

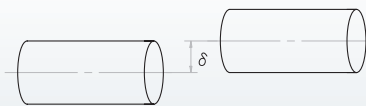
# Micro Coupling

## Micro Coupling

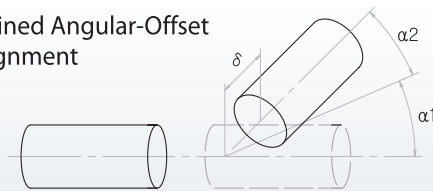
### Alignment Adjustment

- ① Flexible coupling can transmit torque and rotation angle while allowing misalignment. When the misalignment gets higher than limit, vibration may occur and the life of coupling may be reduced. Make sure to adjust the alignment accordingly
- ② There are three types of shaft misalignments such as eccentricity (error in parallel alignment), angularity (error in angular alignment) and end-play (shift axle direction). Adjust the alignment to be lower than limit listed in the specification table of each product provided in this catalog.
- ③ The limit of misalignment recorded in this catalog is for one misalignment for eccentricity, angularity and end-play. When there are more than 2 misalignments, we recommend you to apply 1/2 of misalignment limit
- ④ Misalignments are sometimes caused not only by equipment assembly but also by vibration, heat expansion, wear of bearings and so forth during operation. Therefore, it is recommended to adjust the shaft misalignment to be below 1/3 of maximum limit.

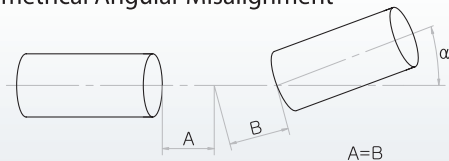
#### ■ Parallel Offset Misalignment



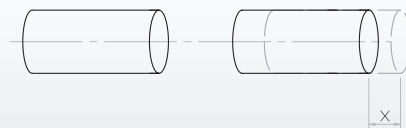
#### ■ Combined Angular-Offset Misalignment



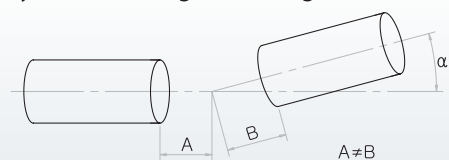
#### ■ Symmetrical Angular Misalignment



#### ■ End-Play



#### ■ Non-Symmetrical Angular Misalignment



#### ■ Run Out



### Adjustment of Torque according to Temperature

SOH, SFC, SJC, SGF use polyurethane, polyacetal or plastic parts or Anti-Vibration Rubber. These models must be used in the operational temperature indicated in this catalog.

When ambient temperature exceeds 30°..., maximum torque and rated torque should be checked by the correction value chart beside.

Category Temperature	Correction Value
-20℃ ~ 30℃	1.0
30℃ ~ 40℃	0.8
40℃ ~ 60℃	0.6
60℃ ~ 100℃	0.5

### Cautions

- Misalignment exceeding maximum limit and excessive torque may result in shorter life of coupling due to plastic deformation.
- Stop machine operation at once when there is abnormal metallic noise, and proceed to check shaft misalignment, disturbance in shaft rotation, loosen screw and so forth
- When used at rotation machine with significant load fluctuation, apply adhesive on screw to prevent loosening or select a size on higher rank.
- Max Torque is thing that can transfer torque momentarily.
- Rated Torque is thing that can transfer torque continuously.

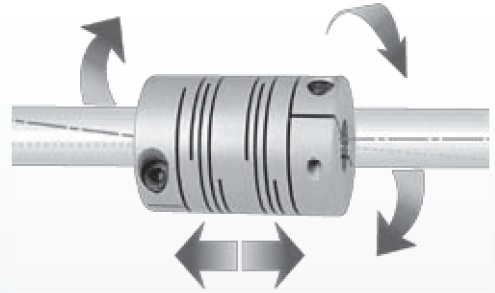
# SRB Series

## Micro Radial Beam Flexible Coupling

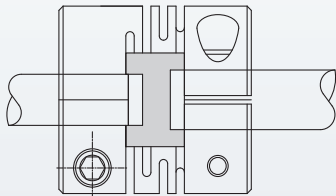
This Product is radial beam type flexible coupling that is made of high strength aluminum alloy (Al7075-T6) and one-piece structure.

