

# Linear Bushings



**SB & SB-AJ & SB-OP TYPE**

- Standard Type
- Clearance Adjustable Type
- Open Type

This type is a metric dimension series widely used in Asian countries

Ordering Example

SB 25 UU - AJ - NM

Specification  
SB standard

Inner contact diameter

Types

Blank	Standard
AJ	Clearance-adjustable type
OP	Open type

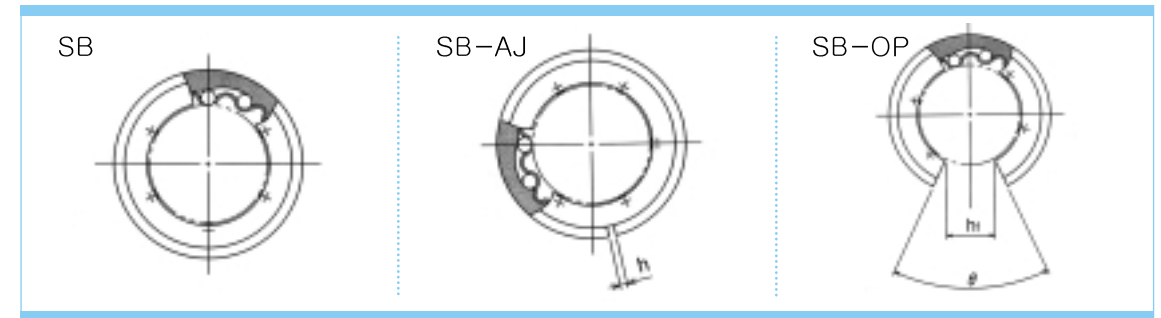
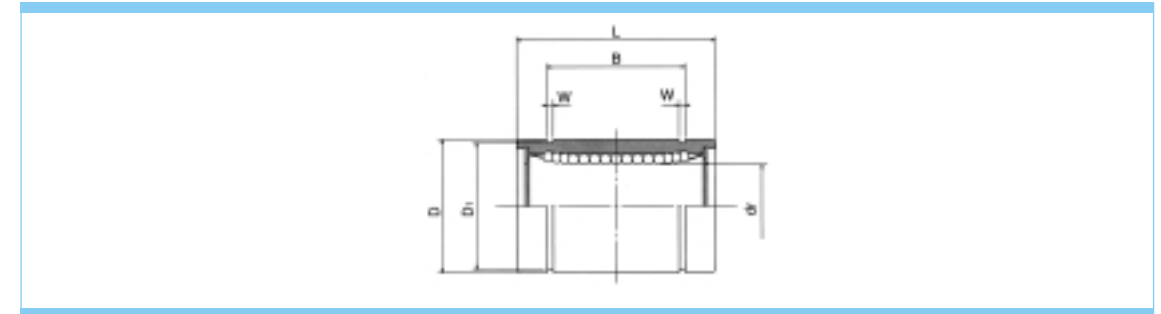
Nickel Plating

Seal

blank	Without seal
U	Seal on one side
UU	Seals on bothside



Part number							Major dimensions			
Standard	Number of ball circuits	Weight g	Clearance adjustable	Number of ball circuits	Open	Number of ball circuits	dr		D	
							mm	Tolerance $\mu m$	mm	Tolerance $\mu m$
SB 4	4	2	-	-	-	-	4	0	8	0
SB 5	4	4	-	-	-	-	5	-8	10	-9
SB 6	4	8.5	SB 6-AJ	4	-	-	6	0 -9	12	0
SB 8s	4	11	SB 8s-AJ	4	-	-	8		15	-11
SB 8	4	17	SB 8-AJ	4	-	-	8		15	-11
SB 10	4	36	SB 10-AJ	4	-	-	10		19	0
SB 12	4	42	SB 12-AJ	4	SB 12-OP	-	12		21	0
SB 13	4	49	SB 13-AJ	4	SB 13-OP	-	13		23	-13
SB 16	5	76	SB 16-AJ	5	SB 16-OP	4	16		28	0
SB 20	5	100	SB 20-AJ	5	SB 20-OP	4	20		32	0
SB 25	6	240	SB 25-AJ	6	SB 25-OP	5	25		40	-16
SB 30	6	270	SB 30-AJ	6	SB 30-OP	5	30		45	-16
SB 35	6	425	SB 35-AJ	6	SB 35-OP	5	35	52	0	
SB 40	6	654	SB 40-AJ	6	SB 40-OP	5	40	60	-19	
SB 50	6	1700	SB 50-AJ	6	SB 50-OP	5	50	80	-19	
SB 60	6	2000	SB 60-AJ	6	SB 60-OP	5	60	0/-15	90	0/-22



