



Linear Bushings

Technical Data / Asia type Ball Bushing / Europe type Ball Bushing /
Compact type Ball Bushing / Option

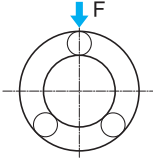
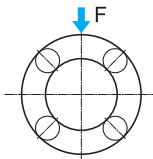
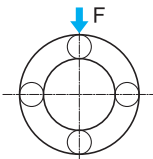
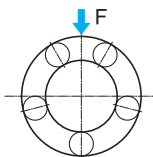
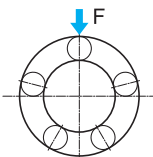
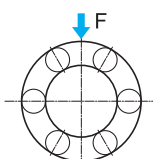
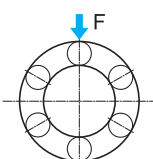
SBC Linear Bushing Systems

Linear Bushing systems are a combination of a Ball Bushing (s) and LM shaft to perform infinite straight motion guiding. The permissible load rating of bushing systems are not as great as SBC profiled rail systems however they are a good, lower cost alternative where precise linear guidance is desired in light load applications.



Load Rating

The load rating of the linear bushing is dependent on the position of balls and relative to the load direction. The table below shows the load rating relative to orientation.

Rows of balls	Ball position	
	Maximum Load	Minimum Load
3 rows	-	 $F = C$
4 rows	 $F = 1.41C$	 $F = C$
5 rows	 $F = 1.46C$	 $F = C$
6 rows	 $F = 1.26C$	 $F = C$

[Basic dynamic load rating : C(N)]
The basic dynamic load rating is the load that the bearing can sustain for a rated life of 50km. This is based on a group of identical bearings under identical conditions with 90% lasting past the rated life.

[Basic static load rating : Co(N)]
The basic static load rating is the maximum load that the bearing can sustain before the raceway sustains permanent deformation of equal to 1/10,000 the diameter of the ball.

Static Safety Factors : f_s

The suggested Static Safety Factors are shown in the table below and are functions of the duty cycle and the loading conditions. These are guidelines for proper size selection .

$$f_s = \frac{C_o}{P}$$

(Radial Load)

- C_o : Basic dynamic load rating
- P : Calculated load

(Table, Static Safety Factor)

Operating Condition	Load Conditions	f_s
Occasional operating	Small impact	1.0 ~ 1.3
	Impact or Twisting load	2.0 ~ 3.0
Ordinary operating	Normal load	1.0 ~ 1.5
	Impact or Twisting load	2.5 ~ 7.0

Calculating the Applied Loads

Loads exerted on a linear bushing vary according to direction. It is important to consider the conditions before selecting the type of linear bushing. Refer to example when calculating the loads.

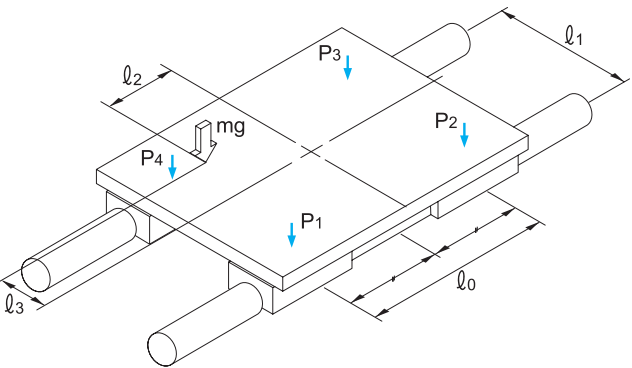
[Applied Load]

- m (kg) : Applied Load
- l_n (mm) : Distance
- P_n (N) : Radial Load
- P_{nT} (N) : Lateral Load
- g (m/s²) : Gravitational Acceleration (= 9.8m/s²)
- V (m/s) : Velocity
- a_n (m/s²) : Acceleration and deceleration

Linear Bushings

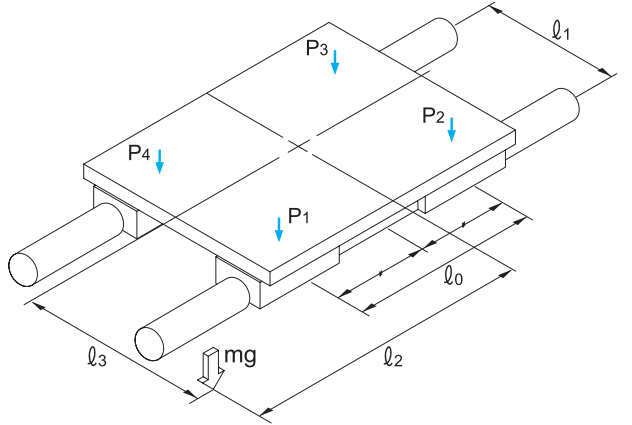
Technical Data

Condition 1 Horizontal axis



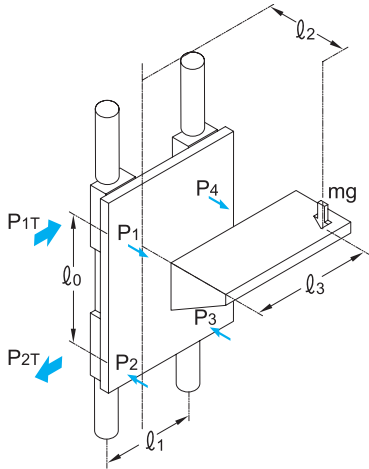
$$\begin{aligned} P_1 &= \frac{mg}{4} + \frac{mg \cdot l_2}{2 \cdot l_0} - \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_2 &= \frac{mg}{4} - \frac{mg \cdot l_2}{2 \cdot l_0} - \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_3 &= \frac{mg}{4} - \frac{mg \cdot l_2}{2 \cdot l_0} + \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_4 &= \frac{mg}{4} + \frac{mg \cdot l_2}{2 \cdot l_0} + \frac{mg \cdot l_3}{2 \cdot l_1} \end{aligned}$$

Condition 2 Overhang Horizontal axis



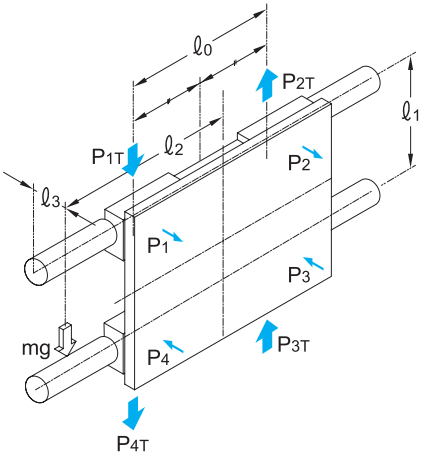
$$\begin{aligned} P_1 &= \frac{mg}{4} + \frac{mg \cdot l_2}{2 \cdot l_0} + \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_2 &= \frac{mg}{4} - \frac{mg \cdot l_2}{2 \cdot l_0} + \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_3 &= \frac{mg}{4} - \frac{mg \cdot l_2}{2 \cdot l_0} - \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_4 &= \frac{mg}{4} + \frac{mg \cdot l_2}{2 \cdot l_0} - \frac{mg \cdot l_3}{2 \cdot l_1} \end{aligned}$$

Condition 3 Vertical axis



$$\begin{aligned} P_1 - P_4 &= \frac{mg \cdot l_2}{2 \cdot l_0} \\ P_{1T} - P_{4T} &= \frac{mg \cdot l_3}{2 \cdot l_0} \end{aligned}$$

Condition 4 Attach on the wall



$$\begin{aligned} P_1 - P_4 &= \frac{mg \cdot l_3}{2 \cdot l_1} \\ P_{1T} - P_{4T} &= \frac{mg}{4} + \frac{mg \cdot l_2}{2 \cdot l_0} \\ P_{2T} - P_{3T} &= \frac{mg}{4} - \frac{mg \cdot l_2}{2 \cdot l_0} \end{aligned}$$

Mean Load

Loads acting on the Linear bushing vary according to various conditions. All load conditions must be taken into consideration in order to calculate the linear bushing.

[Calculating the mean load]

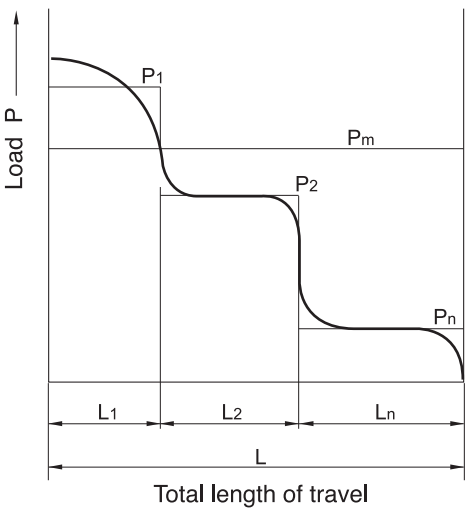
P_m : Mean load (N)
 P_n : Varying load (N)
 L : Total length of travel (mm)
 L_n : Length of travel carrying P_n (mm)

$$P_m = \sqrt[3]{\frac{1}{L} \cdot \sum_{m=1}^n (P_n^3 \cdot L_n)}$$

1) Step loads

$$P_m = \sqrt[3]{\frac{1}{L} (P_1^3 \cdot L_1 + P_2^3 \cdot L_2 + \dots + P_n^3 \cdot L_n)} \dots (1)$$

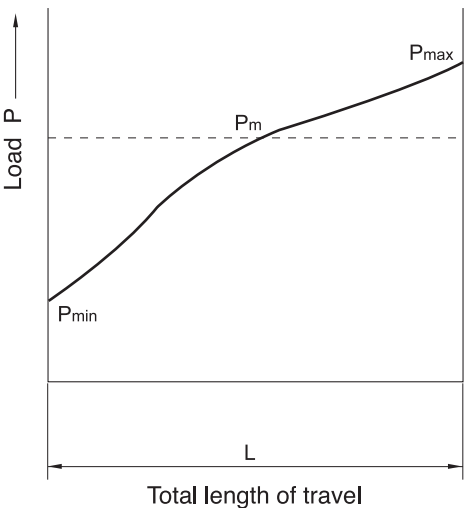
P_m : Mean load (N)
 P_n : Varying load (N)
 L : Total length of travel (mm)
 L_n : Length of travel carrying P_n (mm)



2) Loads that vary linearly

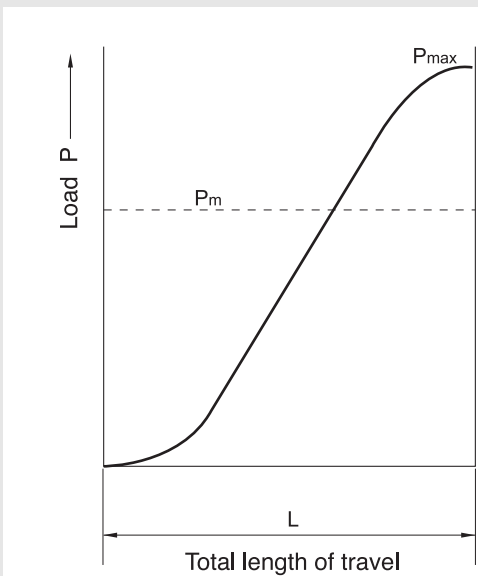
$$P_m \doteq \frac{1}{3} (P_{min} + 2 \cdot P_{max}) \dots (2)$$

P_{min} : Minimum load (N)
 P_{max} : Maximum load (N)

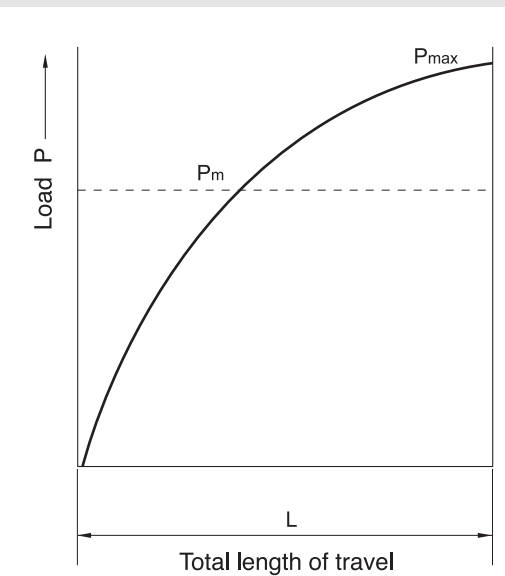


3) Loads varying sinusoidally

a) $P_m \doteq 0.65 P_{max} \dots (3)$



b) $P_m \doteq 0.75 P_{max} \dots (4)$



Nominal Life

The equation of nominal life for linear Ball bush is shown as below.

[Calculating the Nominal Life]

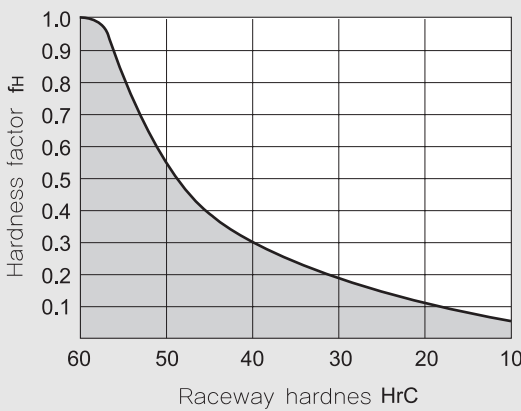
$$L = \left(\frac{f_H \cdot f_T \cdot f_C}{f_W} \cdot \frac{C}{P_C} \right)^3 \times 50$$

- L (km) : Nominal life
- P_C(N) : Calculated load
- C (N) : Basic dynamic load rating
- f_H : Hardness factor
- f_T : Temperature factor
- f_C : Contact factor
- f_W : Load factor

Hardness factor (f_H)

The hardness should be between HrC58~62. If the hardness is lower than this range, the basic rated load decreases per the table below.

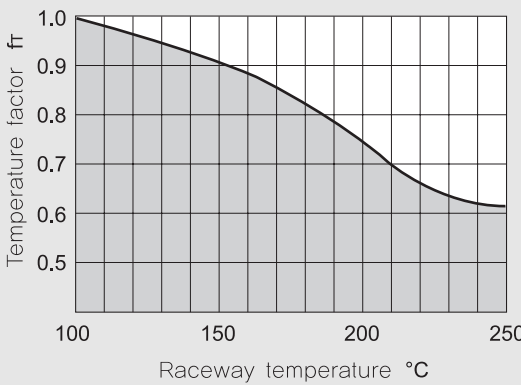
※ When the hardness is enough, normally f_H=1.0



Temperature factor (f_T)

For environments in excess of 100°C the permissible load is reduced by using the Temperature correction factor (f_T) from the adjacent table.

- ※ Under 80°C, f_T=1.0
- ※ Contact SBC, if the environment temperature exceeds 80°C



Contact factor (f_C)

When using Linear bushing in close contact with each other, multiply contact factor.

Number of blocks in close contact	Contact factor f _C
2	0.81
3	0.72
4	0.66
5	0.61
6 or more	0.6
Normal condition	1.0

Load factor (f_W)

Generally reciprocating machines are inclined to involve vibrations and impact. Use the adjacent to factor in effect of vibration Introduced by system speed.

Vibration and Impact	Velocity (V)	Load factor f _W
Very slight	Very low V ≤ 0.25m/s	1 ~ 1.2
Slight	Low 0.25 < V ≤ 1.0m/s	1.2 ~ 1.5
Moderate	Medium 1.0 < V ≤ 2.0m/s	1.5 ~ 2.0
Strong	High V < 2.0m/s	2.0 ~ 3.5

Calculating the Service Life time

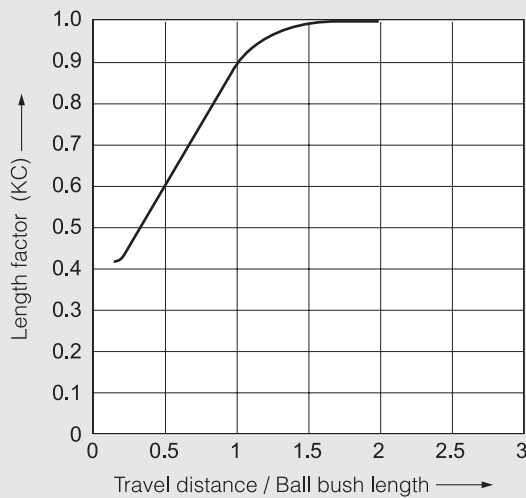
When the nominal travel life has been calculated and the stroke and the number of cycles per minute are known, the service life (h) can be calculated using the equation below.

- L_h (h) : Service life time
- L (km) : Nominal life
- l_s (mm) : Stroke length
- n_1 (min^{-1}) : Number of reciprocations per minute

$$L_h = \frac{L \times 10^6}{2 \times l_s \times n_1 \times 60}$$

[Short Distance]

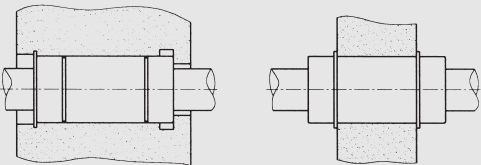
For short stroke applications, where the Bushing travels less than 1 x the bushing length Under above condition, the basic dynamic load is proportionate to length factor (Kc)



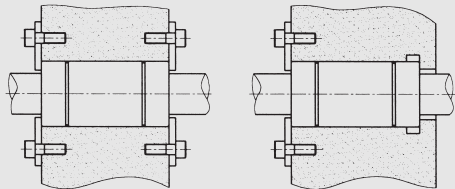
Installing the Linear Bushing

[Method: Cylindrical linear bushing]
Snap ring and end plate method of installation

(1) Snap Ring

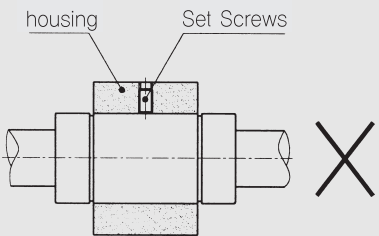


(2) End Plate



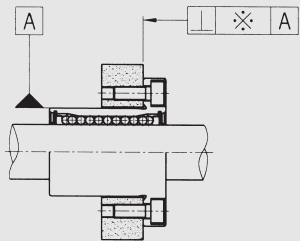
(3) Precautions

- Avoid using force interference fit as it creates risk to the bushing and isn't safe
- Set Screws Not allowed. It will cause the housing to be deformed.