### Features

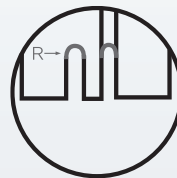
- Zero backlash
- Complete absorption of eccentricity, angularity, and end-play by spring action of radial beam structure.
- High strength aluminum alloy (Al 7075-T6) makes high torsion rigidity and torque, and products are available in aluminum alloy and stainless steel.
- It can be used in high RPM by accurate concentricity and low inertia moment.
- Regular direction and reverse direction are identical and no repair is necessary.
- Excellent durability and oil and chemical resistance.



※ Registration of Design 0237181



• It is easy to assembly by processing widely the inside of coupling



The end part of slit of all Sungil Radial Beam Coupling is machined by round(R). So Stress of flexure of SI SRB is maximized and damage of at the misalignment moment is minimized.

-Registration of Design-

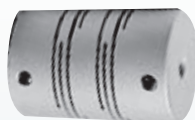
(※ No machined by round(R) is not SI Product)

### Structure & Material

#### SRB Type



Clamp Type



Set Screw Type

Type	SRB-□□	SRB-□□C	SRBS-□□	SRBS-□□C
Fastening Type	Set Screw	Clamp	Set Screw	Clamp
Material	High strength aluminum alloy (Al 7075-T6)		Stainless Steel	
Surface Treatment	Alumite		-	

#### SRBM Type



Clamp Type



Set Screw Type

Type	SRBM-□□	SRBM-□□C	SRBMS-□□C
Fastening Type	Set Screw	Clamp	Clamp
Material	High strength aluminum alloy (Al 7075-T6)		Stainless Steel
Surface Treatment	Alumite		-

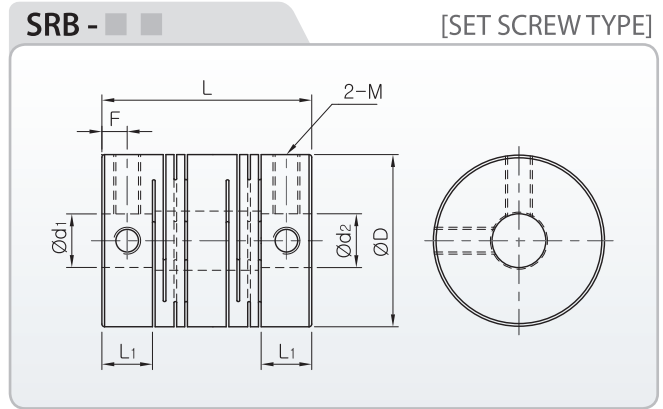
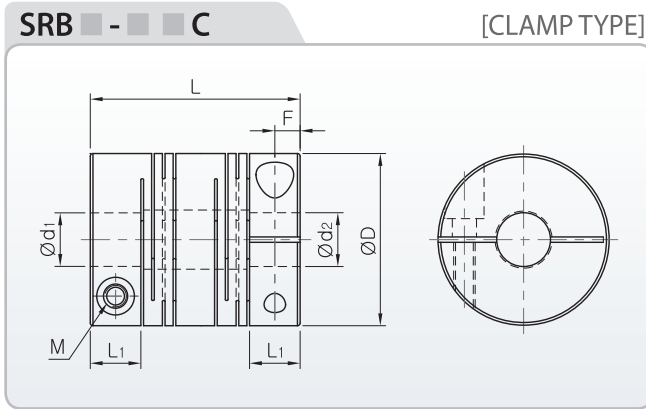
### How to order product



※ Please mark each inner diameter size.