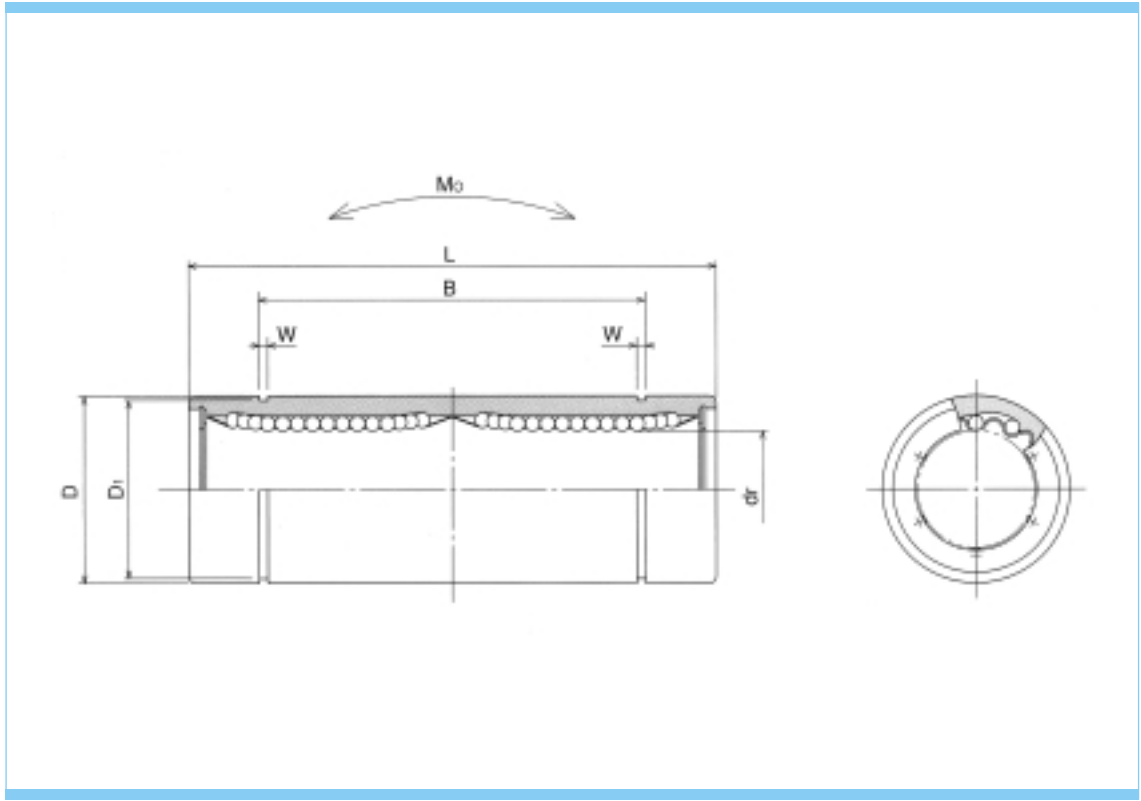
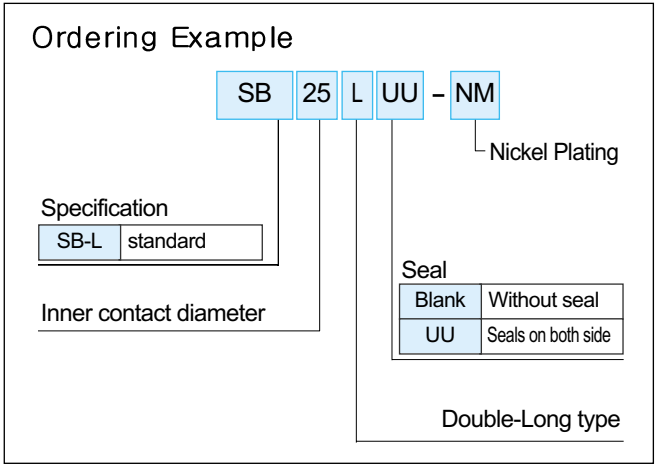
1N=0.102kgf

Major dimensions									Radial clearance $(\mu m)$	Basic load rating		Part Number
L	Tolerance	B	Tolerance	W	D1	h	h1	$\theta$		Dynamic C N	Static Co N	
12	0	-	-	-	-	-	-	-	-3	88	127	SB4
15	-0.12	10.2	0 -0.2	1.1	9.6	-	-	-		167	206	SB5
19	0	13.5		1.1	11.5	1	-	-		206	265	SB6
17		11.5		1.1	14.3	1	-	-		176	216	SB8S
24		17.5		1.1	14.3	1	-	-	274	392	SB8	
29		22		1.3	18	1	-	-	372	549	SB10	
30		-0.2		23	1.3	20	1.5	8	80°	510	784	SB12
32		-6		23	1.3	22	1.5	9	80°	510	784	SB13
37	26.5			1.6	27	1.5	11	80°	774	1,180	SB16	
42	30.5			1.6	30.5	1.5	11	60°	882	1,370	SB20	
59	-8			41	1.85	38	2	12	50°	980	1,570	SB25
64		44.5	1.85	43	2.5	15	50°	1,570	2,740	SB30		
70		49.5	2.1	49	2.5	17	50°	1,670	3,140	SB35		
80		-0.3	60.5	2.1	57	3	20	50°	2,160	4,020	SB40	
100		-13	74	2.6	76.5	3	25	50°	3,820	7,940	SB50	
110	85		3.15	86.5	3	30	50°	4,700	10,000	SB60		

