

**SBE & SBE-AJ & SBE-OP TYPE**

- Standard Type
- Clearance Adjustable Type
- Open Type

This type is a metric dimension series widely used in Europe.

Ordering Example

SBE 25 UU - AJ - NM

Specification: SBE Standard

Inner contact diameter

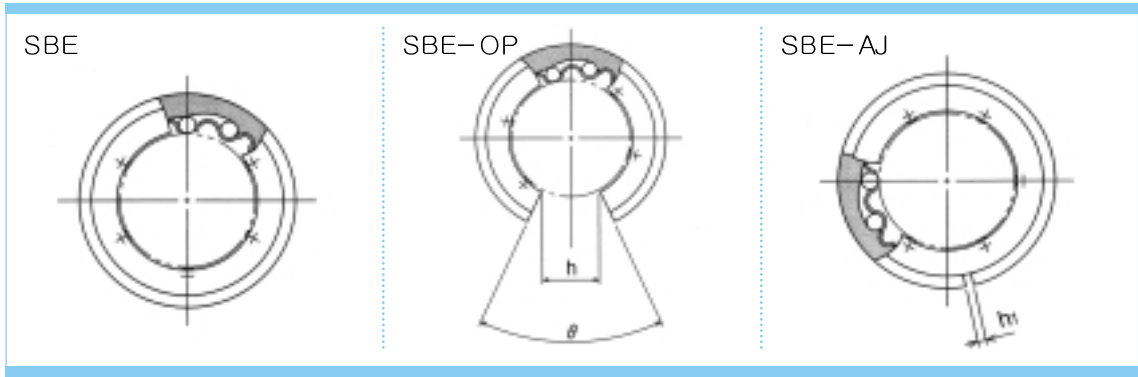
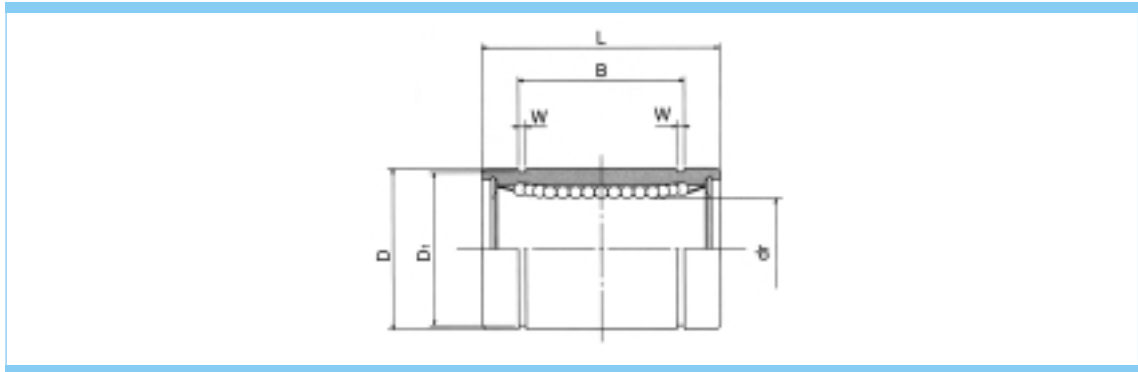
Types

Blank	Standard
AJ	Clearance Adjustable Type
OP	Open type

Nickel Plating

Seals

Blank	Without seal
U	Seal on one side
UU	Seal on both side



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 $\mu m$
SBE 5	4	11	SBE 5-AJ	4	-	-		12	0/-8	
SBE 8	4	22	SBE 8-AJ	4	-	-	8	16		
SBE12	4	45	SBE 12-AJ	4	SBE 12-OP	-	12	22	0	
SBE16	5	60	SBE 16-AJ	5	SBE 16-OP	4	16	26	-9	
SBE20	5	102	SBE 20-AJ	5	SBE 20-OP	4	20	32	0	
SBE25	6	235	SBE 25-AJ	6	SBE 25-OP	5	25	40	-11	
SBE30	6	360	SBE 30-AJ	6	SBE 30-OP	5	30	47	0	
SBE40	6	770	SBE 40-AJ	6	SBE 40-OP	5	40	62	-13	
SBE50	6	1250	SBE 50-AJ	6	SBE 50-OP	5	50	75	0	
SBE60	6	2220	SBE 60-AJ	6	SBE 60-OP	5	60	90	-15	