# SRB Series

## Micro Radial Beam Flexible Coupling



### Standards & Performance

※ Material : High strength aluminum alloy (Al 7075-T6)

Product Number	Dimension (±0.3)				Fastening Bolt M	Fastening Torque (N·m)	Max-RPM (min <sup>-1</sup> )	Max Torque (N·m)	Rated Torque (N·m)	Torsional Stiffness (N·m/rad)	Moment of Inertia (kg·m <sup>2</sup> )	Mass (g)	Errors of Misalignment		
	D	L	L <sub>1</sub>	F									Angle (°)	Parallel (mm)	End-Play (mm)
SRB-12C	12.7	19	5	2.5	M2	0.5	12,000	0.4	0.2	36	8.8×10 <sup>-8</sup>	3.8	2.5	0.1	±0.3
SRB-16C	16	21.5	6.1	3	M2.6	1	10,000	0.8	0.4	65	3.1×10 <sup>-7</sup>	8.5	2.5	0.15	±0.3
SRB-19C	19.1	23	6.1	3	M2.6	1	8,000	1.2	0.6	140	6.4×10 <sup>-7</sup>	12	2.5	0.15	±0.3
SRB-22C	22.2	26.5	7.2	3.6	M3	1.7	7,000	2.0	1.0	170	1.4×10 <sup>-6</sup>	19	2.5	0.15	±0.4
SRB-26C	26.2	31.4	7.4	3.7	M3	1.7	6,000	3.0	1.5	240	3.4×10 <sup>-6</sup>	33	2.5	0.2	±0.4
SRBA-32C	31.8	39	9.4	4.7	M4	3.5	5,000	5.2	2.6	400	1.0×10 <sup>-6</sup>	60	2.5	0.2	±0.4
SRBB-32C	31.8	44	9.4	4.7	M4	3.5	5,000	5.2	2.6	380	1.0×10 <sup>-5</sup>	68	2.5	0.2	±0.4
SRBA-39C	39	43	10.8	5.4	M5	8	4,000	13	6.5	520	2.1×10 <sup>-5</sup>	95	2.5	0.25	±0.4
SRBB-39C	39	56	12	6	M5	8	4,000	13	6.5	460	3.1×10 <sup>-5</sup>	135	2.5	0.25	±0.4
SRBA-49C	49	63.5	15	7.5	M6	13	3,300	26	13	740	9.4×10 <sup>-5</sup>	260	2.5	0.25	±0.5
SRBB-49C	49	70	15	7.5	M6	13	3,300	26	13	740	1.0×10 <sup>-4</sup>	270	2.5	0.25	±0.5
SRBA-60C	60	76.2	19	9.35	M8	30	2,600	48	24	1,000	2.5×10 <sup>-4</sup>	440	2.5	0.25	±0.5
SRBB-60C	60	88	19	9.35	M8	30	2,600	48	24	980	3.0×10 <sup>-4</sup>	520	2.5	0.3	±0.5
SRB-12	12.7	18	4.5	2.2	M2.5	0.5	28,000	0.4	0.2	36	8.8×10 <sup>-8</sup>	3.6	2.5	0.1	±0.3
SRB-16	16	18.5	4.6	2.3	M3	0.7	24,000	0.8	0.4	65	2.8×10 <sup>-7</sup>	7.8	2.5	0.15	±0.3
SRB-19	19.1	22	5.7	2.8	M3	0.7	20,000	1.2	0.6	140	6.4×10 <sup>-7</sup>	12	2.5	0.15	±0.3
SRB-22	22.2	25	6.5	3.2	M4	1.7	17,000	2.0	1.0	170	1.4×10 <sup>-6</sup>	19	2.5	0.15	±0.4
SRB-26	26.2	30	6.8	3.4	M4	1.7	15,000	3.0	1.5	240	3.4×10 <sup>-6</sup>	33	2.5	0.2	±0.4
SRB-32	31.8	39	9.4	4.7	M5	4	12,000	5.2	2.6	400	9.4×10 <sup>-6</sup>	62	2.5	0.2	±0.4
SRB-39	39	56	16	6	M5	4	9,500	13	6.5	460	2.8×10 <sup>-5</sup>	124	2.5	0.25	±0.4
SRB-49	49	70	20	9.5	M6	7	7,000	26	13	740	1.1×10 <sup>-4</sup>	280	2.5	0.25	±0.5
SRB-60	60	88	19	9	M8	15	6,000	48	24	980	3.0×10 <sup>-4</sup>	500	2.5	0.3	±0.5