**SB-L**

- Double -Long Type

This type is a metric dimension series widely used in Asian countries



Part number		Major dimensions						
Standard	Number of ball circuits	Weight g	dr		D		L	
			mm	Tolerance $\mu m$	mm	Tolerance $\mu m$	mm	Tolerance mm
SB 6L	4	16	6	0 -10	12	0	35	0 -0.3
SB 8L	4	31	8		15	-13	45	
SB 10L	4	62	10		19	0	55	
SB 12L	4	80	12		21	0	57	
SB 13L	4	90	13		23	-16	61	
SB 16L	5	145	16		28	0	70	
SB 20L	5	180	20	0 -12	32	0	80	0 -0.4
SB 25L	6	440	25		40	-19	112	
SB 30L	6	480	30		45	0	123	
SB 35L	6	795	35	0 -15	52	0	135	0 -0.4
SB 40L	6	1170	40		60	-22	151	
SB 50L	6	3100	50		80	0/-20	192	
SB 60L	6	3500	60	90	0/-25	209		

1N  $\approx$  0.102kgf

Major dimensions				Basic load rating		Allowable static moment Mo N·m	Part number
mm	B mm	W mm	D1 mm	Dynamic C N	Static Co N		
				27	0 -0.3	1.1	11.5
35	1.1	14.3	431	784		4.31	SB 8L
44	1.3	18	588	1,100		7.24	SB 10L
46	1.3	20	813	1,570		10.9	SB 12L
46	1.3	22	813	1,570		11.6	SB 13L
53	1.6	27	1,230	2,350		19.7	SB 16L
61	0 -0.4	1.6	30.5	1,400	2,740	26.8	SB 20L
82		1.85	38	1,560	3,140	43.4	SB 25L
89		1.85	43	2,490	5,490	82.8	SB 30L
99		2.1	49	2,650	6,270	110	SB 35L
121		21.	57	3,430	8,040	147	SB 40L
148		2.6	76.5	6,080	15,900	397	SB 50L
170	3.15	86.5	7,550	20,000	530	SB 60L	

## SBF & SBK & SBH TYPE

- Round Flange Type
- Square Flange Type
- Two Side Cut Flange Type

This type is a metric dimension series widely used in Asian countries

### Ordering Example

SBF 25 UU - NM

#### Specification

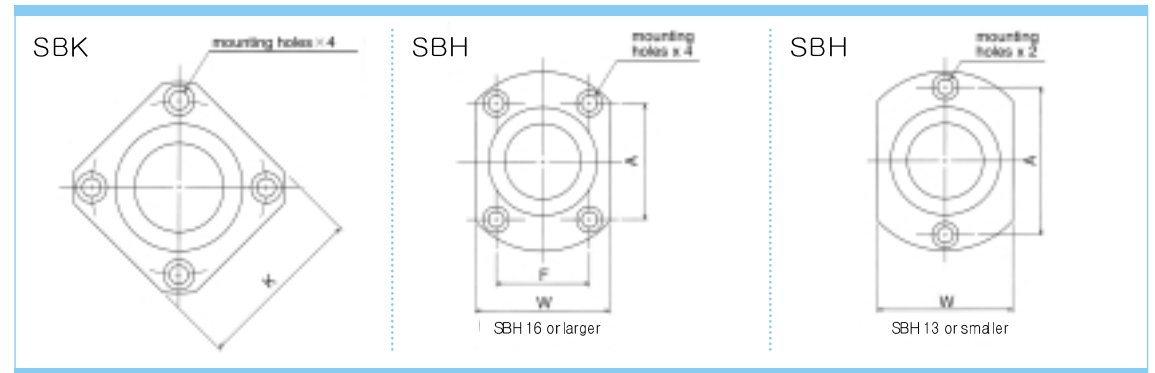
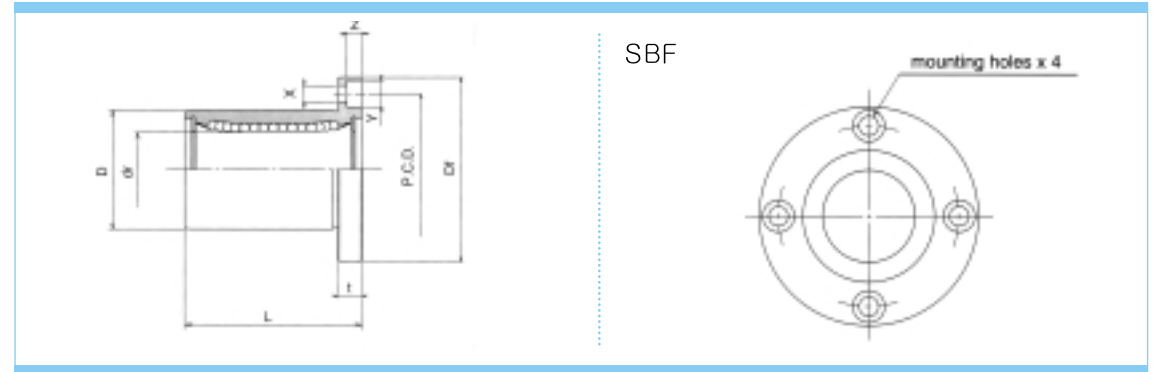
SBF	Round Flange type
SBK	Square Flange Type
SBH	Two Side Cut Flange Type