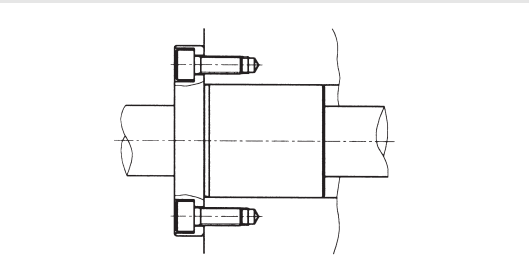


[Method : Flanged Type]

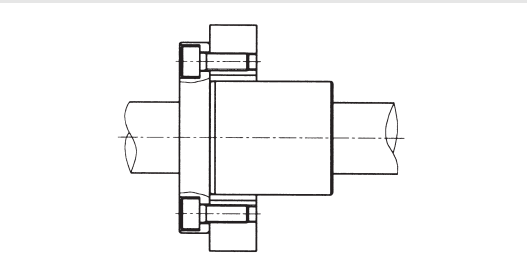
Flange type linear bushing require perpendicular surfaces to reduce risk of damaging bushing housing.



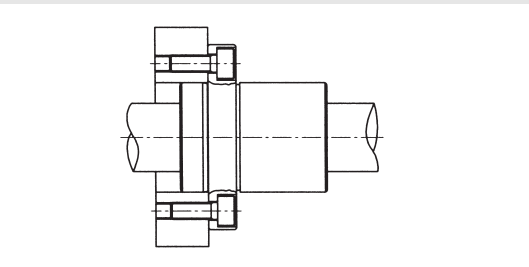
[1] Flange and OD mounting



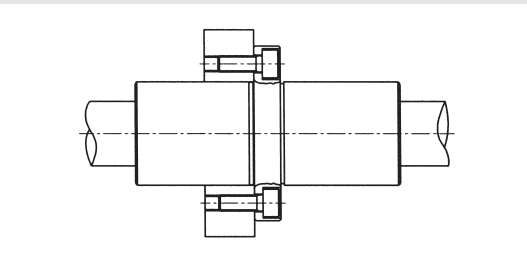
[2] Flange mounting only



[3] Mounted Pilot End type

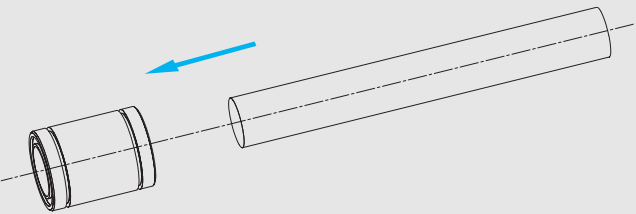


[4] Mounted Center Flange Dual type

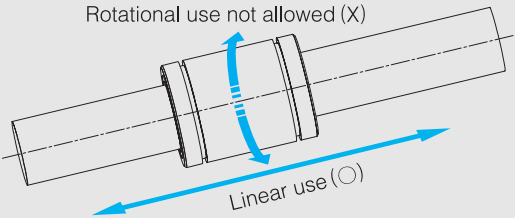


Precautions

① Inserting the Shaft
Insert bushing straight onto shaft



② Linear Bushings are not intended for rotational use
Linear bushings must utilize two shafts to prevent rotation.



③ When in operation the shaft may not exit the housing
Avoid conditions that may cause shaft to exit the linear bushing. Make the length of shaft longer than stroke or restrict travel with a hard stop.

Lubrication

The linear bushing is designed to include grease or oil as a lubricant for its operation.

[Grease Lubrication]

① Clean bushing before Grease lubrication

Before lubricating with grease clean the bushing to remove the anti-rust preservative. Mixing grease and anti-rust preservative may cause adverse effects on the grease.

② Grease lubrication Method

Seal on Both sides(UU)	Direct lubricate on rows of balls
Without Seal	Lubricate on rows of balls / Lubricate on the Shaft

③ Recommended Grease

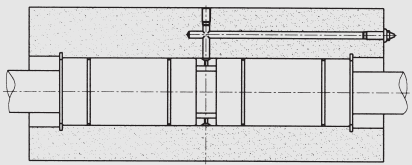
Lithium-soap group grease No. 2.

[Oil Lubrication]

When using oil lubrication it is not required to remove anti-rust oil. We recommend Oil that meets the requirement of ISO viscosity grade VG15~100

① Oil lubrication

When oiling the linear bushing, drip oil on the shaft or fill it from the grease hole on the housing as shown fig1. For sealed bushings the oil must be forced past the seal or the seal must be removed to allow oil to enter the bushing.



② Recommended oil

Turbine oil, machine oil, spindle oil.

Temperature	Viscosity
-30°C ~ 50°C	VG 15 ~46
-50°C ~ 80°C	VG 15 ~100

Surface Treatment

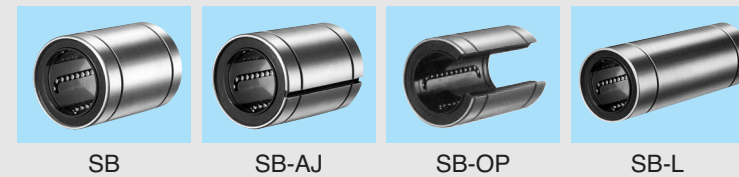
Nickel Plating is available.
Please contact SBC.

Asia type Ball Bushing

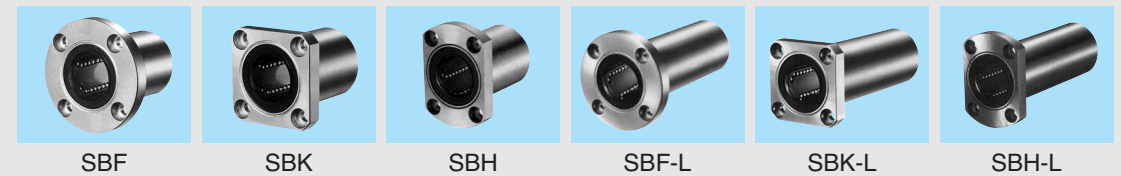
Metric dimension
Widely used in asian countries
Synthetic resin retainer
Variety sizes and models

Asia type ball bushing is a metric dimension series widely used in asian countries.

Standard type : Stock available



Flange type : Stock available



Flange type : Order made



Flange type : Order made



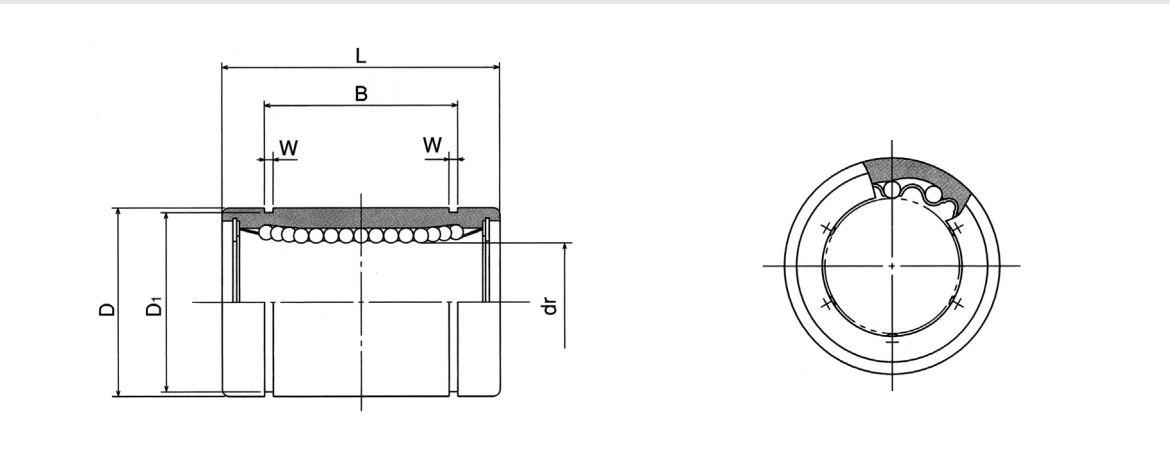
Ball bush housing : Stock available



Linear Bushings

Asia type Ball Bushing

SB standard type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SB4	4	4	0	8	0	12	0	-	-
SB5	4	5	-0.008	10	-0.009	15	-0.02	10.2	
SB6	4	6	0	12	0	19	0	13.5	0
SB8S	4	8		15		17		11.5	
SB8	4	8		15	-0.011	24		17.5	
SB10	4	10		19	0	29		22	
SB12	4	12	-0.009	21		30	-0.2	23	-0.2
SB13	4	13		23	-0.013	32		23	
SB16	5	16		28		37		26.5	
SB20	5	20		32		42		30.5	
SB25	6	25	0	40	0	59	0	41	0
SB30	6	30	-0.010	45	-0.016	64		44.5	
SB35	6	35	0	52	0	70		49.5	
SB40	6	40	-0.012	60	-0.019	80	-0.3	60.5	-0.3
SB50	6	50	0	80	0	100		74	
SB60	6	60	-0.015	90	-0.022	110		85	

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Linear Bushings

Asia type Ball Bushing

Ordering example

SB 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

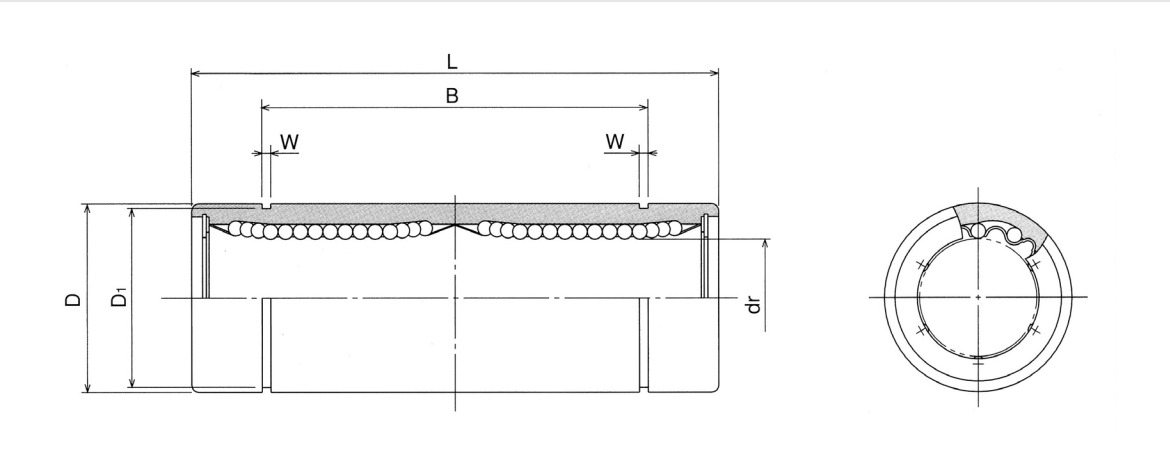


- Metric dimension (Asia type)
- Stock available
- Standard type

(Unit : mm)

W	D1	E	RC	C [N]	Co [N]	M [g]
-	-	0.008	-0.003	88	127	1.4
1.1	9.6	0.008	-0.003	167	206	4
1.1	11.5	0.012	-0.005	200	260	8
1.1	14.3	0.012	-0.005	170	220	11
1.1	14.3	0.012	-0.005	260	400	16
1.3	18	0.012	-0.005	370	540	30
1.3	20	0.012	-0.005	410	590	31.5
1.3	22	0.012	-0.007	500	770	43
1.6	27	0.012	-0.007	770	1170	69
1.6	30.5	0.015	-0.009	860	1370	87
1.85	38	0.015	-0.009	980	1560	220
1.85	43	0.015	-0.009	1560	2740	250
2.1	49	0.020	-0.013	1660	3130	390
2.1	57	0.020	-0.013	2150	4010	585
2.6	76.5	0.020	-0.013	3820	7930	1580
3.15	86.5	0.025	-0.016	4700	9990	2000

SB-L standard type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SB6L	4	6	0 -0.010	12	0	35	0 -0.3	27	0 -0.3
SB8L	4	8		15	-0.013	45		35	
SB10L	4	10		19	0 -0.016	55		44	
SB12L	4	12		21		57		46	
SB13L	4	13		23		61		46	
SB16L	5	16	0 -0.012	28	0 -0.019	70	0 -0.4	53	0 -0.4
SB20L	5	20		32		80		61	
SB25L	6	25		40		112		82	
SB30L	6	30	0 -0.015	45	0 -0.022	123		89	0 -0.4
SB35L	6	35		52		135		99	
SB40L	6	40		60		154		121	
SB50L	6	50	0 -0.020	80	0 -0.025	192		148	
SB60L	6	60		90		211		170	

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

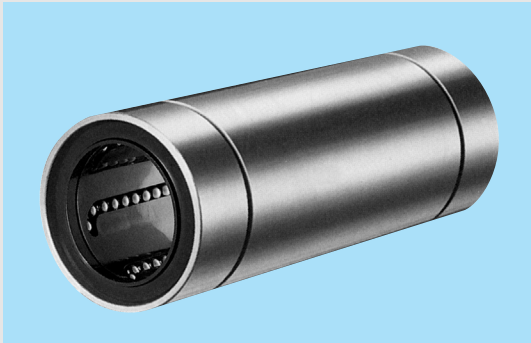
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SB 25L UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

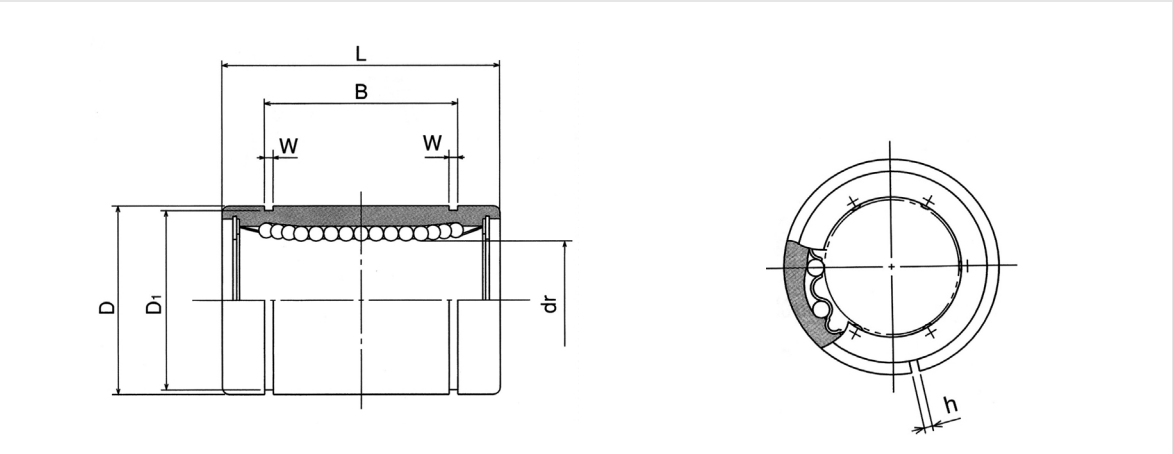


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

W	D1	E	RC	C [N]	Co [N]	M [g]
1.1	11.5	0.015	-0.005	323	530	16
1.1	14.3	0.015	-0.005	431	784	31
1.3	18	0.015	-0.005	588	1100	62
1.3	20	0.015	-0.005	657	1200	80
1.3	22	0.015	-0.007	813	1570	90
1.6	27	0.015	-0.007	1230	2350	145
1.6	30.5	0.020	-0.009	1400	2750	180
1.85	38	0.020	-0.009	1560	3140	440
1.85	43	0.020	-0.009	2490	5490	580
2.1	49	0.025	-0.013	2650	6270	795
2.1	57	0.025	-0.013	3430	8040	1170
2.6	76.5	0.025	-0.013	6080	15900	3100
3.15	86.5	0.025	-0.016	7650	20000	3500

SB-AJ clearance adjustable type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SB6-AJ	4	6	0 -0.009	12	0 -0.011	19	0 -0.2	13.5	0 -0.2
SB8S-AJ	4	8		15		17		11.5	
SB8-AJ	4	8		15		24		17.5	
SB10-AJ	4	10		19		29		22	
SB12-AJ	4	12	0 -0.013	21	0 -0.013	30	0 -0.3	23	0 -0.3
SB13-AJ	4	13		23		32		23	
SB16-AJ	5	16		28		37		26.5	
SB20-AJ	5	20		32		42		30.5	
SB25-AJ	6	25	0 -0.010	40	0 -0.016	59	0 -0.3	41	0 -0.3
SB30-AJ	6	30		45		64		44.5	
SB35-AJ	6	35	0	52	0	70	0 -0.3	49.5	0 -0.3
SB40-AJ	6	40	-0.012	60	-0.019	80		60.5	
SB50-AJ	6	50	0	80	0	100		74	
SB60-AJ	6	60	-0.015	90	-0.022	110		85	

- ① E : Eccentricity (Max)

② RC : Permissible radial clearance
- ③ C : Basic dynamic load rating

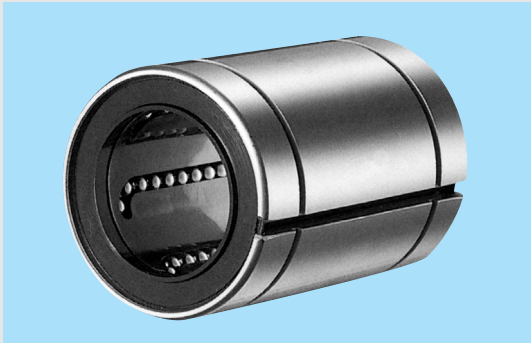
④ Co : Basic static load rating

⑤ M : Mass

Ordering example

SB 25 UU – AJ – NM
[1] [2] [3] [3]

- [1] Model number
- [3] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] AJ : Clearance adjustable
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)