### Standard Inner diameter

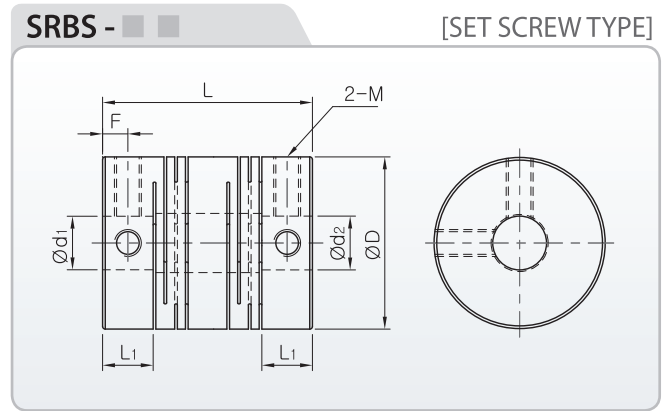
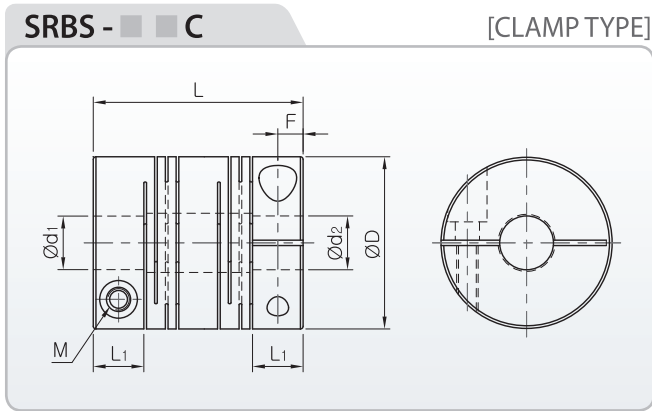
Product Number	Standard Inner diameter (d <sub>1</sub> , d <sub>2</sub> ) Standard INNER Diameter (mm)																			
	ø2	ø3	ø4	ø5	ø6	ø6.35	ø8	ø9.525	ø10	ø11	ø12	ø14	ø15	ø16	ø18	ø19	ø20	ø22	ø24	ø25
SRB-12□		●	●	●																
SRB-16□		●	●	●	●															
SRB-19□			●	●	●	●	●													
SRB-22□				●	●	●	●	●	●											
SRB-26□				●	●	●	●	●	●	●										
SRB□-32□							●	●	●	●	●									
SRB□-39□								●	●	●	●	●	●							
SRB□-49□									●	●	●	●	●	●	●	●	●			
SRB□-60□											●	●	●	●	●	●	●	●	●	●

■ INNER diameter INCH type is also available  
 ■ We recommend that tolerance of shaft is H7.