Inner contact diameter

Nickel Plating

#### Seal

Blank	Without seal
UU	Seals on both side



Part number			Major dimensions								
Round Flange	Square Flange	Two side cut Flange	Number of ball circuits	Weight g	dr		D		L ±0.3 mm	Flange	
					mm	Tolerance μm	mm	Tolerance μm		Df mm	K mm
SBF 6	SBK 6	SBH 6	4	24	6	0 -9	12	0 -13	19	28	22
SBF 8s	SBK 8s	-	4	32	8		15		17	32	25
SBF 8	SBK 8	SBH 8	4	37	8		15		24	32	25
SBF 10	SBK 10	SBH 10	4	72	10		19	29	40	30	
SBF 12	SBK 12	SBH 12	4	76	12		21	30	42	32	
SBF 13	SBK 13	SBH 13	4	88	13		23	32	43	34	
SBF 16	SBK 16	SBH 16	5	120	16		28	37	48	37	
SBF 20	SBK 20	SBH 20	5	180	20		32	42	54	42	
SBF 25	SBK 25	SBH 25	6	340	25		40	59	62	50	
SBF 30	SBK 30	SBH 30	6	470	30		45	64	74	58	
SBF 35	SBK 35	-	6	650	35	52	70	82	64		
SBF 40	SBK 40	-	6	1060	40	60	80	96	75		
SBF 50	SBK 50	-	6	2200	50	80	100	116	92		
SBF 60	SBK 60	-	6	3000	60	0/-15	90	0/-25	110	134	106

1N ≒ 0.102kgf

Major dimensions							Radial clearance μm	Basic load rating		Part number
t mm	P.C.D mm	X x Y x Z mm	W mm	A mm	F mm	Dynamic C N		Static Co N		
5	20	3.5 x 6 x 3.1	18	20	-	-5	206	265	SBF 6	
5	24	3.5 x 6 x 3.1	-	-	-		176	216	SBF 8s	
5	24	3.5 x 6 x 3.1	21	24	-		274	392	SBF 8	
6	29	4.5 x 7.5 x 4.1	25	29	-	-7	372	549	SBF 10	
6	32	4.5 x 7.5 x 4.1	27	32	-		510	784	SBF 12	
6	33	4.5 x 7.5 x 4.1	29	33	-		510	784	SBF 13	
6	38	4.5 x 7.5 x 4.1	34	31	22	-9	774	1,180	SBF 16	
8	43	5.5 x 9 x 5.1	38	36	24		882	1,370	SBF 20	
8	51	5.5 x 9 x 5.1	46	40	32		980	1,570	SBF 25	
10	60	6.6 x 11 x 6.1	51	49	35	-13	1,570	2,740	SBF 30	
10	67	6.6 x 11 x 6.1	-	-	-		1,670	3,140	SBF 35	
13	78	9 x 14 x 8.1	-	-	-		2,160	4,020	SBF 40	
13	98	9 x 14 x 8.1	-	-	-	-16	3,820	7,940	SBF 50	
18	112	11 x 17 x 11.1	-	-	-		4,700	10,000	SBF 60	

**SBF-A & SBK-A & SBH-A TYPE**

- Round Flange Type with Pilot End
- Square Flange Type with Pilot End
- Two Side Cut Pilot End Flange Type