- Metric dimension (Asia type)
- Stock available

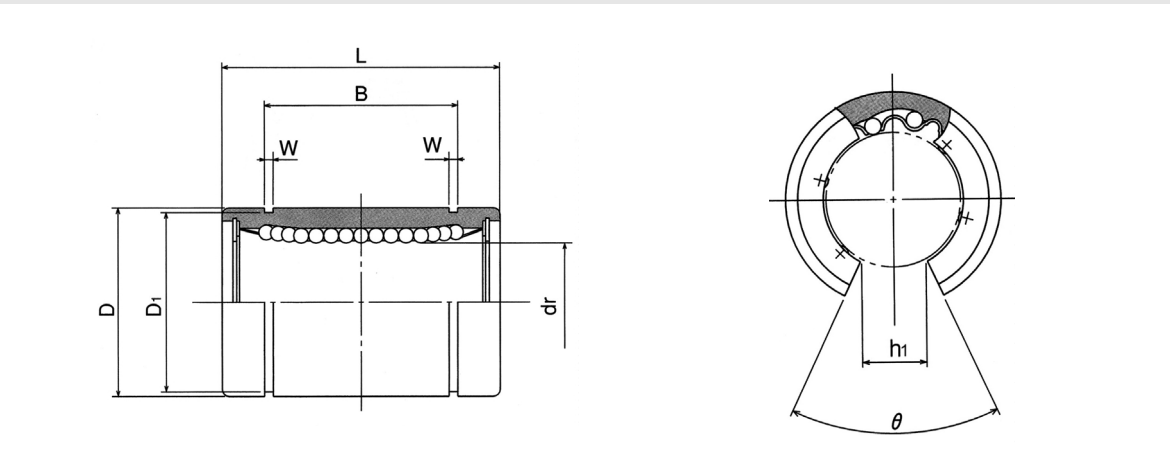
(Unit : mm)

W	D1	h	E	RC	C [N]	Co [N]	M [g]
1.1	11.5	1	0.012	-0.005	200	260	8
1.1	14.3	1	0.012	-0.005	170	220	11
1.1	14.3	1	0.012	-0.005	260	400	16
1.3	18	1	0.012	-0.005	370	540	30
1.3	20	1.5	0.012	-0.005	410	590	31.5
1.3	22	1.5	0.012	-0.007	500	770	43
1.6	27	1.5	0.012	-0.007	770	1170	69
1.6	30.5	1.5	0.015	-0.009	860	1370	87
1.85	38	2	0.015	-0.009	980	1560	220
1.85	43	2.5	0.015	-0.009	1560	2740	250
2.1	49	2.5	0.020	-0.013	1660	3130	390
2.1	57	3	0.020	-0.013	2150	4010	585
2.6	76.5	3	0.020	-0.013	3820	7930	1580
3.15	86.5	3	0.025	-0.016	4700	9990	2000

Linear Bushings

Asia type Ball Bushing

SB-OP open type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SB12-OP	3	12	0 -0.009	21	0 -0.013	30	0 -0.2	23	0 -0.2
SB13-OP	3	13		23		32		23	
SB16-OP	4	16		28		37		26.5	
SB20-OP	4	20	0 -0.010	32	0 -0.016	42	0 -0.3	30.5	0 -0.3
SB25-OP	5	25		40		59		41	
SB30-OP	5	30		45		64		44.5	
SB35-OP	5	35	0 -0.012	52	0 -0.019	70		49.5	0 -0.3
SB40-OP	5	40		60		80		60.5	
SB50-OP	5	50		80		100		74	
SB60-OP	5	60	0 -0.015	90	0 -0.022	110		85	

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

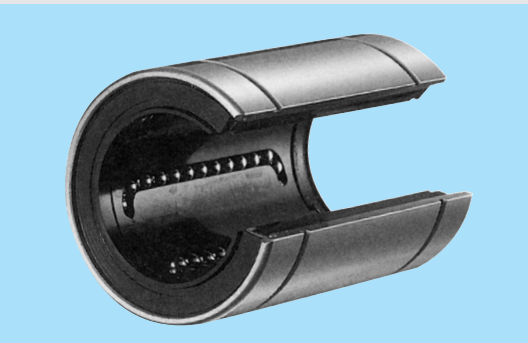
Linear Bushings

Asia type Ball Bushing

Ordering example

SB 25 UU – OP – NM
[1] [2] [3] [4]

- [1] Model number
- [3] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] OP : Open type
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

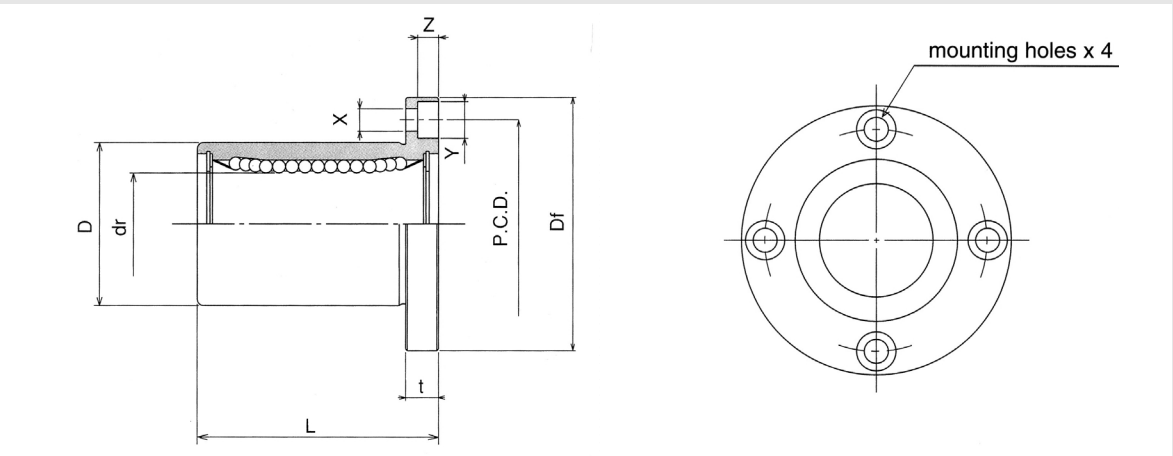


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

W	D1	h1	θ	E	RC	C [N]	Co [N]	M [g]
1.3	20	8	80	0.012	-0.005	410	590	31.5
1.3	22	9	80	0.012	-0.007	500	770	43
1.6	27	11	80	0.012	-0.007	770	1170	69
1.6	30.5	11	60	0.015	-0.009	860	1370	87
1.85	38	12	50	0.015	-0.009	980	1560	220
1.85	43	15	50	0.015	-0.009	1560	2740	250
2.1	49	17	50	0.020	-0.013	1660	3130	390
2.1	57	20	50	0.020	-0.013	2150	4010	585
2.6	76.5	25	50	0.020	-0.013	3820	7930	1580
3.15	86.5	30	50	0.025	-0.016	4700	9990	2000

SBF Flange type



Model number	Number of ball circuits	dr		D		L		Df	t
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBF6	4	6	0 -0.009	12	0 -0.013	19	± 0.3	28	5
SBF8S	4	8		15		17		32	5
SBF8	4	8		15		24		32	5
SBF10	4	10		19		29		40	6
SBF12	4	12	0 -0.016	21	0 -0.016	30		42	6
SBF13	4	13		23		32		43	6
SBF16	5	16		28		37		48	6
SBF20	5	20		32		42		54	8
SBF25	6	25	0 -0.010	40	0 -0.019	59		62	8
SBF30	6	30		45		64		74	10
SBF35	6	35		52		70		82	10
SBF40	6	40		60	0 -0.022	80		96	13
SBF50	6	50	0 -0.012	80		100		116	13
SBF60	6	60		90		110		134	18
			0 -0.015		0 -0.025				

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

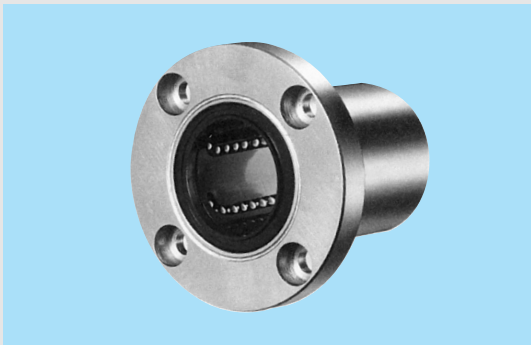
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBF 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

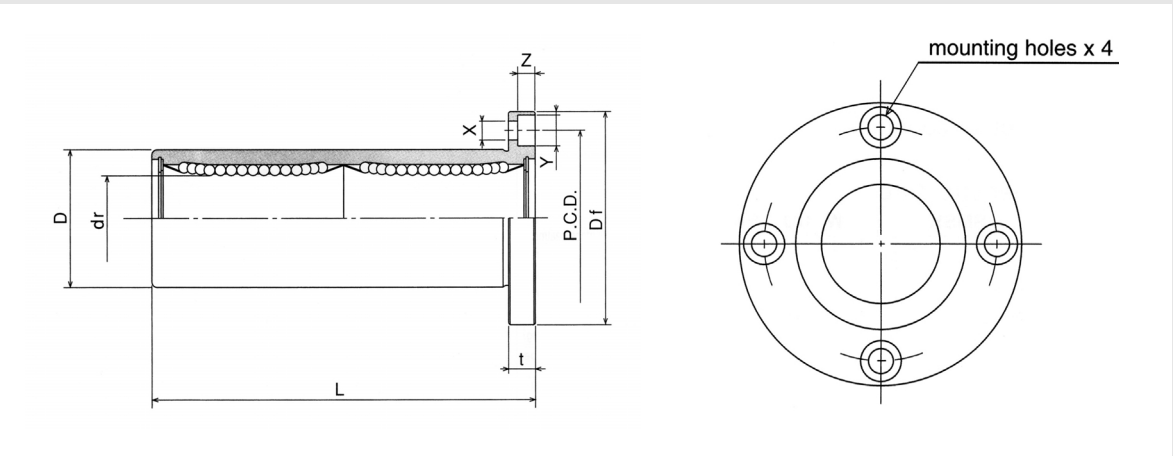


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
20	3.5	6	3.1	0.012	0.012	206	265	24
24	3.5	6	3.1	0.012	0.012	176	216	32
24	3.5	6	3.1	0.012	0.012	274	392	37
29	4.5	7.5	4.1	0.012	0.012	372	549	72
32	4.5	7.5	4.1	0.012	0.012	510	784	76
33	4.5	7.5	4.1	0.012	0.012	510	784	88
38	4.5	7.5	4.1	0.012	0.012	774	1180	120
43	5.5	9	5.1	0.015	0.015	882	1370	180
51	5.5	9	5.1	0.015	0.015	980	1570	340
60	6.6	11	6.1	0.015	0.015	1570	2740	470
67	6.6	11	6.1	0.020	0.020	1670	3140	650
78	9	14	8.1	0.020	0.020	2160	4020	1060
98	9	14	8.1	0.020	0.020	3820	7940	2200
112	11	17	11.1	0.025	0.025	4700	10000	3000

SBF-L Flange type



Model number	Number of ball circuits	dr		D		L		Df	t
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBF6L	4	6	0 -0.010	12	0	35	-0.3	28	5
SBF8L	4	8		15	-0.013	45		32	5
SBF10L	4	10		19	0 -0.016	55		40	6
SBF12L	4	12		21		57		42	6
SBF13L	4	13		23		61		43	6
SBF16L	5	16	28	0 -0.019	70	48		6	
SBF20L	5	20	32		80	54		8	
SBF25L	6	25	40		112	62		8	
SBF30L	6	30	45		123	74		10	
SBF35L	6	35	0 -0.015	52	0	135		82	10
SBF40L	6	40	60	-0.022	154	96		13	
SBF50L	6	50	0 -0.020	80	0	192		116	13
SBF60L	6	60	90	-0.025	211	134		18	

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

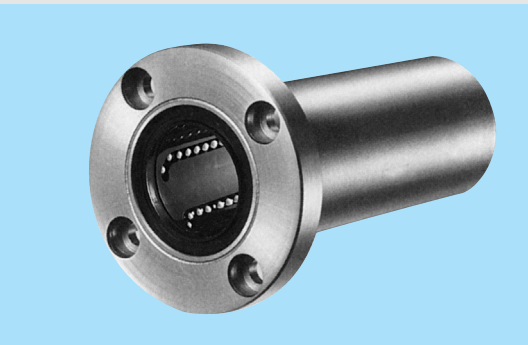
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBF 25L UU - NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

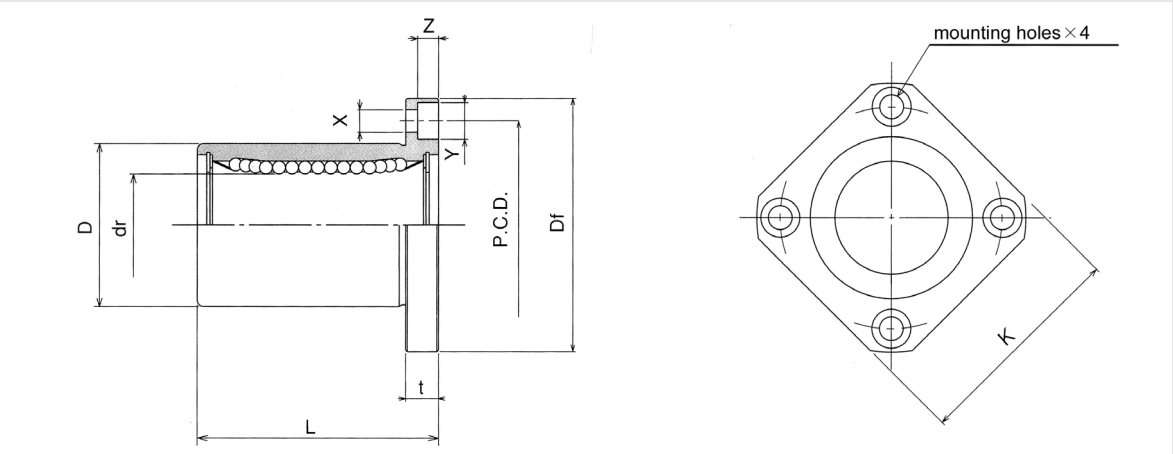


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
20	3.5	6.5	3.1	0.015	0.015	323	530	31
24	3.5	6.5	3.1	0.015	0.015	431	784	51
29	4.5	8	4.1	0.015	0.015	588	1100	98
32	4.5	8	4.1	0.015	0.015	813	1570	110
33	4.5	8	4.1	0.015	0.015	813	1570	130
38	4.5	8	4.1	0.015	0.015	1230	2350	190
43	5.5	9.5	5.1	0.020	0.020	1400	2740	260
51	5.5	9.5	5.1	0.020	0.020	1560	3140	540
60	6.6	11	6.1	0.020	0.020	2490	5490	680
67	6.6	11	6.1	0.025	0.025	2650	6270	1020
78	9	14	8.1	0.025	0.025	3430	8040	1570
98	9	14	8.1	0.025	0.025	6080	15900	3600
112	11	17.5	11.1	0.030	0.030	7550	20000	4500

SBK Flange type



Model number	Number of ball circuits	dr		D		L		Df	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBK6	4	6	0 -0.009	12	0 -0.013	19	± 0.3	28	22
SBK8S	4	8		15		17		32	25
SBK8	4	8		15		24		32	25
SBK10	4	10		19		29		40	30
SBK12	4	12	0 -0.016	21	0 -0.016	30		42	32
SBK13	4	13		23		32		43	34
SBK16	5	16		28		37		48	37
SBK20	5	20		32		42		54	42
SBK25	6	25	0 -0.010	40	0 -0.019	59		62	50
SBK30	6	30		45		64		74	58
SBK35	6	35		52		70		82	64
SBK40	6	40	0 -0.012	60	0 -0.022	80		96	75
SBK50	6	50		80		100		116	92
SBK60	6	60	0 -0.005	90	0 -0.025	110		134	106

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

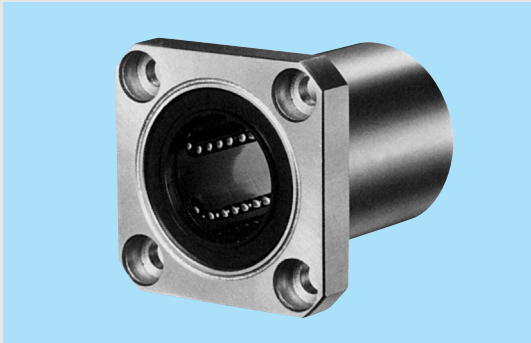
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBK 25 UU - NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

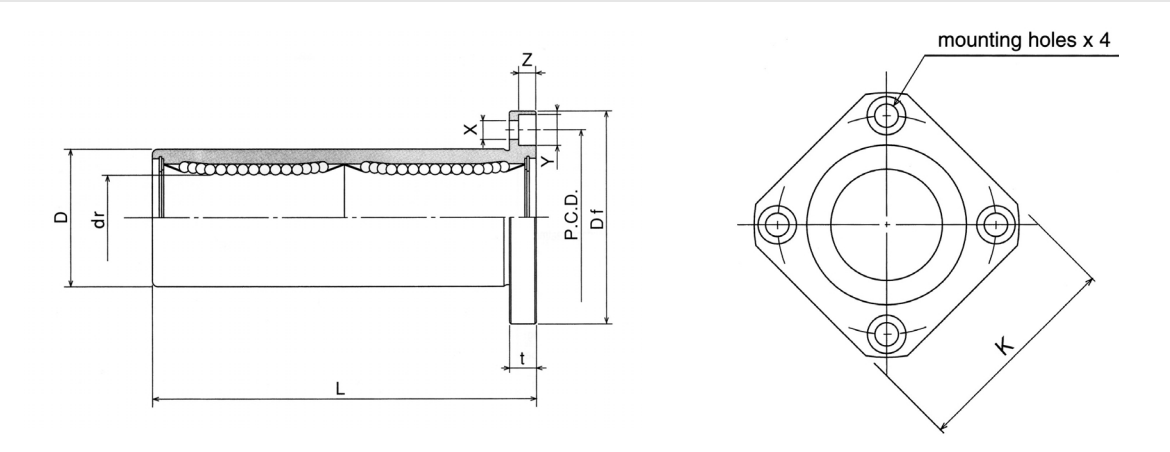


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	20	3.5	6	3.1	0.012	0.012	206	265	24
5	24	3.5	6	3.1	0.012	0.012	176	216	32
5	24	3.5	6	3.1	0.012	0.012	274	392	37
6	29	4.5	7.5	4.1	0.012	0.012	372	549	72
6	32	4.5	7.5	4.1	0.012	0.012	510	784	76
6	33	4.5	7.5	4.1	0.012	0.012	510	784	88
6	38	4.5	7.5	4.1	0.012	0.012	774	1180	120
8	43	5.5	9	5.1	0.015	0.015	882	1370	180
8	51	5.5	9	5.1	0.015	0.015	980	1570	340
10	60	6.6	11	6.1	0.015	0.015	1570	2740	470
10	67	6.6	11	6.1	0.020	0.020	1670	3140	650
13	78	9	14	8.1	0.020	0.020	2160	4020	1060
13	98	9	14	8.1	0.020	0.020	3820	7940	2200
18	112	11	17	11.1	0.025	0.025	4700	10000	3000