■ Non standard inner diameter product is also available

■ KEY TYPE is also available

# SRB Series Micro Radial Beam Flexible Coupling



## Standards & Performance

※ Material : Stainless

Product Number	Dimension ( $\pm 0.3$ )				Fastening Bolt M	Fastening Torque (N · m)	Max-RPM ( $\text{min}^{-1}$ )	Max Torque (N · m)	Rated Torque (N · m)	Torsional Stiffness (N · m/rad)	Moment of Inertia ( $\text{kg} \cdot \text{m}^2$ )	Mass (g)	Errors of Misalignment		
	D	L	L <sub>1</sub>	F									Angle (°)	Parallel (mm)	End-Play (mm)
SRBS-12C	12.7	19	5	2.5	M2	0.5	12,000	0.6	0.3	65	$3.0 \times 10^{-7}$	13	2.5	0.1	$\pm 0.3$
SRBS-16C	16	21.5	6.1	3	M2.6	1	10,000	1	0.5	85	$9.0 \times 10^{-7}$	26	2.5	0.15	$\pm 0.3$
SRBS-19C	19.1	23	6.1	3	M2.6	1	8,000	1.8	0.9	230	$1.7 \times 10^{-6}$	32	2.5	0.15	$\pm 0.3$
SRBS-22C	22.2	26.5	7.2	3.6	M3	1.5	7,000	3.2	1.6	290	$3.0 \times 10^{-6}$	43	2.5	0.15	$\pm 0.4$
SRBS-26C	26.2	31.4	7.4	3.7	M3	1.5	6,000	4.2	2.1	350	$8.6 \times 10^{-6}$	84	2.5	0.2	$\pm 0.4$
SRBS-32C	31.8	39	9.4	4.7	M4	2.5	5,000	7	3.5	840	$2.5 \times 10^{-5}$	160	2.5	0.2	$\pm 0.4$
SRBAS-39C	39	43	10.8	5.4	M5	4	4,000	16	8	1,200	$4.0 \times 10^{-5}$	280	2.5	0.25	$\pm 0.4$
SRBBS-39C	39	56	12	6	M5	4	4,000	16	8	1,000	$8.6 \times 10^{-5}$	360	2.5	0.25	$\pm 0.4$
SRBAS-49C	49	63.5	15	7.5	M6	8	3,300	32	16	1,600	$2.7 \times 10^{-4}$	710	2.5	0.25	$\pm 0.5$
SRBBS-49C	49	70	15	7.5	M6	8	3,300	32	16	1,400	$2.8 \times 10^{-4}$	740	2.5	0.25	$\pm 0.5$
SRBAS-60C	60	76.2	19	9.35	M8	16	2600	60	30	2100	$7.2 \times 10^{-4}$	1150	2.5	0.25	$\pm 0.5$
SRBBS-60C	60	88	19	9.35	M8	16	2600	60	30	2050	$8.6 \times 10^{-4}$	1370	2.5	0.3	$\pm 0.5$
SRBS-12	12.7	18	4.5	2.2	M2.5	0.5	28,000	0.6	0.3	65	$3.0 \times 10^{-8}$	13	2.5	0.1	$\pm 0.3$
SRBS-16	16	18.5	4.6	2.3	M3	0.7	24,000	1	0.5	85	$8.4 \times 10^{-7}$	21	2.5	0.15	$\pm 0.3$
SRBS-19	19.1	22	5.7	2.8	M3	0.7	20,000	1.8	0.9	230	$1.7 \times 10^{-7}$	32	2.5	0.15	$\pm 0.3$
SRBS-22	22.2	25	6.5	3.2	M4	1.5	17,000	3.2	1.6	290	$3.0 \times 10^{-6}$	43	2.5	0.15	$\pm 0.4$
SRBS-26	26.2	30	6.8	3.4	M4	1.5	15,000	4.2	2.1	350	$8.6 \times 10^{-6}$	84	2.5	0.2	$\pm 0.4$
SRBS-32	31.8	39	9.4	4.7	M5	2	12,000	7	3.5	840	$2.5 \times 10^{-6}$	160	2.5	0.2	$\pm 0.4$
SRBS-39	39	56	16	6	M5	2	9,500	16	8	1,000	$8.4 \times 10^{-5}$	350	2.5	0.25	$\pm 0.4$
SRBS-49	49	70	20	9.5	M6	4	7,000	32	16	1,400	$2.8 \times 10^{-4}$	740	2.5	0.25	$\pm 0.5$
SRBS-60	60	88	19	9	M8	8	6000	60	30	1800	$8.6 \times 10^{-4}$	1370	2.5	0.3	$\pm 0.5$