This type is a metric dimension series widely used in Asian countries

**Ordering Example**

SBF 25 UU - A - NM

Nickel Plating

With pilot end

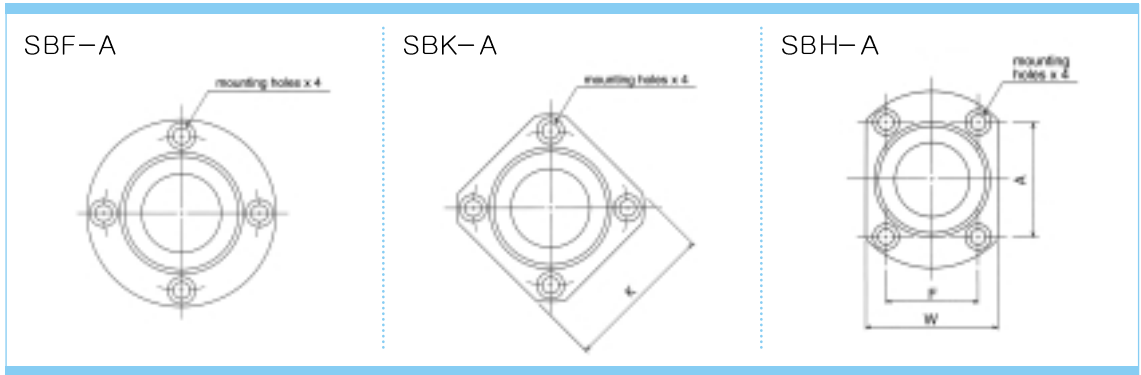
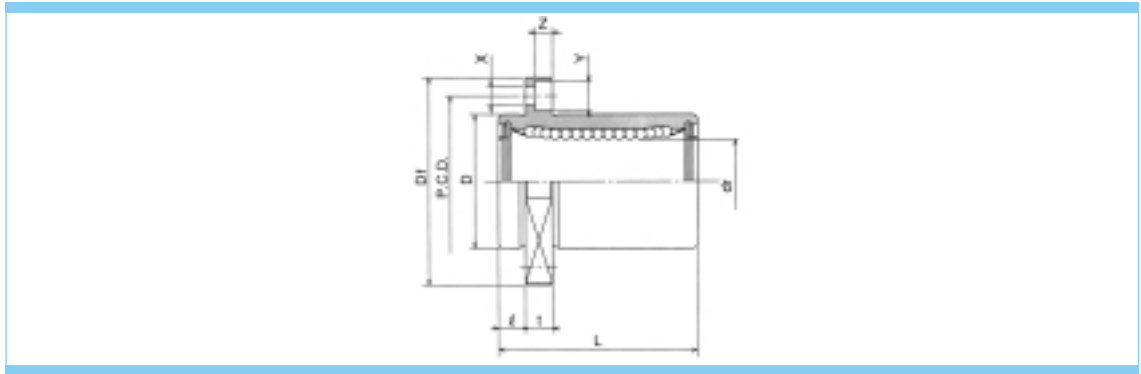
Seals on both sides

Specification

SBF-A	Round Flange type
SBK-A	Square Flange Type
SBH-A	Two Side Cut Flange Type

Inner contact diameter

※UU type is standard feature



Part number			Major dimensions								
Round Flange	Square Flange	Two side cut Flange	Number of ball circuits	Weight g	dr		D		L ± 0.3 mm	Flange	
					mm	Tolerance μm	mm	Tolerance μm		ℓ mm	K mm
SBF16UU-A	SBK16UU-A	SBH16UU-A	5	120	16	0 / -9	28	0 / -16	37	6	37
SBF20UU-A	SBK20UU-A	SBH20UU-A	5	180	20	0 / -10	32	0 / -19	42	8	42
SBF25UU-A	SBK25UU-A	SBH25UU-A	6	340	25		40		59	8	50
SBF30UU-A	SBK30UU-A	SBH30UU-A	6	470	30		45		64	10	58
SBF35UU-A	SBK35UU-A	-	6	650	35	0 / -12	52	0 / -22	70	10	64

1N ≒ 0.102kgf

Major dimensions							Radial clearance μm	Basic load rating		Part number	
Flange								Dynamic C N	Static Co N		
Df mm	t mm	P.C.D mm	X x Y x Z mm	W mm	A mm	F mm					
48	6	38	4.5 x 7.5 x 4.1	34	31	22	-7	774	1,180	SBF16-A	
54	8	43	5.5 x 9 x 5.1	38	36	24		-9	882	1,370	SBF20-A
62	8	51	5.5 x 9 x 5.1	46	40	32			980	1,570	SBF25-A
74	10	60	6.6 x 11 x 6.1	51	49	35	-13	1,570	2,740	SBF30-A	
82	10	67	6.6 x 11 x 6.1	-	-	-		1,670	3,140	SBF35-A	

**SBF-L & SBK-L & SBH-L TYPE**

- Round Flange Double-Long Type
- Square Flange Double-Long Type
- Two Side Cut Double-Long Flange Type

