般都是采用滚动轴承设计，扶手带与导轨摩擦产生大量的磨屑和灰尘，这些磨屑和灰尘对滚动轴承的正常工作和寿命造成了严重影响，室外运行滚动轴承还带来因生锈失效的问题，滚动轴承工作一段时间后容易出现噪音加大甚至卡死现象，容易导致扶手带磨损加剧损坏，扶梯运行系统负载增加，影响了电机使用寿命。



The design of the escalator rotary chain is usually with rolling bearings. There are a lot of containment and dust generated between the chain belt and the guide rail during the operation, therefore it induces damages to the rolling bearing and reduces the service life of the bearing and affects the performance of the bearing. Furthermore, outdoor operation of the escalator may cause corrosions to the rolling bearings. Under the above conditions, the rolling bearing in the chain is easy to cause failure of the operation of the chain. It may damage the chain system or consequently damage the driving motor in the escalator system.

### SAVJS-PER自润滑回转链 Self-lubricated rotary chains

SAVJS-PER 自润滑回转链关键转动部位采用了自润滑塑料轴承设计，自润滑塑料轴承由 BLR15 材料制成解决了轴承需要加油维护的问题，而且 BLR15 材料对灰尘有极好的抵抗能力，采用此材料制成的自润滑轴承能在环境非常恶劣的情况下长期正常工作；SAVJS-PER 新型回转链长期平稳低噪音运行成功解决了滚动轴承回转链长期存在的噪音和滚动轴承容易卡死的缺陷；SAVJS-PER 回转链上的金属部件均采用了特殊的表面处理技术可以确保在户外长期平稳运行。



The rotation parts of SAVJS-PER series rotary chain are with self-lubricated plastic bearings, the material SAVJS-BLR15 used in the plastic bearings provides maintenance free feature of the chain system and with the anti-dust and anti-corrosion feature of the bearing material, the chain system could be free to operate under critical conditions. The long term stable operation with low noise design of SAVJS-PER chain prevent the chain system from stuck and operation failure comparing with the traditional rolling bearing design. The metal parts of the SAVJS-PER chain are specially treated for the long term outdoor operation.



### 产品特性 Product features

SAVJS-FWR 材料以高强度玻璃纤维增强高温环氧树脂作为承载层，以特种纤维和 PTFE 纤维作为滑动层，使得轴承在高载低速工况条件下具有优良的耐磨性和很低的摩擦系数，甚至可以在长时间不加油的情况下仍能发挥良好的自润滑特性和很高的轴承比压。由此我们开发了可以适合不同工况下的多种自润材料。

The back material of SAVJS-FWR materials is high strength glass fiber with epoxy resin and the lubricating layer of it is PTFE wound fiber or special lubricating fiber. Therefore, this special structure performs an outstanding anti-wear feature and low friction coefficient under high load and low speed condition. Furthermore, this absolutely new idea gives better solution for high load and excellent wear resistance possibility.

### Tribotape® 摩擦带 Tribo-tape liners

- 极高的动承载能力，最高 140Mpa；
- 优秀的耐磨性能；
- 极低的摩擦系数，摩擦系数 <0.12；
- 长期干运行，不推荐加油。

- Very high load capacity, Max. 140Mpa;
- Very good chemical resistance;
- Lower friction and good wear properties. Friction coefficient <0.12;
- Long time dry operation without oil.

### 技术数据表 Technical data table

材料性能 Material properties	标准 Standard	单位 Unit							
			CRM	CRB	CRG	CRH	CRP	CRW	CRF
密度 Density	ISO1183	g/cm <sup>3</sup>	1.95	1.95	1.95	1.95	1.95	1.95	1.30
最大吸水率 Max. water absorption	ISO62	%	0.1	0.1	0.1	0.1	0.1	0.1	0.5
极限 PV 值 Max. PV (dry)	ITS026	N/mm <sup>2</sup> ·m/s	1.8	1.8	2.0	2.0	1.6	1.8	1.2
摩擦系数 Coefficient of friction	ITS025	μ	0.05~0.15	0.03~0.12	0.03~0.12	0.05~0.15	0.02~0.12	0.02 ~ 0.10	0.08~0.30
连续运行温度 Long-term application temperature	ITS029	°C	+160	+160	+160	+200	+160	+100	+130
短时运行温度 Short-term application temperature	ITS029	°C	+180	+180	+180	+260	+180	+160	+160
最低运行温度 Lowest application temperature	ITS029	°C	-100	-100	-100	-100	-100	-100	-40
最高速度 Max. Speed	ITS032	m/s	0.20	0.20	0.20	0.16	0.40	0.40	0.13
抗压强度 Compressive strength	ITS033	MPa	420	420	420	620	420	420	300
最大静载荷 Max. static load	ITS027	MPa	240	240	240	420	240	240	150
最大动载荷 Max. dynamic load	ITS028	MPa	120	140	160	160	30	120	45
邵氏硬度 Shore hardness	ISO868	D	95	95	95	95	95	95	90
线性热膨胀系数 (25 ~ 150°C) Linear coef. of thermal Expansion	ISO11359	10 <sup>-6</sup> ·K <sup>-1</sup>	13	13	13	13	13	13	40

\*ITS: CSB 内部测试标准 CSB company's internal test standards.

\*\* 除非特殊说明测试温度为 23°C Test temperatures are 23°C unless otherwise stated.

**WWW.SAVI.LTD**

**<http://www.savi.ltd>**

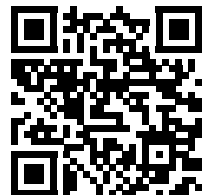


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