SBK-L Flange type



Model number	Number of ball circuits	dr		D		L		Df	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBK6L	4	6	0 -0.010	12	0 -0.013	35	-0.3	28	22
SBK8L	4	8		15		45		32	25
SBK10L	4	10		19		55		40	30
SBK12L	4	12		21	0 -0.016	57		42	32
SBK13L	4	13		23		61		43	34
SBK16L	5	16		28		70		48	37
SBK20L	5	20	0 -0.012	32	0 -0.019	80		54	42
SBK25L	6	25		40		112		62	50
SBK30L	6	30		45		123		74	58
SBK35L	6	35	0 -0.015	52	0 -0.022	135		82	64
SBK40L	6	40	0 -0.020	60	0 -0.025	154		96	75
SBK50L	6	50		80		192		116	92
SBK60L	6	60		90		211		134	106

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

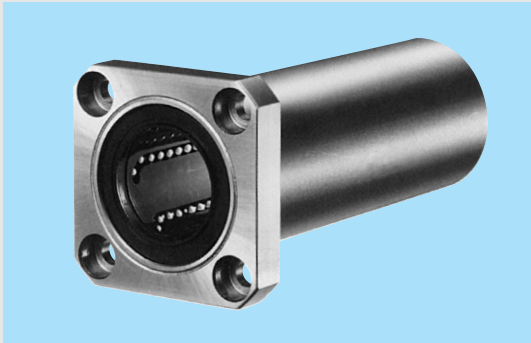
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBK 25L UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

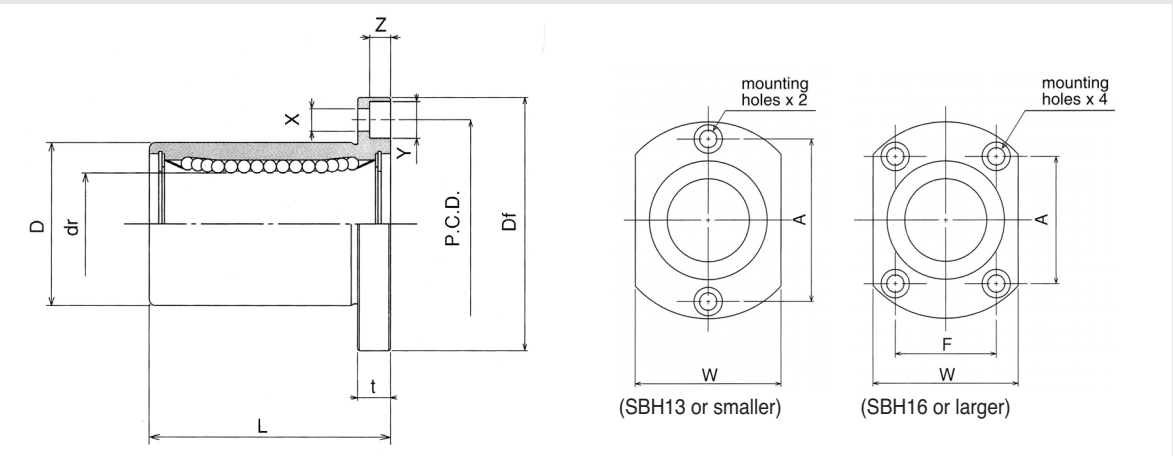


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	20	3.5	6.5	3.1	0.015	0.015	323	530	25
5	24	3.5	6.5	3.1	0.015	0.015	431	784	43
6	29	4.5	8	4.1	0.015	0.015	588	1100	78
6	32	4.5	8	4.1	0.015	0.015	813	1570	90
6	33	4.5	8	4.1	0.015	0.015	813	1570	108
6	38	4.5	8	4.1	0.015	0.015	1230	2350	165
8	43	5.5	9.5	5.1	0.020	0.020	1400	2740	225
8	51	5.5	9.5	5.1	0.020	0.020	1560	3140	500
10	60	6.6	11	6.1	0.020	0.020	2490	5490	590
10	67	6.6	11	6.1	0.025	0.025	2650	6270	930
13	78	9	14	8.1	0.025	0.025	3430	8040	1380
13	98	9	14	8.1	0.025	0.025	6080	15900	3400
18	112	11	17.5	11.1	0.030	0.030	7550	20000	4060

SBH Flange type



Model number	Number of ball circuits	dr		D		L		Df	W
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBH6	4	6	0 -0.009	12	0	19	± 0.3	28	18
SBH8	4	8		15	-0.013	24		32	21
SBH10	4	10		19	0 -0.016	29		40	25
SBH12	4	12		21		30		42	27
SBH13	4	13		23		32		43	29
SBH16	5	16	0 -0.010	28	0 -0.019	37	± 0.3	48	34
SBH20	5	20		32		42		54	38
SBH25	6	25		40		59		62	46
SBH30	6	30		45		64		74	51

- ① E : Eccentricity (Max)

② S : Squarness
- ③ C : Basic dynamic load rating

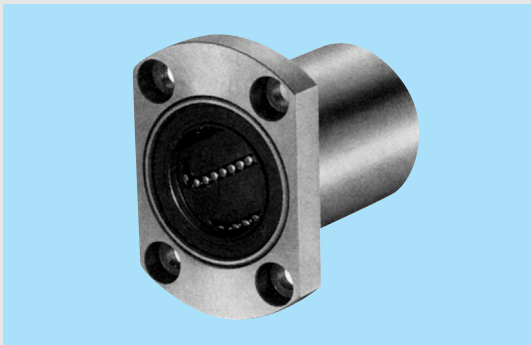
④ Co : Basic static load rating

⑤ M : Mass

Ordering example

SBH 25 UU - NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

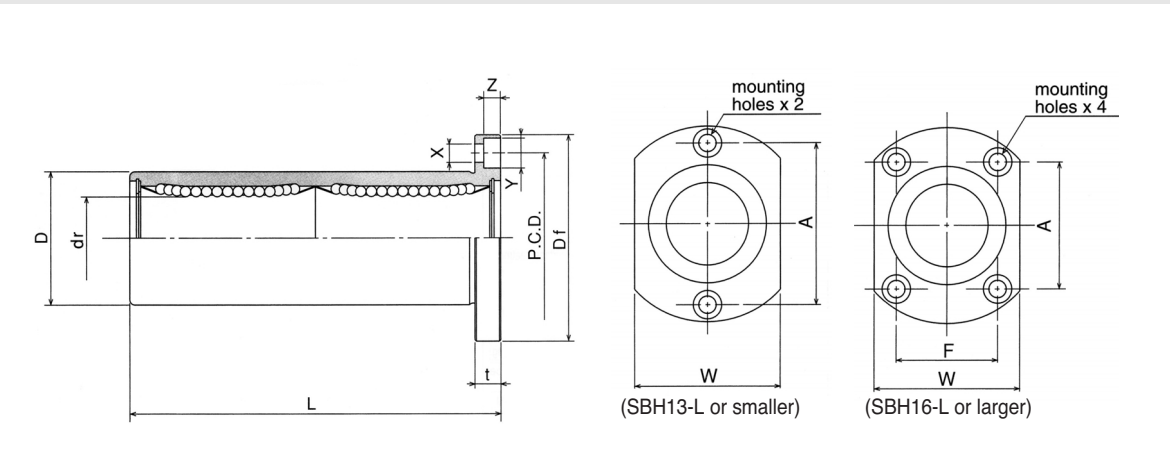


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

t	A	F	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	20	-	3.5	6	3.1	0.012	0.012	206	265	21
5	24	-	3.5	6	3.1	0.012	0.012	274	392	33
6	29	-	4.5	7.5	4.1	0.012	0.012	372	549	64
6	32	-	4.5	7.5	4.1	0.012	0.012	510	784	68
6	33	-	4.5	7.5	4.1	0.012	0.012	510	784	81
6	31	22	4.5	7.5	4.1	0.012	0.012	774	1180	112
8	36	24	5.5	9	5.1	0.015	0.015	882	1370	167
8	40	32	5.5	9	5.1	0.015	0.015	980	1570	325
10	49	35	6.6	11	6.1	0.015	0.015	1570	2740	388

SBH-L Flange type



Model number	Number of ball circuits	dr		D		L		Df	W
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBH6L	4	6	0 -0.010	12	0	35	-0.3	28	18
SBH8L	4	8		15	-0.013	45		32	21
SBH10L	4	10		19	0 -0.016	55		40	25
SBH12L	4	12		21		57		42	27
SBH13L	4	13		23		61		43	29
SBH16L	5	16	0 -0.012	28	0 -0.019	70		48	34
SBH20L	5	20		32		80		54	38
SBH25L	6	25		40		112		62	46
SBH30L	6	30		45		123		74	51

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

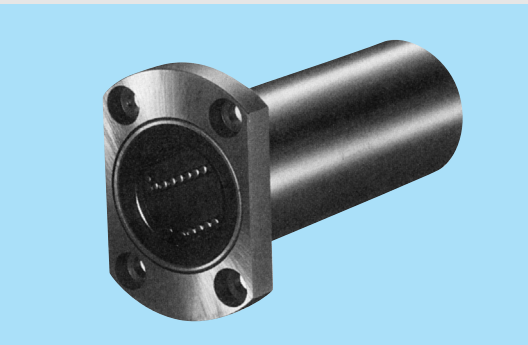
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBH 25L UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

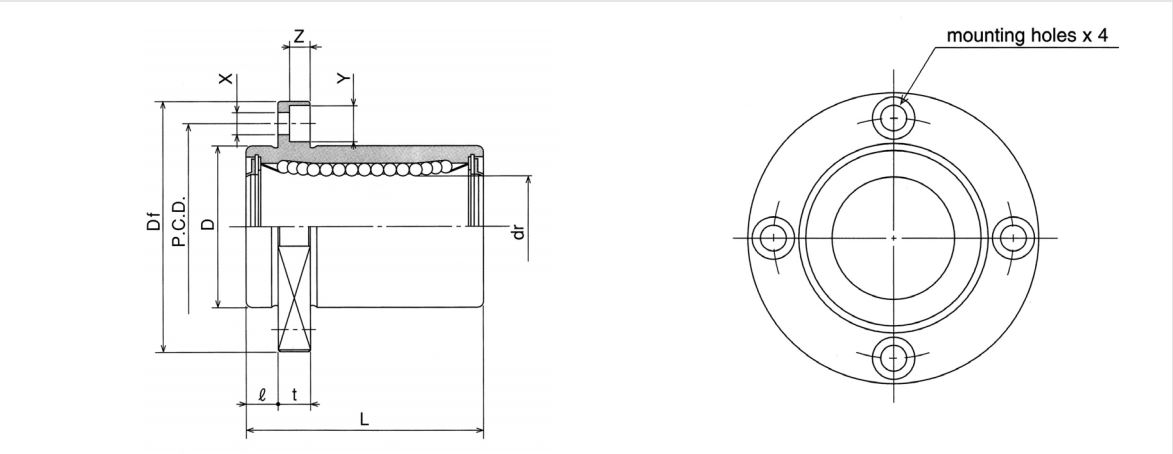


- Metric dimension (Asia type)
- Stock available

(Unit : mm)

t	A	F	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	20	-	3.5	6.5	3.1	0.015	0.015	323	529	28
5	24	-	3.5	6.5	3.1	0.015	0.015	431	784	47
6	29	-	4.5	8	4.1	0.015	0.015	588	1100	90
6	32	-	4.5	8	4.1	0.015	0.015	813	1570	102
6	33	-	4.5	8	4.1	0.015	0.015	813	1570	123
6	31	22	4.5	8	4.1	0.015	0.015	1230	2350	182
8	36	24	5.5	9.5	5.1	0.020	0.020	1400	2740	247
8	40	32	5.5	9.5	5.1	0.020	0.020	1560	3140	525
10	49	35	6.5	11	6.1	0.020	0.020	2490	5490	645

SBF-A Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBF16UU-A	5	16	$\begin{smallmatrix} 0 \\ -0.009 \end{smallmatrix}$	28	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	37	± 0.3	6	48
SBF20UU-A	5	20	$\begin{smallmatrix} 0 \\ -0.010 \end{smallmatrix}$	32	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	42		8	54
SBF25UU-A	6	25		40		59		8	62
SBF30UU-A	6	30		45		64		10	74
SBF35UU-A	6	35	$\begin{smallmatrix} 0 \\ -0.012 \end{smallmatrix}$	52	$\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix}$	70		10	82

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBF 25 UU – A – NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

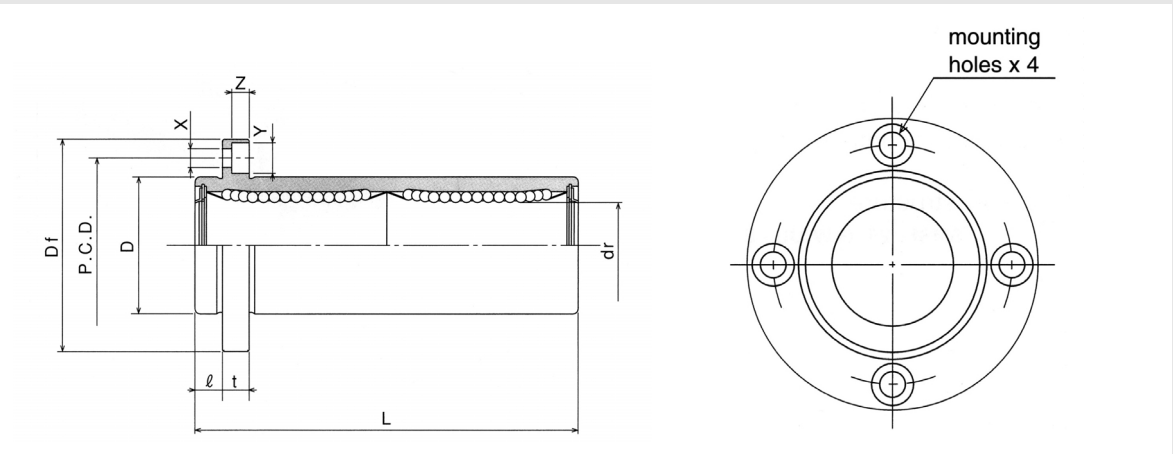


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	38	4.5	7.5	4.1	0.012	0.012	774	1180	120
8	43	5.5	9	5.1	0.015	0.015	882	1370	180
8	51	5.5	9	5.1	0.015	0.015	980	1570	340
10	60	6.6	11	6.1	0.015	0.015	1570	2740	470
10	67	6.6	11	6.1	0.020	0.020	1670	3140	650

SBF-LA Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBF16LUU-A	5	16	⁰ -0.010	28	⁰ -0.016	70	±0.3	6	48
SBF20LUU-A	5	20	⁰ -0.012	32	⁰ -0.019	80		8	54
SBF25LUU-A	6	25		40		112		8	62
SBF30LUU-A	6	30		45		123		10	74
SBF35LUU-A	6	35	⁰ -0.015	52	⁰ -0.022	135		10	82

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBF 25L UU – A – NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard), NM(Nickel plating)

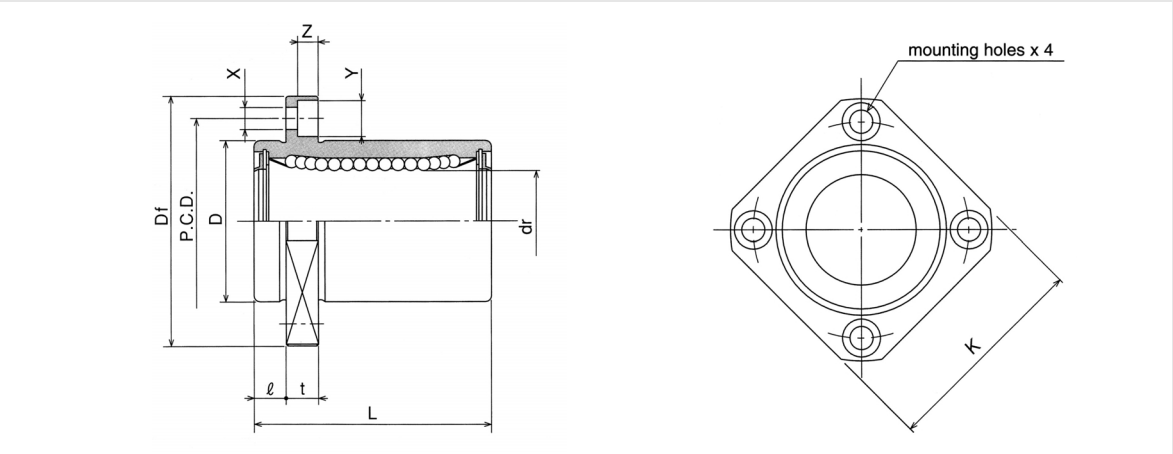


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	38	4.5	7.5	4.1	0.015	0.015	1230	2350	190
8	43	5.5	9	5.1	0.020	0.020	1400	2740	260
8	51	5.5	9	5.1	0.020	0.020	1560	3140	540
10	60	6.6	11	6.1	0.020	0.020	2490	5490	680
10	67	6.6	11	6.1	0.025	0.025	2650	6270	1020

SBK-A Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBK16UU-A	5	16	$\begin{smallmatrix} 0 \\ -0.009 \end{smallmatrix}$	28	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	37	± 0.3	6	37
SBK20UU-A	5	20	$\begin{smallmatrix} 0 \\ -0.010 \end{smallmatrix}$	32	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	42		8	42
SBK25UU-A	6	25		40		59		8	50
SBK30UU-A	6	30		45		64		10	58
SBK35UU-A	6	35	$\begin{smallmatrix} 0 \\ -0.012 \end{smallmatrix}$	52	$\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix}$	70		10	64