\* Please contact us about lead time of SRB-60 Series

## Standard Inner diameter

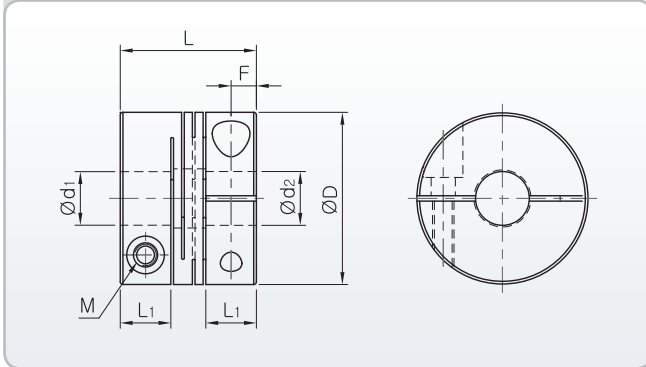
Product Number	Standard Inner diameter (d <sub>1</sub> , d <sub>2</sub> ) Standard INNER Diameter (mm)							
SRBS-12□	3×3	3×4	4×4	4×5	4.5×5	5×5		
SRBS-16□	3×3	4×4	4×5	4×6	4.5×5	4.5×6	5×5	5×6
	6×6							
SRBS-19□	4×4	4×5	5×5	5×6	5×8	6×6	6×6.35	6×8
	6.35×8	8×8						
SRBS-22□	5×5	5×6	6×6	6×6.35	6×8	6×10	6.35×8	6.35×10
	8×8	8×9.525	8×10	10×10				
SRBS-26□	5×5	6×6	6×6.35	6×8	6×10	6.35×8	6.35×10	8×8
	8×9.525	8×10	10×10	10×12	12×12			
SRBS-32□	6×6	6×8	6×10	6.35×8	8×8	8×9.525	8×10	8×12
	10×10	10×12	10×14	12×12	12×14	14×14	15×15	
SRB□S-39□	8×8	10×10	10×12	10×14	12×12	14×14	15×15	16×16
SRB□S-49□	12×14	14×14	14×16	15×15	16×16	18×18	20×20	
SRB□S-60□	15×15	16×16	18×18	20×20	22×22	24×24	25×25	

# SRB Series

## Micro Radial Beam Flexible Coupling

### SRBM(S) - ■ ■ C

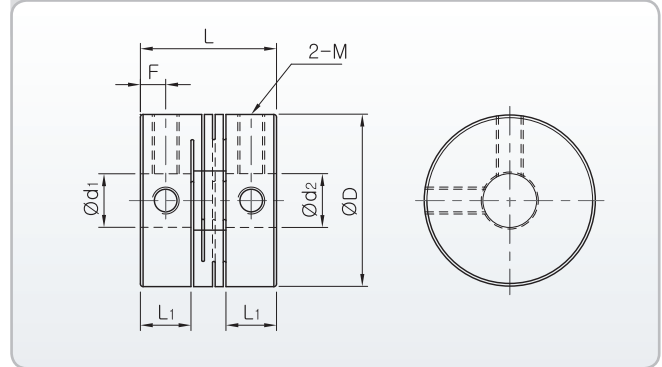
[CLAMP TYPE]



※ Material : High strength aluminum alloy (Al 7075-T6), Stainless

### SRBM - ■ ■

[SET SCREW TYPE]



※ Material : High strength aluminum alloy (Al 7075-T6)