This type is a metric dimension series widely used in Asian countries

Ordering Example

SBF 25 L UU - NM

Specification

SBF-L	Round Flange Type
SBK-L	Square Flange Type
SBH-L	Two Side Cut Flange Type

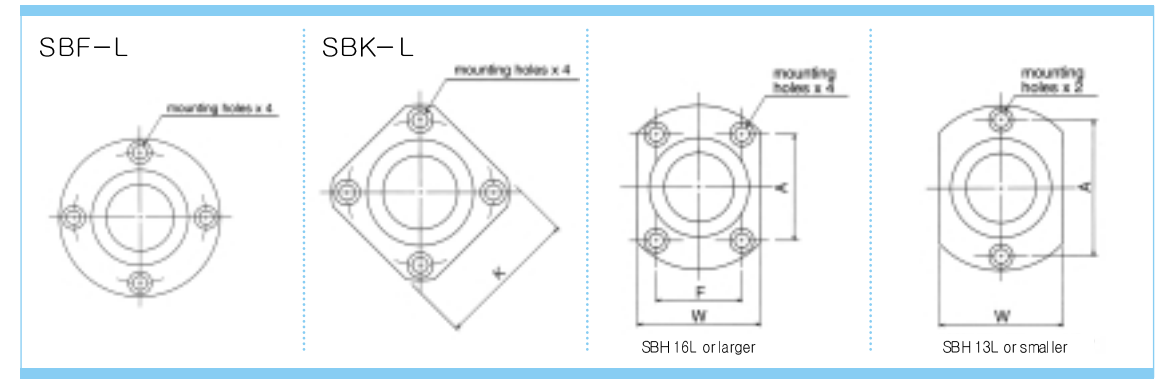
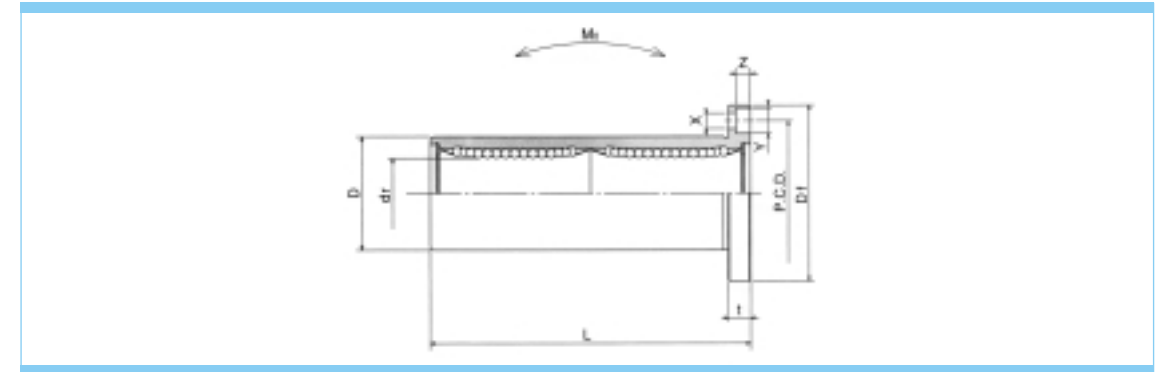
Inner contact diameter

Seals

blank	Without seal
UU	Seal on both sides

Nickel Plating

Double-Long type



Part number			Major dimensions								
Round Flange	Square Flange	Two side cut Flange	Number of ball circuits	Weight g	dr mm	Tolerance μm	D		L ±0.3 mm	Flange	
							mm	μm		Df mm	K mm
SBF 6L	SBK 6L	SBH 6L	4	31	6	0	12	0	35	28	22
SBF 8L	SBK 8L	SBH 8L	4	51	8		15	-13	45	32	25
SBF 10L	SBK 10L	SBH10L	4	98	10		19	0	55	40	30
SBF 12L	SBK 12L	SBH12L	4	110	12		21	0	57	42	32
SBF 13L	SBK 13L	SBH13L	4	130	13		23	-16	61	43	34
SBF 16L	SBK 16L	SBH16L	5	190	16		28	0	70	48	37
SBF 20L	SBK 20L	SBH20L	5	260	20	32	0	80	54	42	
SBF 25L	SBK 25L	SBH25L	6	540	25	40	-12	112	62	50	
SBF 30L	SBK 30L	SBH30L	6	680	30	45		-19	123	74	58
SBF 35L	SBK 35L	-	6	1020	35	52		0	135	82	64
SBF 40L	SBK 40L	-	6	1570	40	60	-15	151	96	75	
SBF 50L	SBK 50L	-	6	3600	50	80		-22	192	116	92
SBF 60L	SBK 60L	-	6	4500	60	0/-20	90	0/-25	209	134	106

Major dimensions						Radial clearance μm	Basic load rating		Allowable static moment Mo N.m	Part number
t mm	P.C.D mm	X x Y x Z mm	W mm	A mm	F mm		Dynamic C N	Static Co N		
5	20	3.5 x 6 x 3.1	18	20	-	-5	323	530	2.18	SBF6L
5	24	3.5 x 6 x 3.1	21	24	-		431	784	4.31	SBF8L
6	29	4.5 x 7.5 x 4.1	25	29	-		588	1,100	7.24	SBF10L
6	32	4.5 x 7.5 x 4.1	27	32	-	-7	813	1,570	10.9	SBF12L
6	33	4.5 x 7.5 x 4.1	29	33	-		813	1,570	11.6	SBF13L
6	38	4.5 x 7.5 x 4.1	34	31	22		1,230	2,350	19.7	SBF16L
8	43	5.5 x 9 x 5.1	38	36	24	-9	1,400	2,740	26.8	SBF20L
8	51	5.5 x 9 x 5.1	46	40	32		1,560	3,140	43.4	SBF25L
10	60	6.6 x 11 x 6.1	51	49	35		2,490	5,490	82.8	SBF30L
10	67	6.6 x 11 x 6.1	-	-	-	-13	2,650	6,270	110	SBF35L
13	78	9 x 14 x 8.1	-	-	-		3,430	8,040	147	SBF40L
13	98	9 x 14 x 8.1	-	-	-		6,080	15,900	397	SBF50L
18	112	11 x 17 x 11.1	-	-	-	-16	7,550	20,000	530	SBF60L

1N ≒ 0.102kgf

**SBF-L-A & SBK-L-A & SBH-L-A TYPE**

- Round Flange Double-Long Pilot End Type
- Square Flange Double-Long Pilot End Type
- Two Side Cut Double-Long Flange Pilot End Type