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

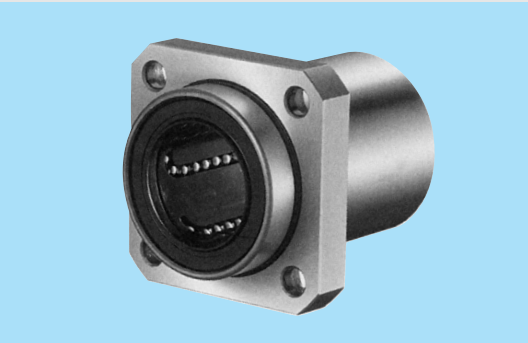
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBK 25 UU – A – NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

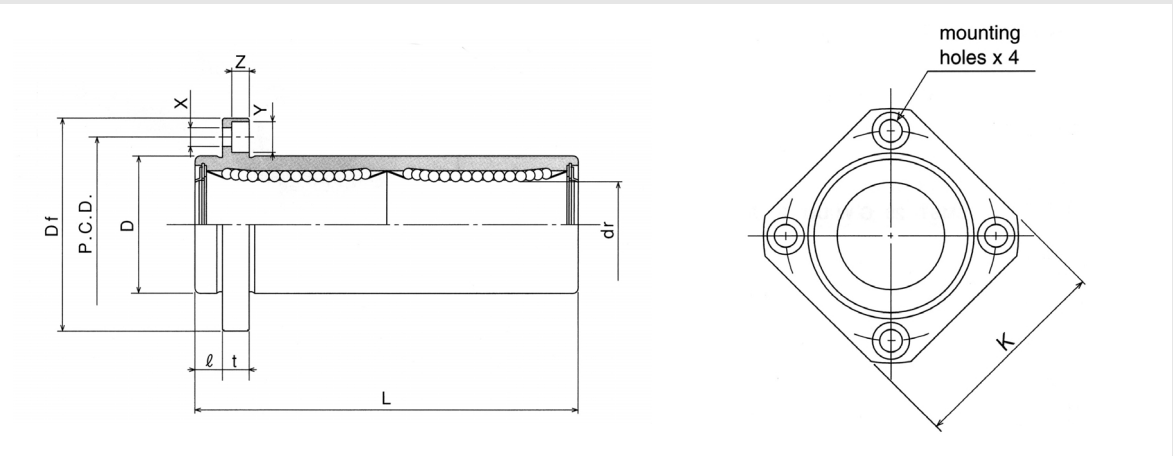


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

Df	t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
48	6	38	4.5	7.5	4.1	0.012	0.012	774	1180	120
54	8	43	5.5	9	5.1	0.015	0.015	882	1370	180
62	8	51	5.5	9	5.1	0.015	0.015	980	1570	340
74	10	60	6.6	11	6.1	0.015	0.015	1570	2740	470
82	10	67	6.6	11	6.1	0.020	0.020	1670	3140	650

SBK-LA Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBK16LUU-A	5	16	⁰ -0.010	28	⁰ -0.016	70	±0.3	6	37
SBK20LUU-A	5	20	⁰ -0.012	32	⁰ -0.019	80		8	42
SBK25LUU-A	6	25		40		112		8	50
SBK30LUU-A	6	30		45		123		10	58
SBK35LUU-A	6	35	⁰ -0.015	52	⁰ -0.022	135		10	64

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBK 25L UU - A - NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

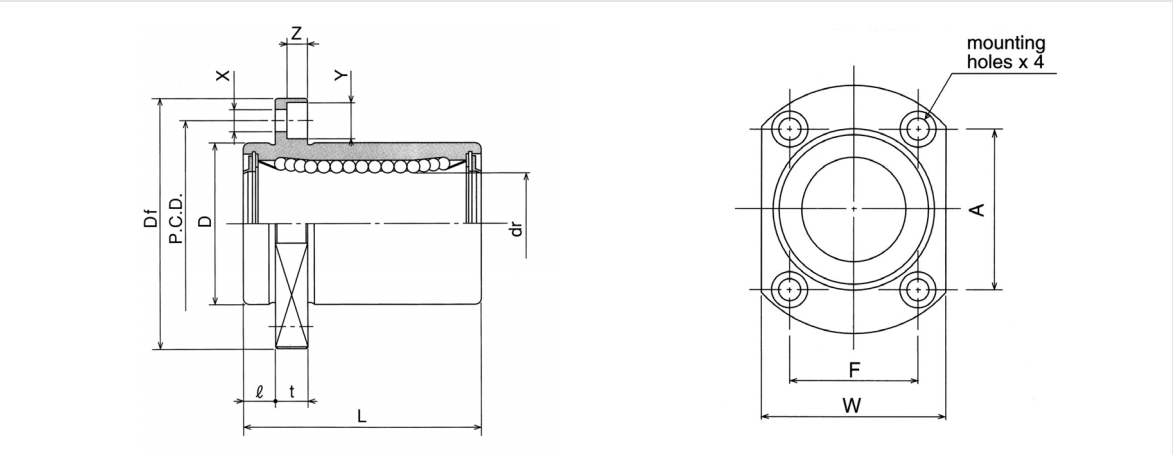


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

Df	t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
48	6	38	4.5	7.5	4.1	0.015	0.015	1230	2350	190
54	8	43	5.5	9	5.1	0.020	0.020	1400	2740	260
62	8	51	5.5	9	5.1	0.020	0.020	1560	3140	540
74	10	60	6.6	11	6.1	0.020	0.020	2490	5490	680
82	10	67	6.6	11	6.1	0.025	0.025	2650	6270	1020

SBH-A Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBH16UU-A	5	16	⁰ -0.009	28	⁰ -0.016	37	±0.3	6	48
SBH20UU-A	5	20	⁰ -0.010	32	⁰ -0.019	42		8	54
SBH25UU-A	6	25		40		59		8	62
SBH30UU-A	6	30		45		64		10	74

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBH 25 UU – A – NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

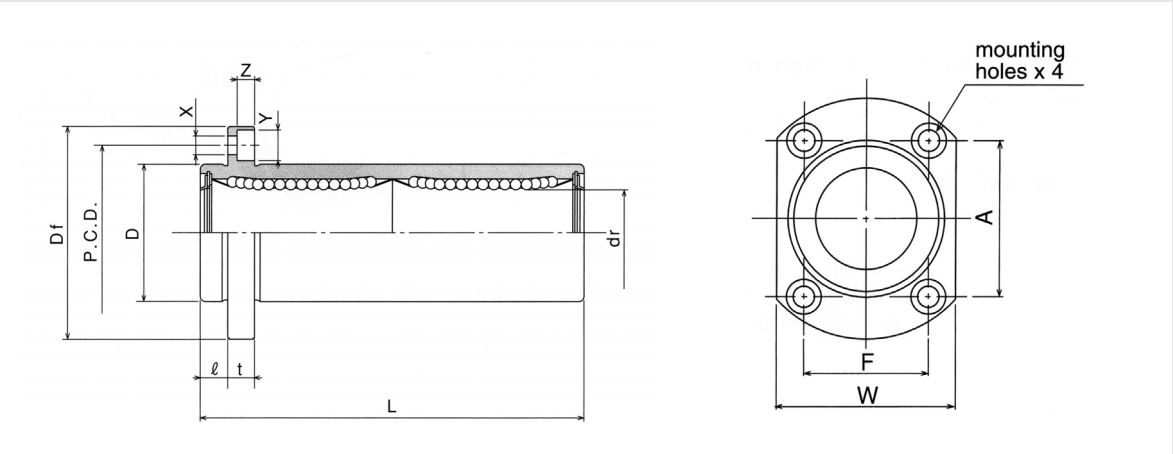


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

t	W	A	F	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	34	31	22	4.5	7.5	4.1	0.012	0.012	774	1180	120
8	38	36	24	5.5	9	5.1	0.015	0.015	882	1370	180
8	46	40	32	5.5	9	5.1	0.015	0.015	980	1570	340
10	51	49	35	6.6	11	6.1	0.015	0.015	1570	2740	470

SBH-LA Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBH16LUU-A	5	16	$\begin{smallmatrix} 0 \\ -0.009 \end{smallmatrix}$	28	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	70	± 0.3	6	48
SBH20LUU-A	5	20	$\begin{smallmatrix} 0 \\ -0.012 \end{smallmatrix}$	32	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	80		8	54
SBH25LUU-A	6	25		40		112		8	62
SBH30LUU-A	6	30		45		123		10	74

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBH 25L UU - A - NM
[1] [2] [3] [4]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] A : With pilot end
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

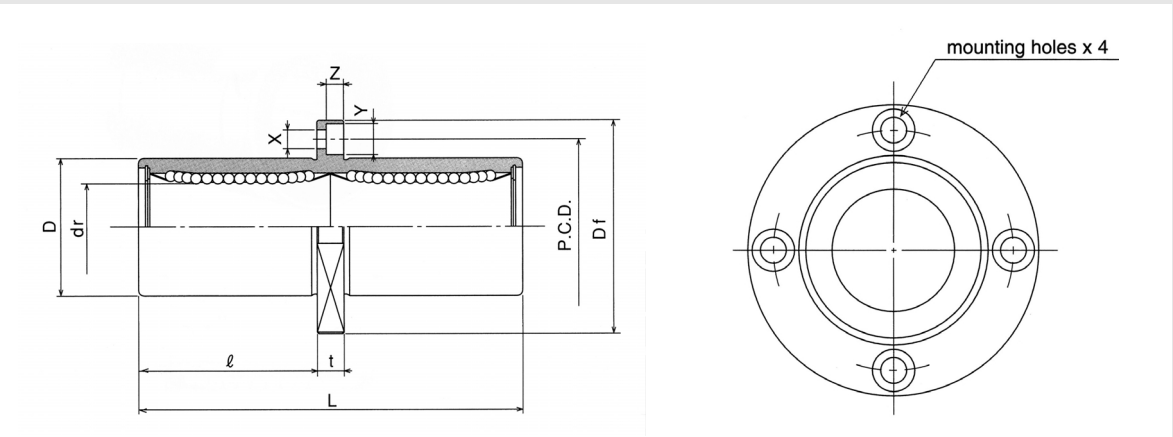


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

t	W	A	F	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	34	31	22	4.5	7.5	4.1	0.015	0.015	1230	2350	190
8	38	36	24	5.5	9	5.1	0.020	0.020	1400	2740	260
8	46	40	32	5.5	9	5.1	0.020	0.020	1560	3140	540
10	51	49	35	6.6	11	6.1	0.020	0.020	2490	5490	680

SBFC Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBFC16UU	5	16	⁰ -0.010	28	⁰ -0.016	70	±0.3	32	48
SBFC20UU	5	20	⁰ -0.012	32	⁰ -0.019	80		36	54
SBFC25UU	6	25		40		112		52	62
SBFC30UU	6	30		45		123		56.5	74
SBFC35UU	6	35	⁰ -0.015	52	⁰ -0.022	135		62.5	82

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBFC 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)



- Metric dimension (Asia type)
- Order made (Please contact SBC)

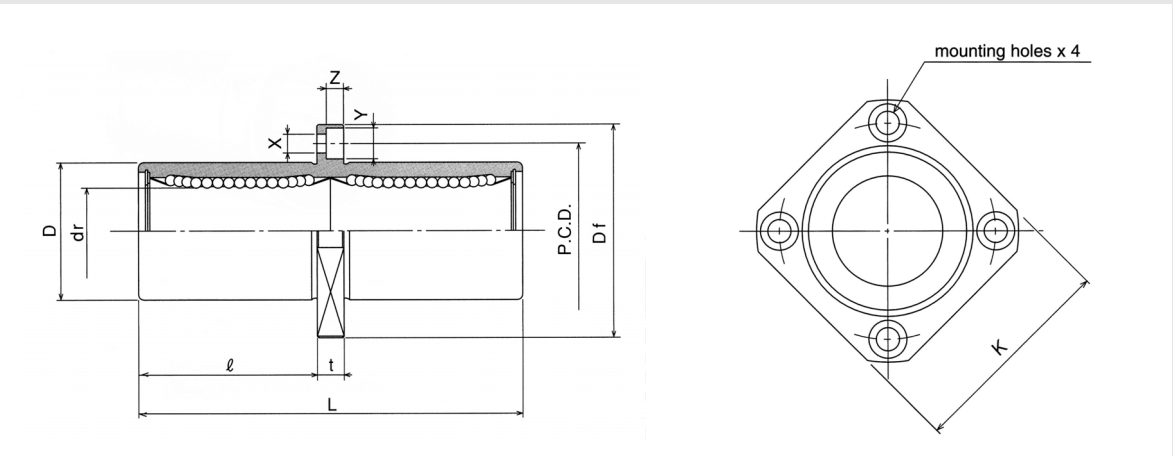
(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	38	4.5	8	4.1	0.015	0.015	1230	2350	190
8	43	5.5	9.5	5.1	0.020	0.020	1400	2740	260
8	51	5.5	9.5	5.1	0.020	0.020	1560	3140	540
10	60	6.6	11	6.1	0.020	0.020	2490	5490	680
10	67	6.6	11	6.1	0.025	0.025	2650	6270	1020

Linear Bushings

Asia type Ball Bushing

SBKC Flange type



Model number	Number of ball circuits	dr		D		L		l	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBKC16UU	5	16	$\begin{smallmatrix} 0 \\ -0.010 \end{smallmatrix}$	28	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	70	± 0.3	32	48
SBKC20UU	5	20	$\begin{smallmatrix} 0 \\ -0.012 \end{smallmatrix}$	32	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	80		36	54
SBKC25UU	6	25		40		112		52	62
SBKC30UU	6	30		45		123		56.5	74
SBKC35UU	6	35	$\begin{smallmatrix} 0 \\ -0.015 \end{smallmatrix}$	52	$\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix}$	135		62.5	82

- ❶ E : Eccentricity (Max)
 ❷ S : Squariness
- ❸ C : Basic dynamic load rating
 ❹ Co : Basic static load rating
 ❺ M : Mass

Linear Bushings

Asia type Ball Bushing

Ordering example

SBKC 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

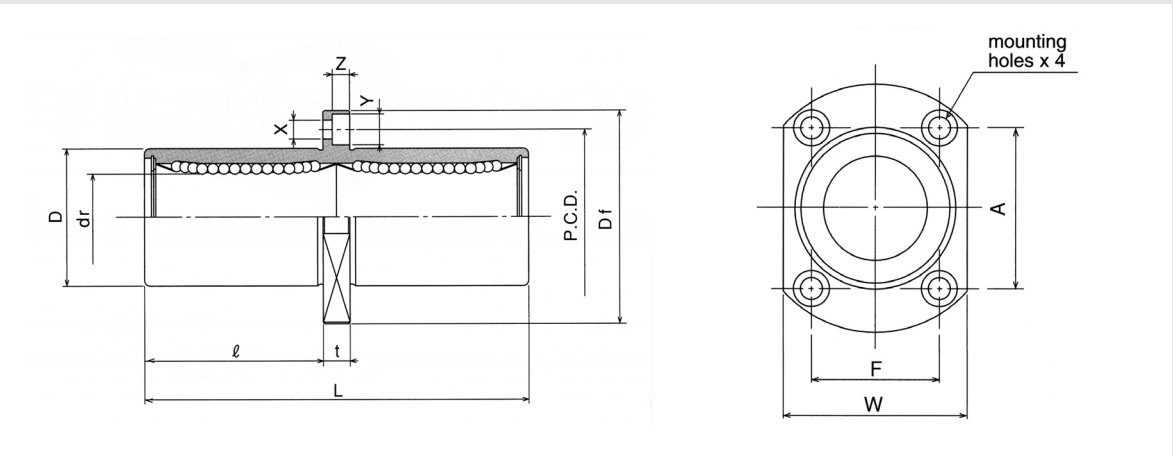


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

K	t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
37	6	38	4.5	7.5	4.1	0.015	0.015	1230	2350	190
42	8	43	5.5	9	5.1	0.020	0.020	1400	2740	260
50	8	51	5.5	9	5.1	0.020	0.020	1560	3140	540
58	10	60	6.6	11	6.1	0.020	0.020	2490	5490	680
64	10	67	6.6	11	6.1	0.015	0.015	2650	6270	1020

SBHC Flange type



Model number	Number of ball circuits	dr		D		L		ℓ	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBHC16UU	5	16	$\begin{smallmatrix} 0 \\ -0.010 \end{smallmatrix}$	28	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	70	± 0.3	32	48
SBHC20UU	5	20	$\begin{smallmatrix} 0 \\ -0.012 \end{smallmatrix}$	32	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	80		36	54
SBHC25UU	6	25		40		112		52	62
SBHC30UU	6	30		45		123		56.5	74

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBHC 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

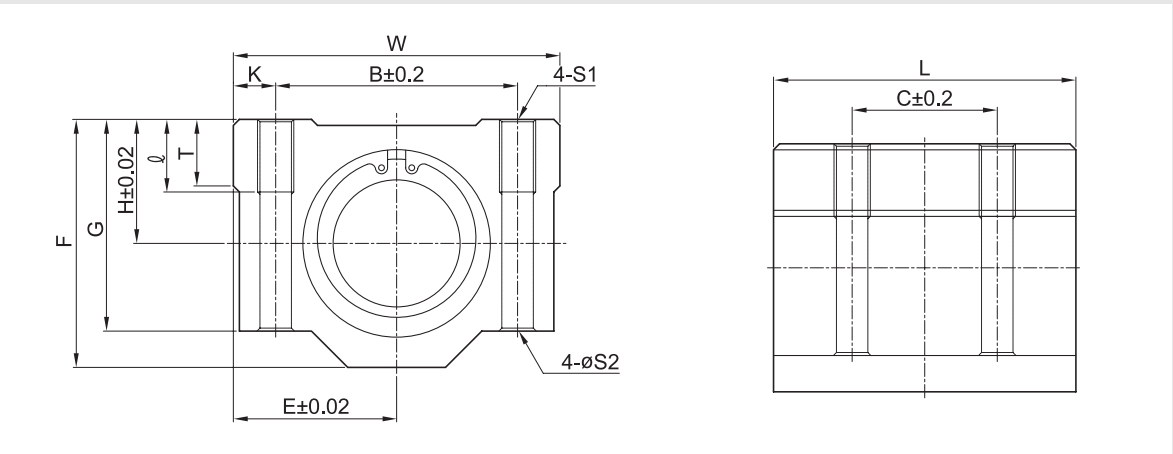


- Metric dimension (Asia type)
- Order made (Please contact SBC)