### Standards & Performance

Product Number	Dimension (±0,3)				Fastening Bolt M	Fastening Torque (N·m)	Max-RPM (min <sup>-1</sup> )	Max Torque (N·m)	Rated Torque (N·m)	Torsional Stiffness (N·m/rad)	Moment of Inertia (kg·m <sup>2</sup> )	Mass (g)	Errors of Misalignment		
	D	L	L <sub>1</sub>	F									Angle (°)	Parallel (mm)	End-Play (mm)
SRBM-12C	12,7	14	5	2,5	M2	0,5	20,000	0,4	0,2	60	7,4×10 <sup>-8</sup>	3,2	1	0	0,15
SRBM-16C	16	16	6	3,0	M2,6	1	20,000	0,8	0,4	130	2,9×10 <sup>-7</sup>	8,0	1	0	0,15
SRBM-19C	19,1	17	6,3	3,1	M2,6	1	19,000	1,2	0,6	160	5,0×10 <sup>-7</sup>	10	1	0	0,15
SRBM-22C	22,2	20	7,4	3,7	M3	1,7	17,000	2,0	1,0	180	1,1×10 <sup>-6</sup>	15	1	0	0,15
SRBM-26C	26,2	23	8,4	4,2	M3	1,7	15,000	3,0	1,5	480	2,5×10 <sup>-6</sup>	25	1	0	0,15
SRBM-32C	31,8	30	11	5,5	M4	3,5	10,000	5,2	2,6	780	7,5×10 <sup>-6</sup>	50	1	0	0,15
SRBMS-12C	12,7	14	5	2,5	M2	0,5	20,000	0,6	0,3	120	2,4×10 <sup>-7</sup>	10	1	0	0,15
SRBMS-16C	16	16	6	3,0	M2,6	1	20,000	1,0	0,5	240	7,0×10 <sup>-7</sup>	20	1	0	0,15
SRBMS-19C	19,1	17	6,3	3,1	M2,6	1	19,000	1,8	0,9	300	1,5×10 <sup>-6</sup>	32	1	0	0,15
SRBMS-22C	22,2	20	7,4	3,7	M3	1,5	17,000	3,2	1,6	350	3,1×10 <sup>-6</sup>	42	1	0	0,15
SRBMS-26C	26,2	23	8,4	4,2	M3	1,5	15,000	4,2	2,1	720	7,2×10 <sup>-6</sup>	70	1	0	0,15
SRBMS-32C	31,8	30	11	5,5	M4	2,5	10,000	7,0	3,5	1,300	2,0×10 <sup>-5</sup>	140	1	0	0,15
SRBM-12	12,7	13	4,5	2,2	M2,5	0,5	28,000	0,4	0,2	60	7,4×10 <sup>-8</sup>	3,2	1	0	0,15
SRBM-16	16	14	5,0	2,5	M3	0,7	24,000	0,8	0,4	130	2,9×10 <sup>-7</sup>	8,0	1	0	0,15
SRBM-19	19,1	17	6,3	3,1	M3	0,7	22,000	1,2	0,6	160	5,0×10 <sup>-7</sup>	10	1	0	0,15
SRBM-22	22,2	19	6,9	3,4	M4	1,7	19,000	2,0	1,0	180	1,1×10 <sup>-6</sup>	15	1	0	0,15
SRBM-26	26,2	22	7,9	3,9	M4	1,7	18,000	3,6	1,5	480	2,5×10 <sup>-6</sup>	25	1	0	0,15
SRBM-32	31,8	29	10,5	5,2	M5	4	12,000	5,2	2,6	780	7,5×10 <sup>-6</sup>	50	1	0	0,15

\* Please contact us about set screw type of SRBMS.

### Standard Inner diameter

Product Number	Standard Inner diameter (d <sub>1</sub> , d <sub>2</sub> ) Standard INNER Diameter (mm)												
	ø2	ø3	ø4	ø5	ø6	ø6,35	ø8	ø9,525	ø10	ø11	ø12	ø14	ø15
SRBM(S)-12□		●	●	●									
SRBM(S)-16□		●	●	●	●								
SRBM(S)-19□			●	●	●	●	●						
SRBM(S)-22□				●	●	●	●	●	●				
SRBM(S)-26□				●	●	●	●	●	●	●	●		
SRBM(S)-32□					●	●	●	●	●	●	●	●	●

■ INNER diameter INCH type is also available  
 ■ We recommend that tolerance of shaft is H7.

■ Non standard inner diameter product is also available

■ KEY TYPE is also available