This type is a metric dimension series widely used in Asian countries

**Ordering Example**

SBF 25 L UU - A - NM

Nickel Plating

With pilot end

Seals on both sides

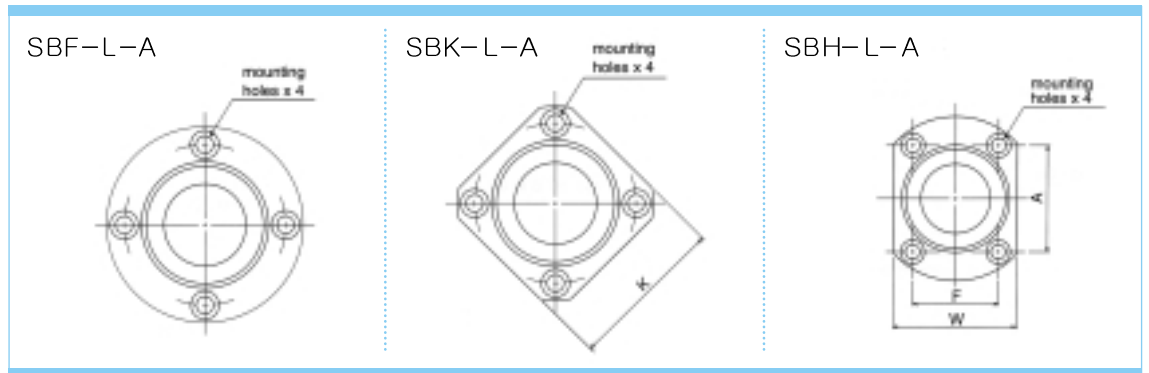
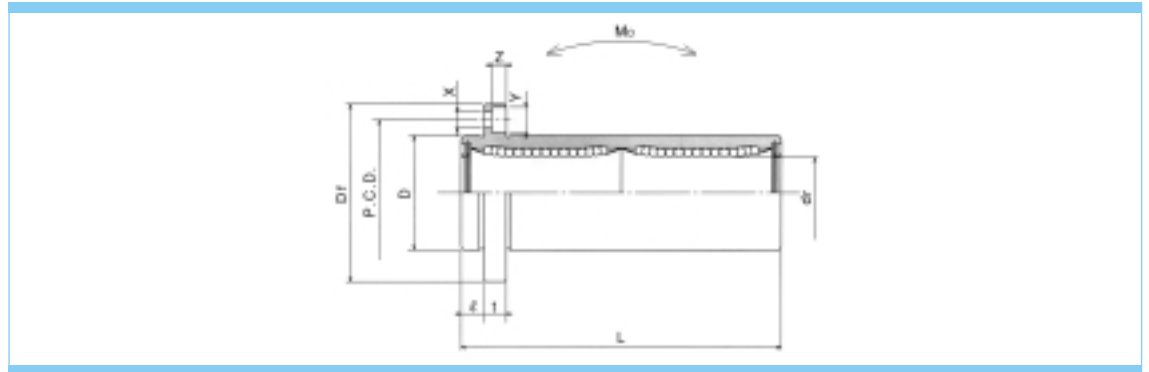
Double-Long type

Inner contact diameter

**Specification**

SBF-L-A	Round Flange Type
SBK-L-A	Square Flange Type
SBH-L-A	Two Side Cut Flange Type

※UU type is standard feature



Part number			Major dimensions									
Round Flange	Square Flange	Two side cut Flange	Number of ball circuits	Weight g	dr		D		L ±0.3 mm	Flange		
					mm	Tolerance μm	mm	Tolerance μm		ℓ mm	Df mm	K mm
SBF16UU-A	SBK16UU-A	SBH16UU-A	5	190	16	0/-10	28	0/-16	70	6	48	37
SBF20UU-A	SBK20UU-A	SBH20UU-A	5	260	20	0/-12	32	0/-19	80	8	54	42
SBF25UU-A	SBK25UU-A	SBH25UU-A	6	540	25		40		112	8	62	50
SBF30UU-A	SBK30UU-A	SBH30UU-A	6	680	30		45		123	10	74	58
SBF35UU-A	SBK35UU-A	-	6	1020	35	0/-15	52	0/-22	135	10	82	64

1N ≒ 0.102kgf

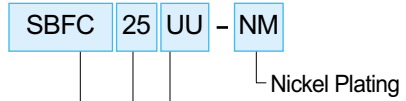
Major dimensions						Radial clearance μm	Basic load rating		Allowable static moment Mo N.m	Part number
t mm	P.C.D mm	X x Y x Z mm	W mm	A mm	F mm		Dynamic C N	Static Co N		
6	38	4.5 x 7.5 x 4.1	34	31	22	-7	1,230	2,350	19.7	SBF16UU-A
8	43	5.5 x 9 x 5.1	38	36	24		1,400	2,740	26.8	SBF20UU-A
8	51	5.5 x 9 x 5.1	46	40	32	-9	1,560	3,140	43.4	SBF25UU-A
10	60	6.6 x 11 x 6.1	51	49	35		2,490	5,490	82.8	SBF30UU-A
10	67	6.6 x 11 x 6.1	-	-	-		2,650	6,270	110	SBF35UU-A