(Unit : mm)

t	W	A	F	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	34	31	22	38	4.5	7.5	4.1	0.015	0.015	1230	2350	190
8	38	36	24	43	5.5	9	5.1	0.020	0.020	1400	2740	260
8	46	40	32	51	5.5	9	5.1	0.020	0.020	1560	3140	540
10	51	49	35	60	6.6	11	6.1	0.020	0.020	2490	5490	680

SC ball bush housing



Model number	H	E	W	L	F	G	T
SC 12	15	21	42	36	28	24	8
SC 13	15	22	44	39	30	24.5	8
SC 16	19	25	50	44	38.5	32.5	9
SC 20	21	27	54	50	41	35	11
SC 25	26	38	76	67	51.5	42	12
SC 30	30	39	78	72	59.5	49	15
SC 35	34	45	90	80	68	54	18
SC 40	40	51	102	90	78	62	20

- ❶ C : Basic dynamic load rating
- ❷ Co : Basic static load rating

Ordering example

SC 25 UU
[1] [2]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)



- Metric dimension (Asia type)
- Stock available

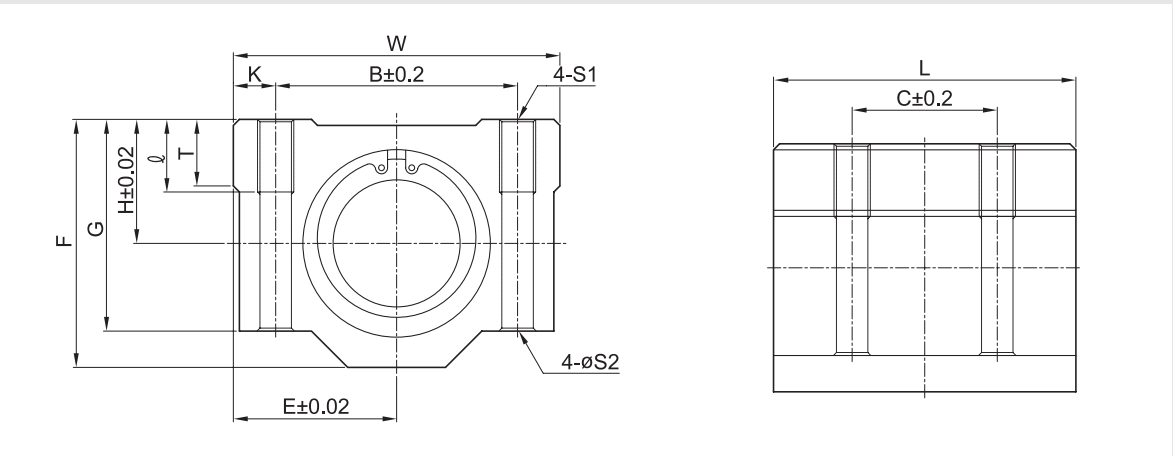
(Unit : mm)

B	C	K	S1	S2	ℓ	C [N]	Co [N]
30.5	26	5.75	M5	4.3	12	510	780
33	26	5.5	M5	4.3	12	510	780
36	34	7	M5	4.3	12	770	1180
40	40	7	M6	5.2	12	880	1350
54	50	11	M8	7	18	980	1550
58	58	10	M8	7	18	1570	2700
70	60	10	M8	7	18	1670	3150
80	60	11	M10	8.7	25	2160	4020

Linear Bushings

Asia type Ball Bushing

SC-L ball bush housing



Model number	H	E	W	L	F	G	T
SC 12L	15	21	42	70	28	24	8
SC 13L	15	22	44	75	30	24.5	8
SC 16L	19	25	50	85	38.5	32.5	9
SC 20L	21	27	54	96	41	35	11
SC 25L	26	38	76	130	51.5	42	12
SC 30L	30	39	78	140	59.5	49	15
SC 35L	34	45	90	155	68	54	18
SC 40L	40	51	102	175	78	62	20

- ① C : Basic dynamic load rating
② Co : Basic static load rating

Linear Bushings

Asia type Ball Bushing

Ordering example

SC 25L UU
[1] [2]

- [1] Model number
[2] Seal : No symbol(Without seal),
UU(Seals on bothside)



- Metric dimension (Asia type)
- Stock available

(Unit : mm)

B	C	K	S1	S2	Ø	C [N]	Co [N]
30.5	50	5.75	M5	4.3	12	813	1570
33	50	5.5	M5	4.3	12	813	1570
36	60	7	M5	4.3	12	1230	2350
40	70	7	M6	5.2	12	1400	2740
54	100	11	M8	7	18	1560	3140
58	110	10	M8	7	18	2490	5490
70	120	10	M8	7	18	2650	6270
80	140	11	M10	8.7	25	3430	8040

Europe type Ball Bushing

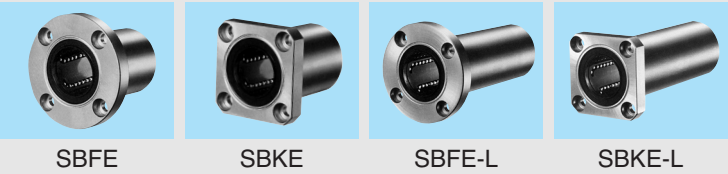
- Metric dimension
- Widely used in Europe countries
- Synthetic resin retainer
- Variety sizes and models

Europe type ball bushing is a metric dimension series widely used in europe countries.

Standard type : Stock available



Flange type : Stock available



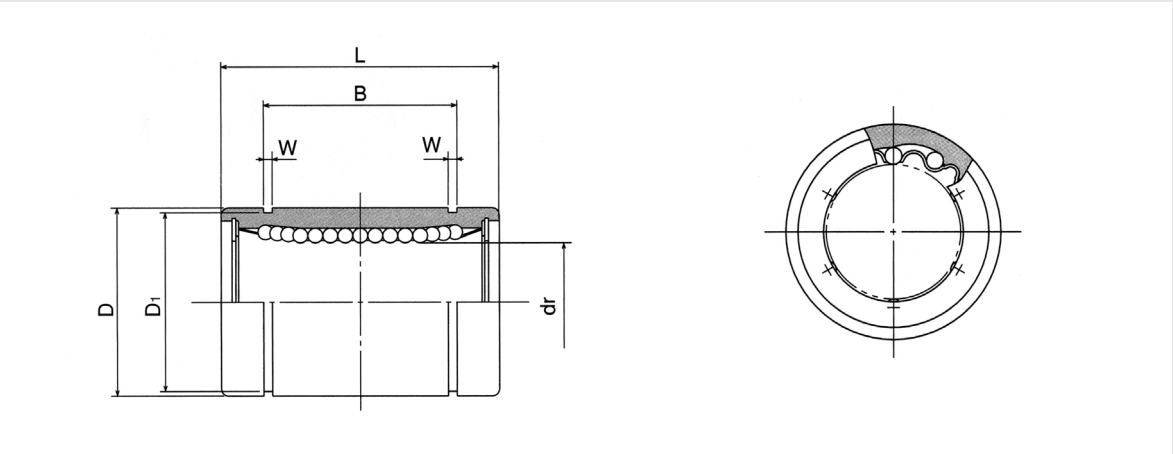
Flange type : Order made



Ball bush housing : Stock available



SBE Standard type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SBE5	3	5	+0.008 0	12	0	22	0 -0.2	14.5	0 -0.2
SBE8	4	8		16	-0.008	25		16.5	
SBE12	4	12		22	0	32		22.9	
SBE16	5	16	+0.009	26	-0.009	36	0 -0.11	24.9	0 -0.3
SBE20	5	20	-0.001	32	0	45		31.5	
SBE25	6	25	+0.011	40		58		44.1	
SBE30	6	30	-0.001	47	0 -0.13	68	0 -0.3	52.1	0 -0.3
SBE40	6	40	+0.013 -0.002	62	0	80		60.6	
SBE50	6	50		75	-0.013	100		77.6	
SBE60	6	60		90	0 -0.015	125	0 -0.4	101.7	0 -0.4

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBE 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

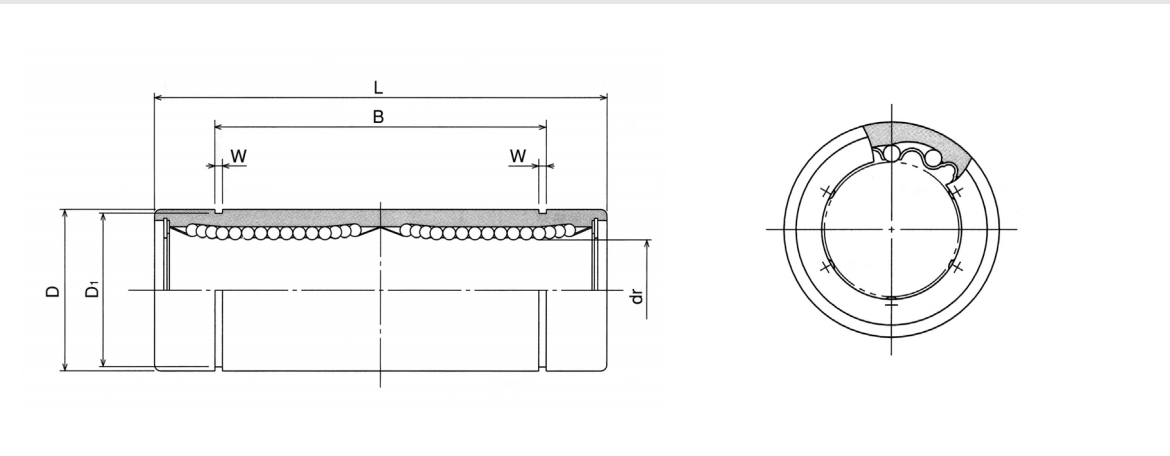


- Metric dimension (Europe type)
- Stock available
- Standard type

(Unit : mm)

W	D1	E	RC	C [N]	Co [N]	M [g]
1.1	11.5	0.012	-0.005	200	260	11
1.1	15.2	0.012	-0.005	260	400	20
1.3	21	0.012	-0.007	410	590	41
1.3	24.9	0.012	-0.007	770	1170	65
1.6	30.5	0.015	-0.009	860	1370	91
1.85	38	0.015	-0.009	980	1560	215
1.85	44.5	0.015	-0.009	1560	2740	325
2.15	59	0.017	-0.013	2150	4010	705
2.65	72	0.017	-0.013	3820	7930	1130
3.15	86.5	0.020	-0.016	4700	9990	2220

SBE-L Standard type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SBE8L	4	8	+0.009 -0.001	16	⁰ -0.009	45	⁰ -0.3	33	⁰ -0.3
SBE12L	4	12		22	⁰ -0.011	57		45.8	
SBE16L	5	16	+0.011 -0.001	26		70		49.8	
SBE20L	5	20		32	⁰ -0.013	80	⁰ -0.4	61	⁰ -0.4
SBE25L	6	25	+0.013 -0.002	40		112		82	
SBE30L	6	30		47		123		104.2	
SBE40L	6	40	+0.016 -0.004	62	⁰ -0.015	154	⁰ -0.4	121.2	⁰ -0.4
SBE50L	6	50		75	⁰ -0.020	192		155.2	
SBE60L	6	60		90		211		170	

- ❶ E : Eccentricity (Max)

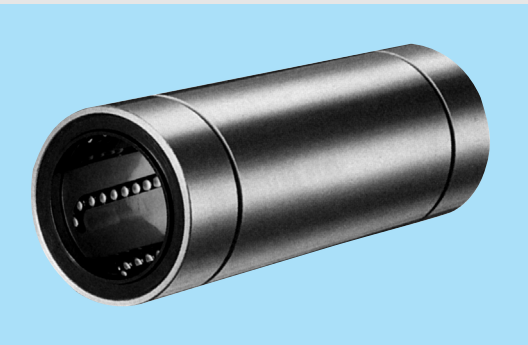
❷ C : Basic dynamic load rating
- ❸ Co : Basic static load rating

❹ M : Mass

Ordering example

SBE 25L UU - NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

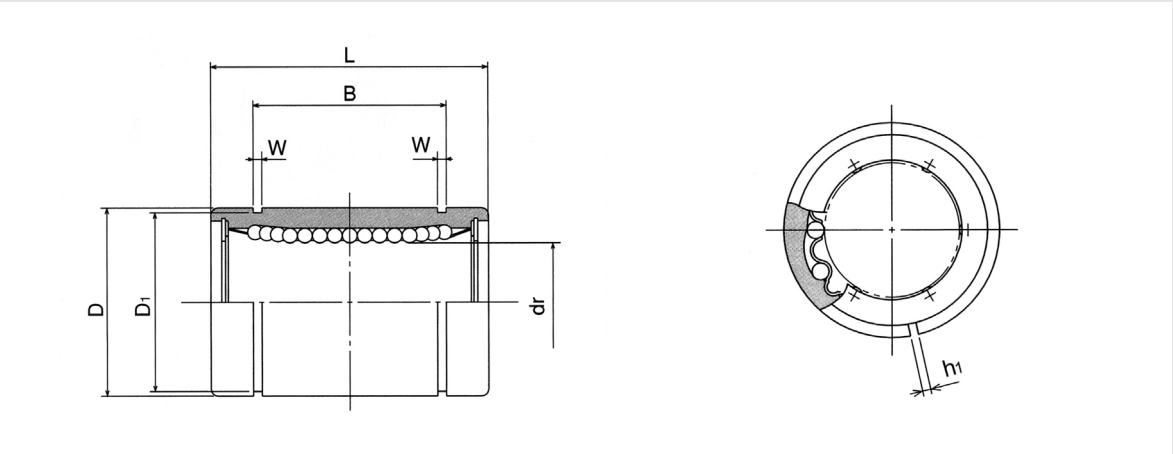


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

W	D1	E	C [N]	Co [N]	M [g]
1.1	15.2	0.015	421	804	40
1.3	21	0.015	813	1570	80
1.3	24.9	0.015	921	1780	115
1.6	30.5	0.017	1370	2740	180
1.85	38	0.017	1570	3140	430
1.85	44.5	0.017	2500	5490	615
2.15	59	0.020	3430	8040	1400
2.65	72	0.020	6080	15900	2320
3.15	86.5	0.025	7550	20000	3920

SBE-AJ clearance adjustable type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SBE5-AJ	3	5	+0.008 0	12	0	22	0 -0.2	14.5	0 -0.2
SBE8-AJ	4	8		16	-0.008	25		16.5	
SBE12-AJ	4	12		22	0	32		22.9	
SBE16-AJ	5	16	+0.009	26	-0.009	36	0 -0.3	24.9	0 -0.3
SBE20-AJ	5	20	-0.001	32	0 -0.011	45		31.5	
SBE25-AJ	6	25	+0.011	40		58		44.1	
SBE30-AJ	6	30	-0.001	47	0 -0.013	68	0 -0.4	52.1	0 -0.4
SBE40-AJ	6	40	+0.013 -0.002	62	0	80		60.6	
SBE50-AJ	6	50		75	-0.013	100		77.6	
SBE60-AJ	6	60		90	0 -0.015	125		101.7	

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

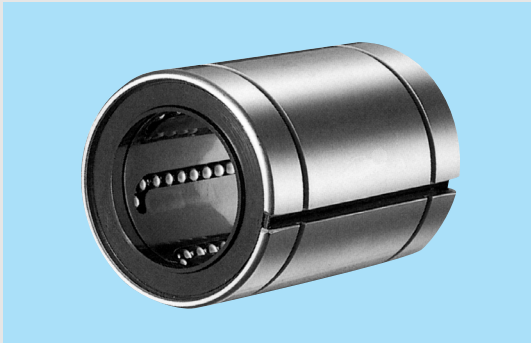
SBE 25 UU – AJ – NM
[1] [2] [3] [4]

- [1] Model number

[3] Seal : No symbol(Without seal),
UU(Seals on bothside)

[3] AJ : Clearance adjustable

[4] Surface treatment : No symbol(Standard),
NM(Nickel plating)

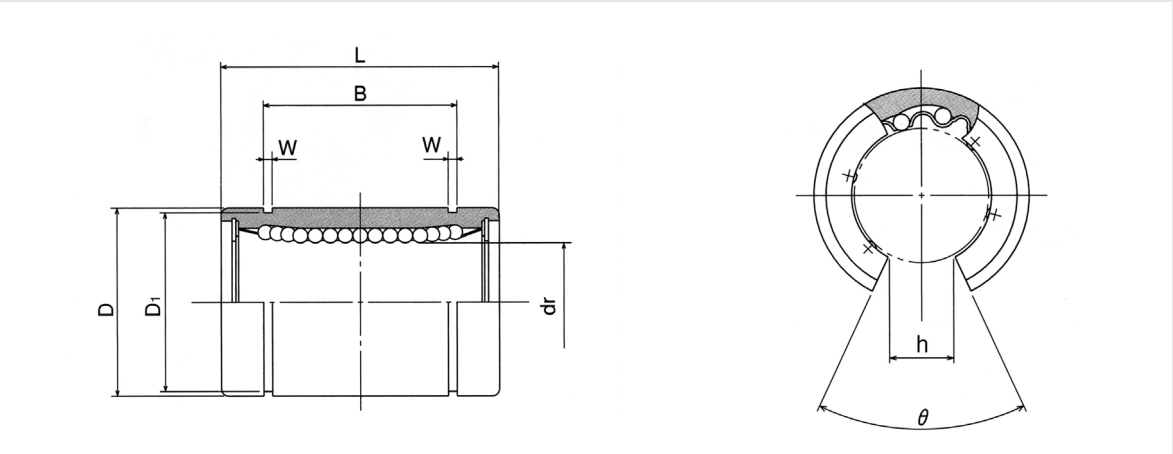


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

W	D1	h	E	RC	C [N]	Co [N]	M [g]
1.1	11.5	1	0.012	-0.005	200	260	11
1.1	15.2	1	0.012	-0.005	260	400	20
1.3	21	1.5	0.012	-0.007	410	590	41
1.3	24.9	1.5	0.012	-0.007	770	1170	65
1.6	30.5	2	0.015	-0.009	860	1370	91
1.85	38	2	0.015	-0.009	980	1560	215
1.85	44.5	2	0.015	-0.009	1560	2740	325
2.15	59	3	0.017	-0.013	2150	4010	705
2.65	72	3	0.017	-0.013	3820	7930	1130
3.15	86.5	3	0.020	-0.016	4700	9990	2220

SBE-OP open type



Model number	Number of ball circuits	dr		D		L		B	
			Permissible tolerance		Permissible tolerance		Permissible tolerance		Permissible tolerance
SBE12-OP	3	12	+0.008 0	22	0 -0.009	32	0 -0.2	22.9	0 -0.2
SBE16-OP	4	16	+0.009	26	0 -0.011	36	0 -0.3	24.9	0 -0.3
SBE20-OP	4	20	-0.001	32		45		31.5	
SBE25-OP	5	25	+0.011	40	0 -0.013	58	0 -0.4	44.1	0 -0.4
SBE30-OP	5	30	-0.001	47		68		52.1	
SBE40-OP	5	40	+0.013 -0.002	62	0 -0.015	80		60.6	
SBE50-OP	5	50		75		100		77.6	
SBE60-OP	5	60		90		125		101.7	

- ❶ E : Eccentricity (Max)

❷ RC : Permissible radial clearance
- ❸ C : Basic dynamic load rating

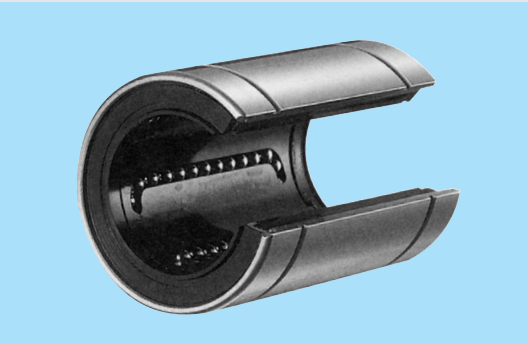
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBE 25 UU – OP – NM
[1] [2] [3] [4]

- [1] Model number
- [3] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] OP : Open type
- [4] Surface treatment : No symbol(Standard),
NM(Nickel plating)



- Metric dimension (Europe type)
- Stock available

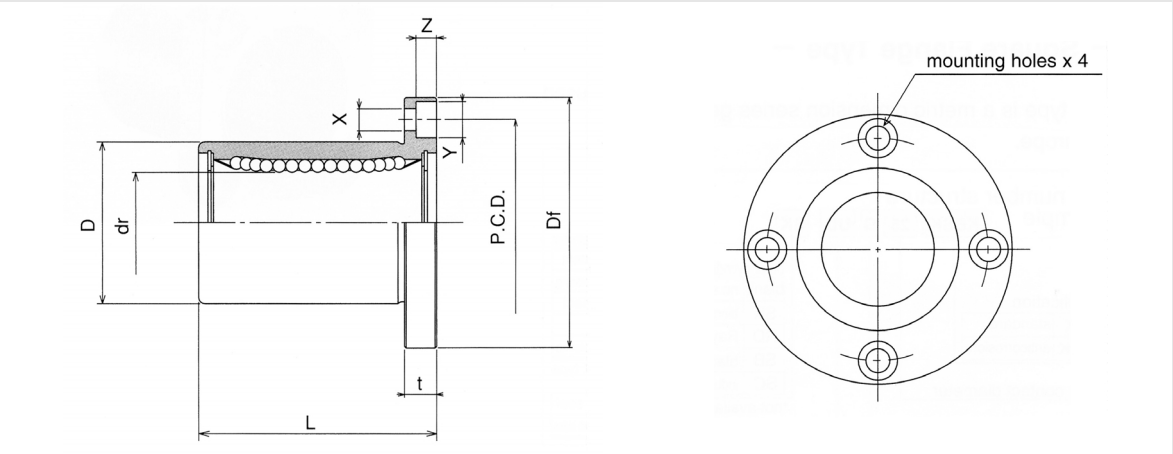
(Unit : mm)

W	D1	h1	θ	E	RC	C [N]	Co [N]	M [g]
1.3	21	7.5	78	0.012	-0.007	410	590	41
1.3	24.9	10	78	0.012	-0.007	770	1170	65
1.6	30.5	10	60	0.015	-0.009	860	1370	91
1.85	38	12.5	60	0.015	-0.009	980	1560	215
1.85	44.5	12.5	50	0.015	-0.009	1560	2740	325
2.15	59	16.8	50	0.017	-0.013	2150	4010	705
2.65	72	21	50	0.017	-0.013	3820	7930	1130
3.15	86.5	27.2	54	0.020	-0.016	4700	9990	2220

Europe type Ball Bushing

Europe type Ball Bushing

SBFE Flange type



Model number	Number of ball circuits	dr		D		L		Df	t
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBFE8	4	8	+0.008 0	16	0 -0.013	25	±0.3	32	5
SBFE12	4	12	+0.009 -0.001	22	0 -0.016	32		42	6
SBFE16	5	16		26	0 -0.019	36		46	6
SBFE20	5	20		32		45		54	8
SBFE25	6	25	+0.011 -0.001	40		58		62	8
SBFE30	6	30	+0.013 -0.002	47	0 -0.022	68		76	10
SBFE40	6	40		62	0 -0.025	80		98	13
SBFE50	6	50		75		100		112	13
SBFE60	6	60		90		125		134	18

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

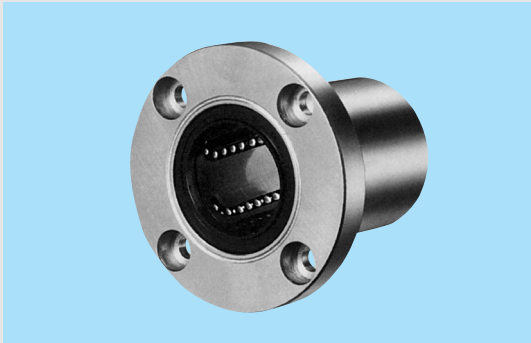
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBFE 25 UU - NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

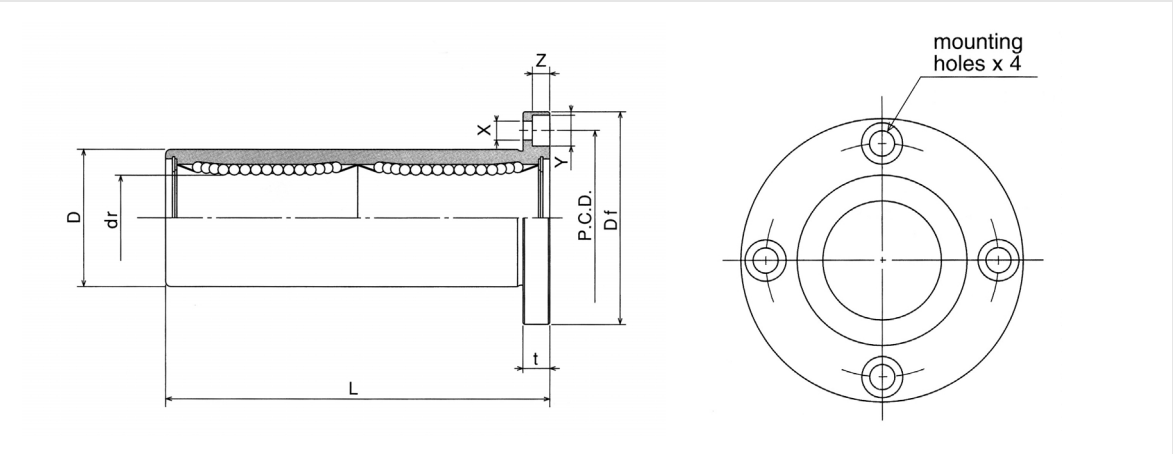


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
24	3.5	6	3.1	0.012	0.012	265	402	41
32	4.5	7.5	4.1	0.012	0.012	510	784	80
36	4.5	7.5	4.1	0.012	0.012	578	892	103
43	5.5	9	5.1	0.015	0.015	862	1370	182
51	5.5	9	5.1	0.015	0.015	980	1570	335
62	6.6	11	6.1	0.015	0.015	1570	2740	560
80	9	14	8.1	0.017	0.017	2160	4020	1175
94	9	14	8.1	0.017	0.017	3820	7940	1745
112	11	17	11.1	0.020	0.020	4700	9800	3220

SBFE-L Flange type



Model number	Number of ball circuits	dr		D		L		Df	t
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBFE8L	4	8	+0.009 -0.001	16	0 -0.013	45	-0.3	32	5
SBFE12L	4	12		22	0 -0.016	57		42	6
SBFE16L	5	16	+0.011 -0.001	26	0 -0.019	70		46	6
SBFE20L	5	20		32	0 -0.022	80		54	8
SBFE25L	6	25	+0.013 -0.002	40	0 -0.025	112		62	8
SBFE30L	6	30		47	0 -0.025	123		76	10
SBFE40L	6	40	+0.016 -0.004	62	0 -0.025	154		98	13
SBFE50L	6	50		75	0 -0.025	192		112	13
SBFE60L	6	60		90	0 -0.025	211		134	18

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

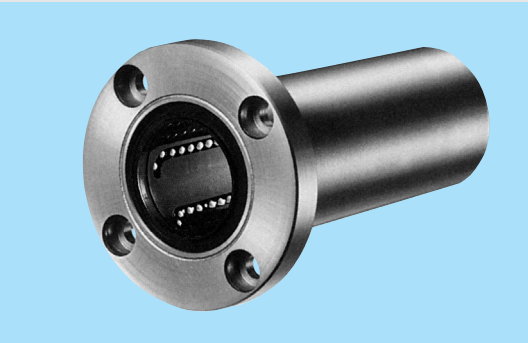
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBFE 25L UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

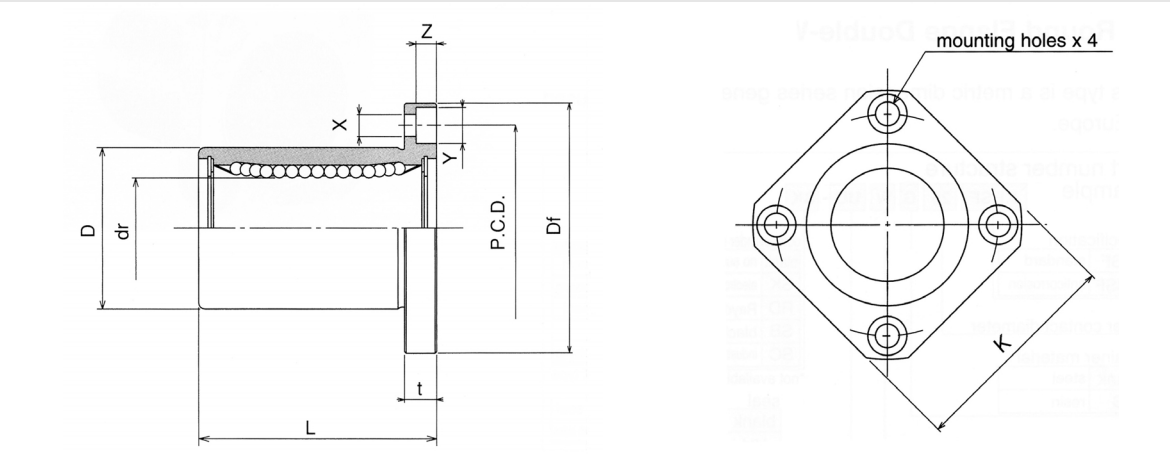


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
24	3.5	6.5	3.1	0.015	0.015	421	804	59
32	4.5	8	4.1	0.015	0.015	813	1570	110
36	4.5	8	4.1	0.015	0.015	921	1780	160
43	5.5	9.5	5.1	0.017	0.017	1370	2740	260
51	5.5	9.5	5.1	0.017	0.017	1570	3140	540
62	6.6	11	6.1	0.017	0.017	2500	5490	815
80	9	14	8.1	0.020	0.020	3430	8040	1805
94	9	14	8.1	0.020	0.020	6080	15900	2820
112	11	17.5	11.1	0.025	0.025	7550	20000	4920

SBKE Flange type



Model number	Number of ball circuits	dr		D		L		Df	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBKE8	4	8	+0.008 0	16	0 -0.013	25	±0.3	32	25
SBKE12	4	12	+0.009 -0.001	22	0 -0.016	32		42	32
SBKE16	5	16		26	0 -0.019	36		46	35
SBKE20	5	20	+0.011 -0.001	32		45		54	42
SBKE25	6	25		40	0 -0.022	58		62	50
SBKE30	6	30	+0.013 -0.002	47		68		76	60
SBKE40	6	40		62	0 -0.025	80		98	75
SBKE50	6	50		75		100		112	88
SBKE60	6	60		90		125		134	106

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

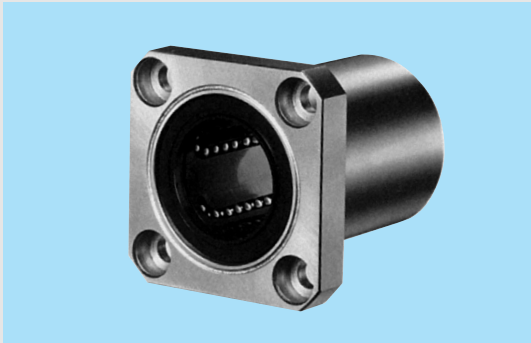
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBKE 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

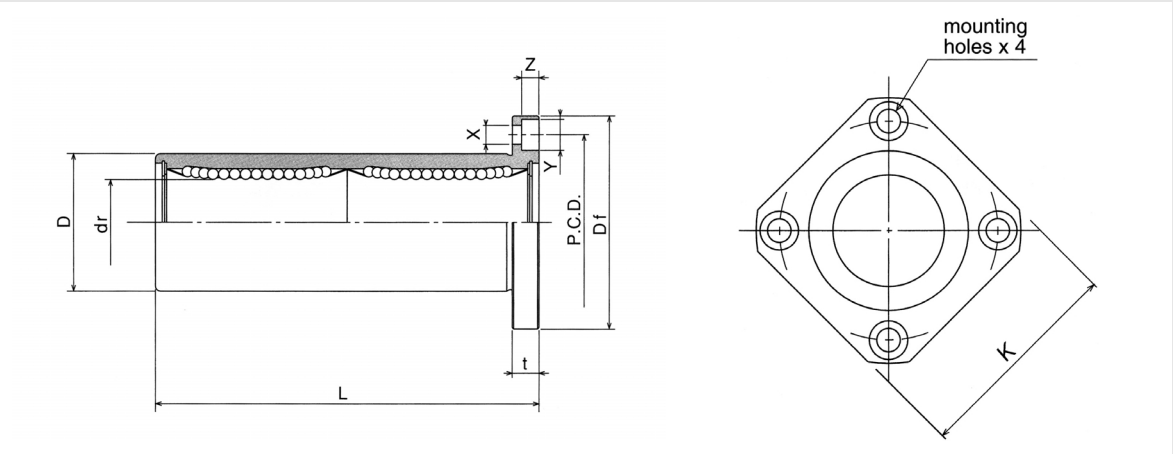


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	24	3.5	6	3.1	0.012	0.012	265	402	41
6	32	4.5	7.5	4.1	0.012	0.012	510	784	80
6	36	4.5	7.5	4.1	0.012	0.012	578	892	103
8	43	5.5	9	5.1	0.015	0.015	862	1370	182
8	51	5.5	9	5.1	0.015	0.015	980	1570	335
10	62	6.6	11	6.1	0.015	0.015	1570	2740	560
13	80	9	14	8.1	0.017	0.017	2160	4020	1175
13	94	9	14	8.1	0.017	0.017	3820	7940	1745
18	112	11	17	11.1	0.020	0.020	4700	9800	3220

SBKE-L Flange type



Model number	Number of ball circuits	dr		D		L		Df	K
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBKE8L	4	8	+0.009 -0.001	16	⁰ -0.013	45	-0.3	32	25
SBKE12L	4	12	+0.011 -0.001	22	⁰ -0.016	57		42	32
SBKE16L	5	16		26	⁰ -0.019	70		46	35
SBKE20L	5	20		32		80		54	42
SBKE25L	6	25	+0.013 -0.002	40	⁰ -0.022	112		62	50
SBKE30L	6	30	+0.016 -0.004	47		123		76	60
SBKE40L	6	40		62		154		98	75
SBKE50L	6	50		75		192		112	88
SBKE60L	6	60		90	⁰ -0.025	211		134	106

- ❶ E : Eccentricity (Max)

❷ S : Squariness
- ❸ C : Basic dynamic load rating

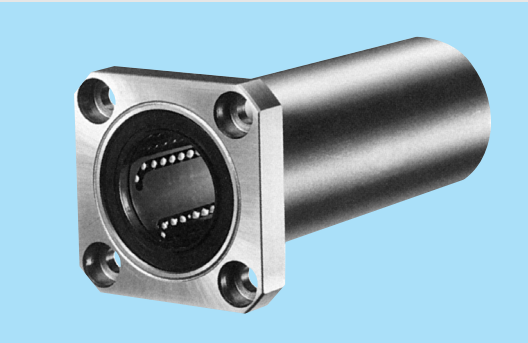
❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBKE 25L UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