**SBFC & SBKC & SBHC TYPE**

- Center Mount Round Flange Type
- Center Mount Square Flange Type
- Two Side Cut Center Flange Type

This type is a metric dimension series widely used in Asian countries

Ordering Example



Specification

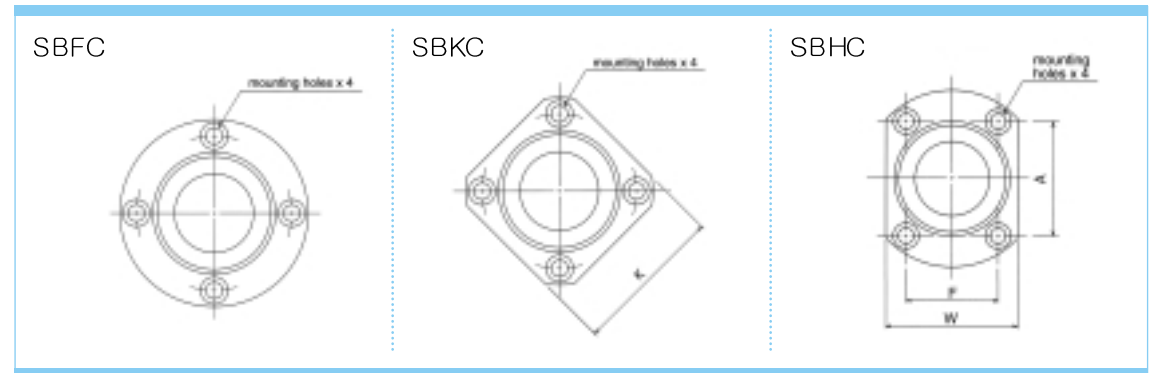
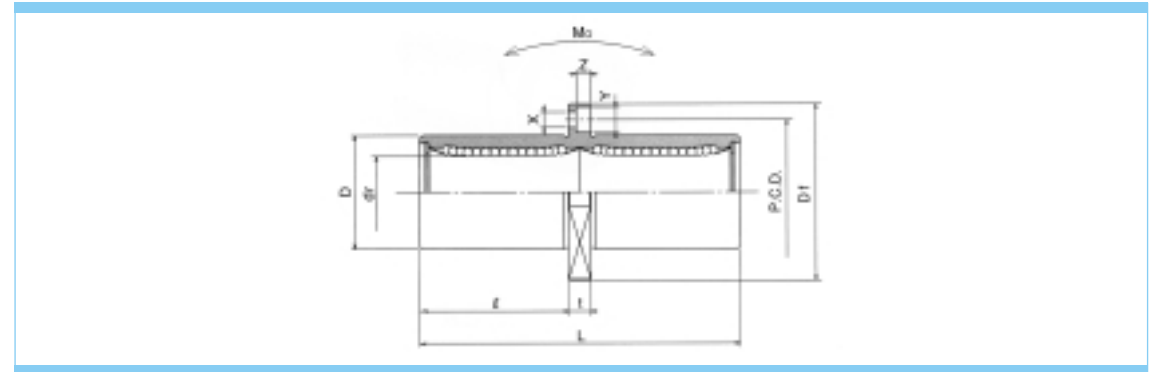
SBFC	Center Mount Round Flange Type
SBKC	Center Mount Square Flange Type
SBHC	Two Side Cut Center Flange Type

Inner contact diameter

Seals

Blank	Without seal
UU	Seal on both sides

※UU type is standard



Part number			Major dimensions									
Round Flange	Square Flange	Two side cut Flange	Number of ball circuits	Weight g	dr		D		L ±0.3 mm	Flange		
					mm	Tolerance μm	mm	Tolerance μm		Df mm	K mm	ℓ mm
SBFC16UU	SBKC16UU	SBHC16UU	5	190	16	0/-10	28	0/-16	70	48	37	32
SBFC20UU	SBKC20UU	SBHC20UU	5	260	20	0	32	0	80	54	42	36
SBFC25UU	SBKC25UU	SBHC25UU	6	540	25		40		-19	112	62	50
SBFC30UU	SBKC30UU	SBHC30UU	6	680	30	-12	45	-19	123	74	58	56.5
SBFC35UU	SBKC35UU	-	6	1020	35		52		0/-22	135	82	64

1N ≒ 0.102kgf

Major dimensions						Radial clearance μm	Basic load rating		Allowable static moment Mo N.m	Part number
Flange							dynamic C N	static Co N		
t mm	P.C.D mm	X x Y x Z mm	W mm	A mm	F mm					
6	38	4.5 x 7.5 x 4.1	34	31	22	-7	1,230	2,350	19.7	SBFC16JU
8	43	5.5 x 9 x 5.1	38	36	24	-9	1,400	2,740	26.8	SBFC20JU
8	51	5.5 x 9 x 5.1	46	40	32		1,560	3,140	43.4	SBFC25JU
10	60	6.6 x 11 x 6.1	51	49	35		2,490	5,490	82.8	SBFC30JU
10	67	6.6 x 11 x 6.1	-	-	-		-13	2,650	6,270	110