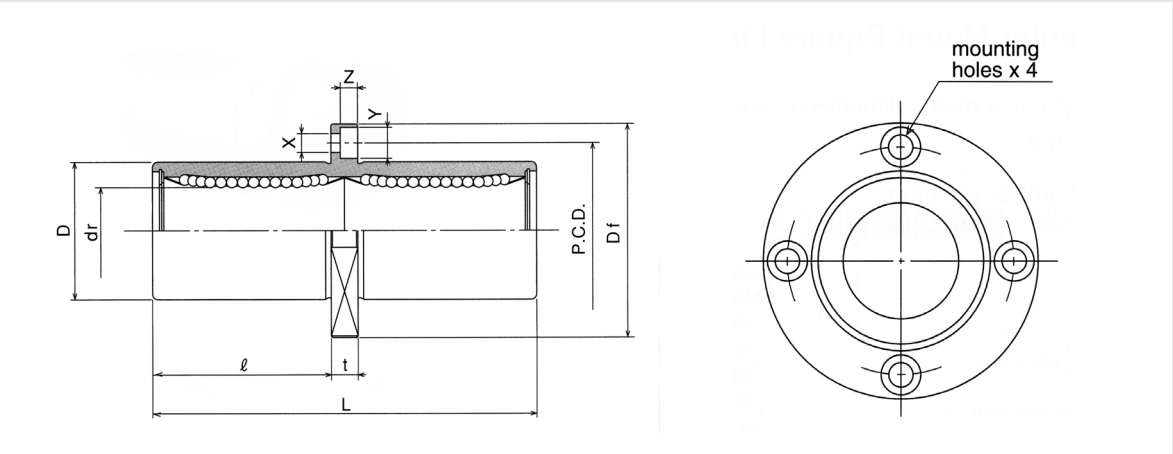


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
5	24	3.5	6.5	3.1	0.015	0.015	421	804	51
6	32	4.5	8	4.1	0.015	0.015	813	1570	90
6	36	4.5	8	4.1	0.015	0.015	921	1780	135
8	43	5.5	9.5	5.1	0.017	0.017	1370	2740	225
8	51	5.5	9.5	5.1	0.017	0.017	1570	3140	500
10	62	6.6	11	6.1	0.017	0.017	2500	5490	720
13	80	9	14	8.1	0.020	0.020	3430	8040	1600
13	94	9	14	8.1	0.020	0.020	6080	15900	2620
18	112	11	17.5	11.1	0.025	0.025	7550	20000	4480

SBFCE Flange type



Model number	Number of ball circuits	dr		D		L		l	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBFCE16UU	5	16	+0.011 -0.001	26	⁰ -0.016	68	±0.3	31	46
SBFCE20UU	5	20		32		80		36	54
SBFCE25UU	6	25	+0.013 -0.002	40	⁰ -0.019	112		52	62
SBFCE30UU	6	30		47		123		56.5	76

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBFCE 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

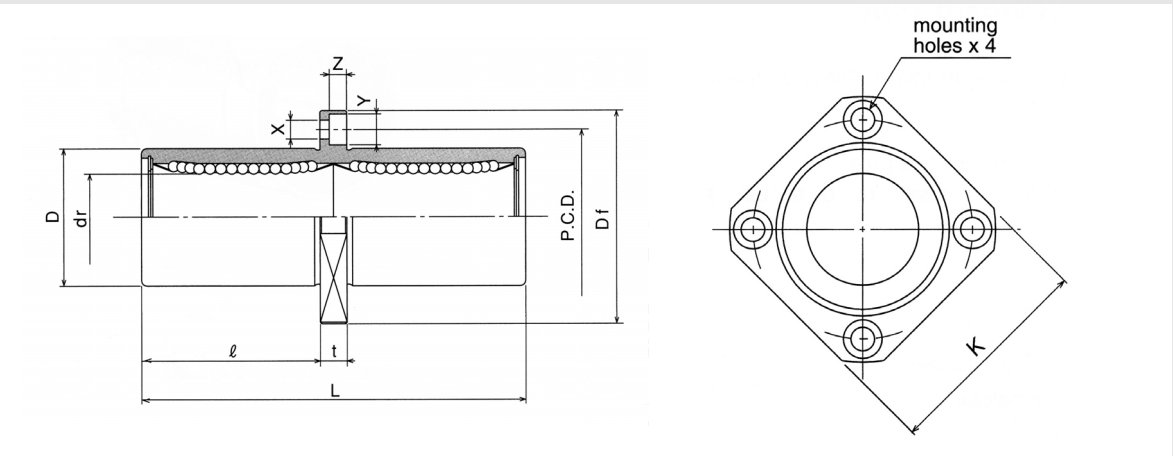


- Metric dimension (Europe type)
- Order made (Please contact SBC)

(Unit : mm)

t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
6	36	4.5	8	4.1	0.015	0.015	921	1780	160
8	43	5.5	9.5	5.1	0.017	0.017	1370	2740	260
8	51	5.5	9.5	5.1	0.017	0.017	1570	3140	540
10	62	6.6	11	6.1	0.017	0.017	2500	5490	815

SBKCE Flange type



Model number	Number of ball circuits	dr		D		L		l	Df
			Permissible tolerance		Permissible tolerance		Permissible tolerance		
SBKCE16UU	5	16	+0.011 -0.001	26	⁰ -0.016	68	±0.3	31	46
SBKCE20UU	5	20		32	⁰ -0.019	80		36	54
SBKCE25UU	6	25	+0.013 -0.002	40		112		52	62
SBKCE30UU	6	30		47		123		56.5	76

- ❶ E : Eccentricity (Max)

❷ S : Squarness
- ❸ C : Basic dynamic load rating

❹ Co : Basic static load rating

❺ M : Mass

Ordering example

SBKCE 25 UU – NM
[1] [2] [3]

- [1] Model number
- [2] Seal : UU(Seals on bothside)
- [3] Surface treatment : No symbol(Standard),
NM(Nickel plating)

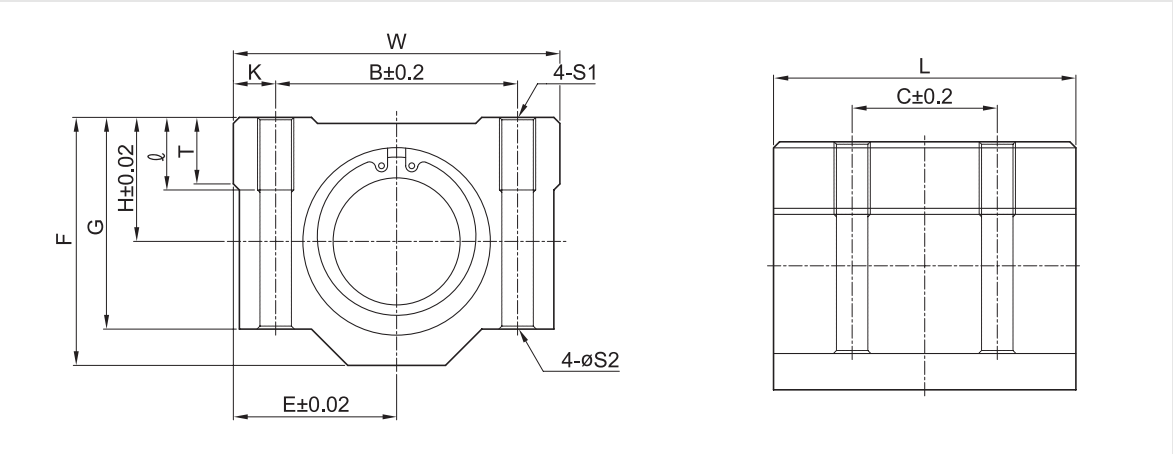


- Metric dimension (Europe type)
- Order made (Please contact SBC)

(Unit : mm)

K	t	PCD	X	Y	Z	E	S	C [N]	Co [N]	M [g]
35	6	36	4.5	8	4.1	0.015	0.015	921	1780	160
42	8	43	5.5	9.5	5.1	0.017	0.017	1370	2740	260
50	8	51	5.5	9.5	5.1	0.017	0.017	1570	3140	540
60	10	62	6.6	11	6.1	0.017	0.017	2500	5490	815

SCE ball bush housing



Model number	H	E	W	L	F	G	T
SCE 12	15	21	42	36	28	24	8
SCE 16	19	25	50	44	38.5	32.5	9
SCE 20	21	27	54	53	41	35	11
SCE 25	26	38	76	67	51.5	42	12
SCE 30	30	39	78	76	59.5	49	15
SCE 40	40	51	102	90	78	62	20

- ① C : Basic dynamic load rating
- ② Co : Basic static load rating

Ordering example

SCE 25 UU
[1] [2]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)

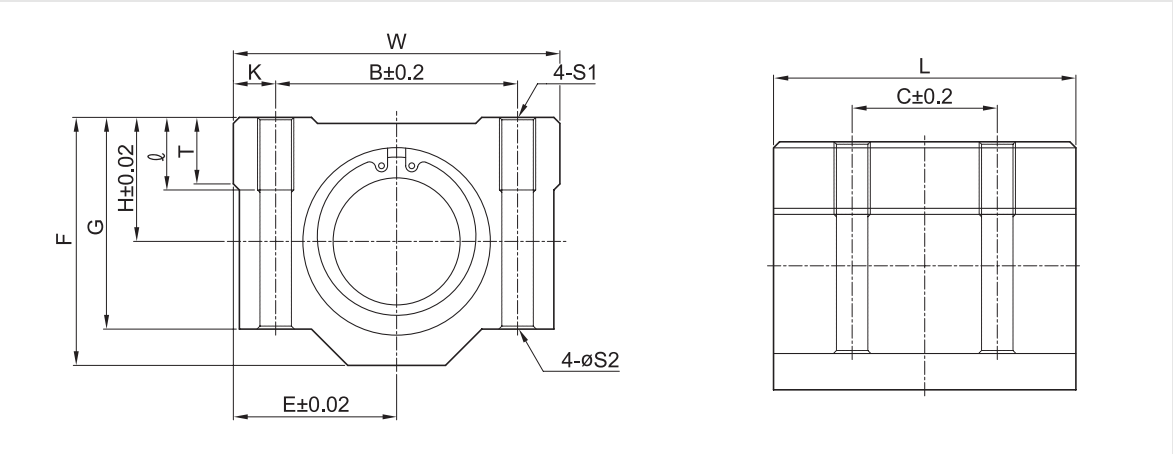


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

B	C	K	S1	S2	Ø	C [N]	Co [N]
30.5	26	5.75	M5	4.3	12	510	780
36	34	7	M5	4.3	12	770	1180
40	40	7	M6	5.2	12	880	1350
54	50	11	M8	7	18	980	1550
58	58	10	M8	7	18	1570	2700
80	60	11	M10	8.7	25	2160	4020

SCE-L ball bush housing



Model number	H	E	W	L	F	G	T
SCE 12L	15	21	42	70	28	24	8
SCE 16L	19	25	50	85	38.5	32.5	9
SCE 20L	21	27	54	102	41	35	11
SCE 25L	26	38	76	130	51.5	42	12
SCE 30L	30	39	78	140	59.5	49	15
SCE 40L	40	51	102	175	78	62	20

- ① C : Basic dynamic load rating
- ② Co : Basic static load rating

Ordering example

SCE 25L UU
[1] [2]

- [1] Model number
- [2] Seal : No symbol(Without seal),
UU(Seals on bothside)

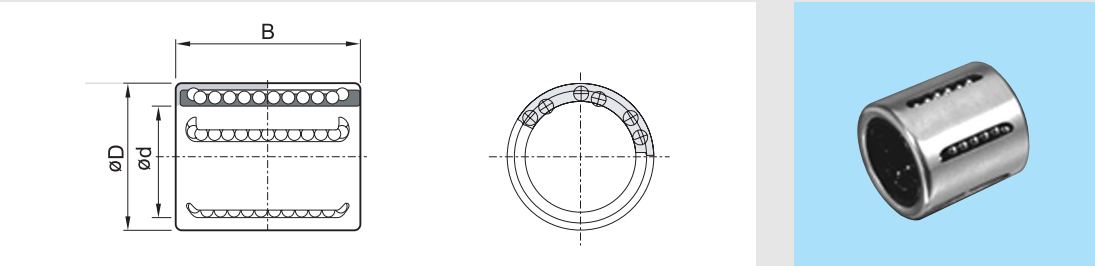


- Metric dimension (Europe type)
- Stock available

(Unit : mm)

B	C	K	S1	S2	Ø	C [N]	Co [N]
30.5	50	5.75	M5	4.3	12	813	1570
36	60	7	M5	4.3	12	1230	2350
40	70	7	M6	5.2	12	1400	2740
54	100	11	M8	7	18	1560	3140
58	110	10	M8	7	18	2490	5490
80	140	11	M10	8.7	25	3430	8040

Compact size / Synthetic resin retainer



Ordering example

KH 0622 – PP
[1] [2]

[1] Model number
[2] Seal : No symbol(Without seal), P(Seal one end),
PP(Seals on bothside)

(Unit : mm)						
Model number	Ød	ØD	B	C [N]	Co [N]	M [g]
KH 0622	6	12	22	400	239	7
KH 0824	8	15	24	435	280	12
KH 1026	10	17	26	500	370	14.5
KH 1228	12	19	28	620	510	18.5
KH 1428	14	21	28	620	520	20.5
KH 1630	16	24	30	800	620	27.5
KH 2030	20	28	30	950	790	32.5
KH 2540	25	35	40	1990	1670	66
KH 3050	30	40	50	2800	2700	95
KH 4060	40	52	60	4400	4450	182
KH 5070	50	62	70	5500	6300	252

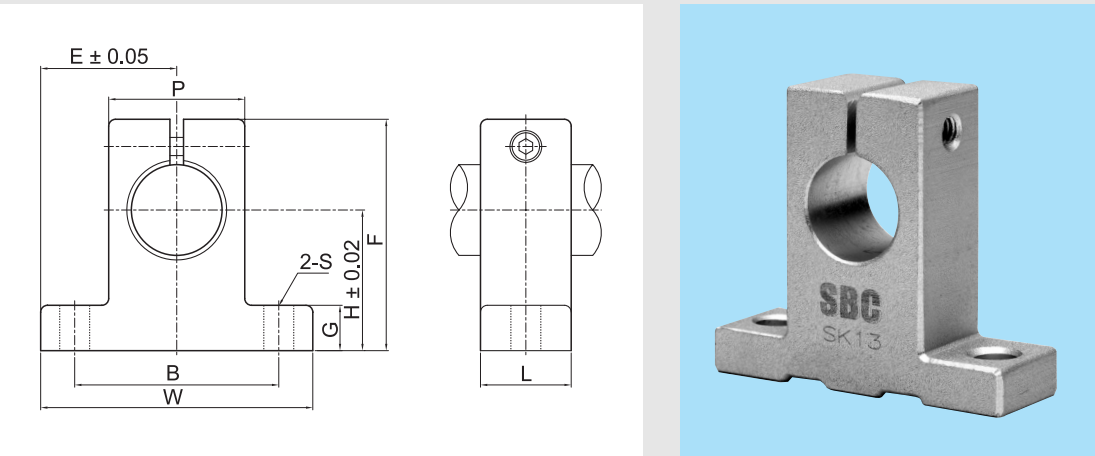
- ❶ C : Basic dynamic load rating
- ❷ Co : Basic static load rating
- ❸ M : Mass

Compact type Ball Bushing

Option

- Compact size
- Synthetic resin retainer
- Shaft support

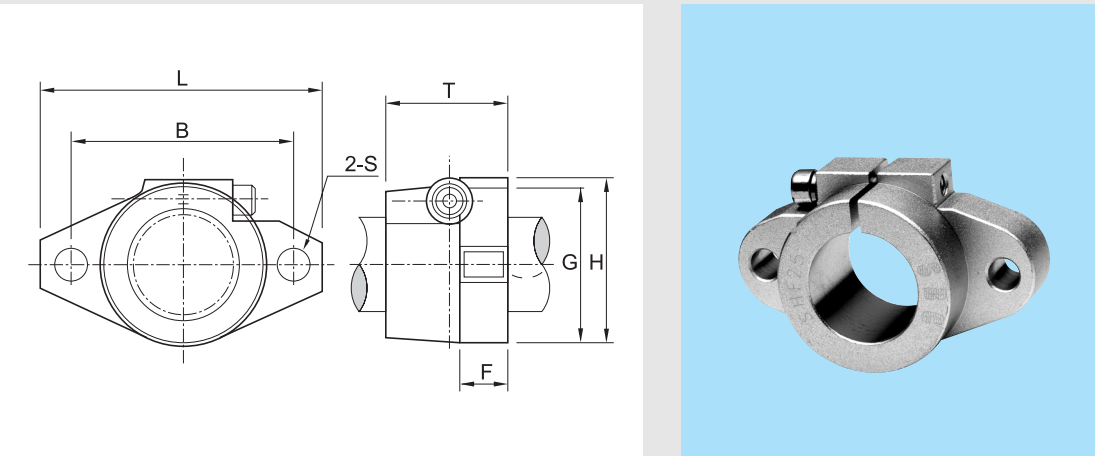
SK shaft support



(Unit : mm)

Reference	Main dimension									Fixing bolt	Mounting bolt
	H	E	W	L	F	G	P	B	S		
SK8	20	21	42	14	32.8	6	18	32	5.5	M4	M5
SK10	20	21	42	14	32.8	6	18	32	5.5	M4	M5
SK12	23	21	42	14	37.5	6	20	32	5.5	M4	M5
SK13	23	21	42	14	37.5	6	20	32	5.5	M4	M5
SK16	27	24	48	16	44	8	25	38	5.5	M4	M5
SK20	31	30	60	20	51	10	30	45	6.6	M5	M6
SK25	35	35	70	24	60	12	38	56	6.6	M6	M6
SK30	42	42	84	28	70	12	44	64	9	M6	M8
SK35	50	49	98	32	82	15	50	74	11	M8	M10
SK40	60	57	114	36	96	15	60	90	11	M8	M10

SHF shaft support



(Unit : mm)

Reference	Main dimension									Weight g
	L	T	F	B	G	H	S	Fixing bolt	Mounting bolt	
SHF10	43	10	5	32	20	24	5.5	M5	M4	13
SHF12	47	13	7	36	25	28	5.5	M5	M4	20
SHF13	47	13	7	36	25	28	5.5	M5	M4	20
SHF16	50	16	8	40	28	31	5.5	M5	M4	27
SHF20	60	20	8	48	34	37	7	M6	M5	40
SHF25	70	25	10	56	40	42	7	M6	M5	60
SHF30	80	30	12	64	46	50	9	M8	M6	110
SHF35	92	35	14	72	50	58	12	M10	M8	140
SHF40	102	40	16	80	56	67	12	M10	M10	205