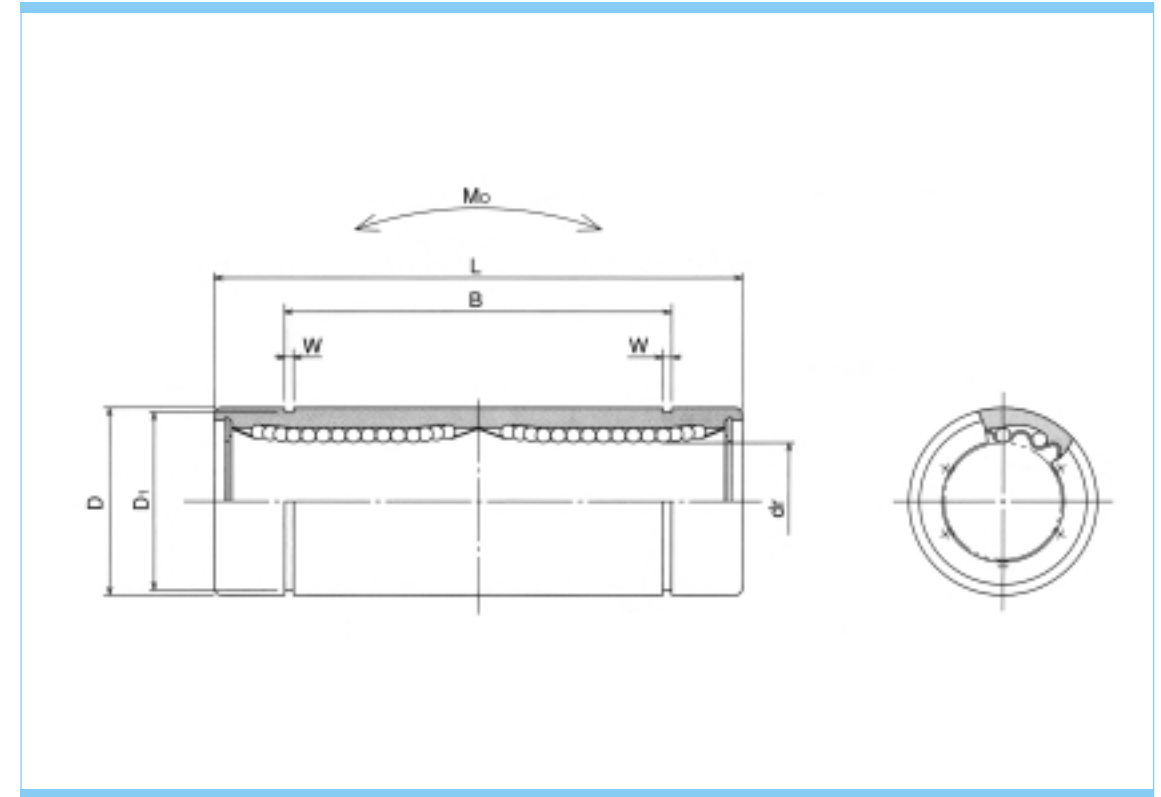
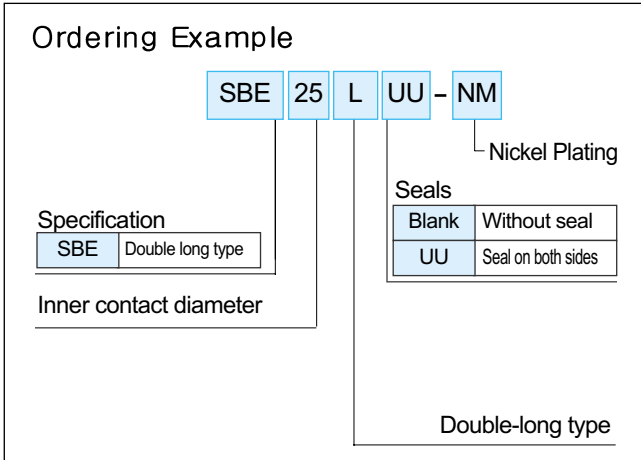
1N=0.102kgf

Major dimensions									Radial clearance (maximum) $\mu m$	Basic load rating		Part number
L	B	W	D1	h1	h	$\theta$	Dynamic C N	Static Co N				
22		14.5		1.1	11.5	1	-	-	-3	200	260	SBE 5
25		16.5		1.1	15.2	1	6.8	80°	-3	265	402	SBE 8
32		22.9		1.3	21	1.5	10	78°	-4	510	784	SBE 12
36		24.9		1.3	24.9	1.5	10	60°	-4	578	892	SBE 16
45		31.5		1.6	30.3	2	12.5	60°	-6	862	1,370	SBE 20
58		44.1		1.85	37.5	2	12.5	50°	-6	980	1,570	SBE 25
68		52.1		1.85	44.5	2	16.8	50°	-8	1,570	2,740	SBE 30
80		60.6		2.15	59	3	21	50°	-8	2,160	4,020	SBE 40
100		77.6		2.65	72	3	27.2	54°	-13	3,820	7,940	SBE 50
125	0/-0.4	101.7	0/-0.4	3.15	86.5	3	36.3	54°	-13	4,700	9,800	SBE 60

**SBE-L**

- Double -Long Type

This type is a metric dimension series widely used in Europe.



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
SBE 8L	4	40	8	+9	16	0/-9	46	0 -0.3	
SBE 12L	4	80	12	-1	22	0	61		
SBE 16L	5	115	16	+11	26	-11	68		
SBE 20L	5	180	20	-1	32	0	80	0 -0.4	
SBE 25L	6	430	25	+13	40	-13	112		
SBE 30L	6	615	30	-2	47	0	123		
SBE 40L	6	1400	40	+16	62	0	151		
SBE 50L	6	2320	50	-4	75	-15	192		
SBE 60L	6	3920	60		90	0/-20	209		

1N  $\approx$  0.102kgf

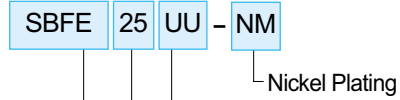
Major dimensions				Basic load rating		Allowable static moment Mo N·m	Part number
mm	B Tolerance mm	W mm	D1 mm	Dynamic C N	Static Co N		
33	0 -0.3	1.1	15.2	421	804	4.3	SBE 8L
45.8		1.3	21	803	1,570	11.7	SBE 12L
49.8		1.3	24.9	921	1,780	14.2	SBE 16L
61		1.6	30.5	1,370	2,740	25.0	SBE 20L
82	0 -0.4	1.85	38	1,570	3,140	44.0	SBE 25L
104.2		1.85	44.5	2,500	5,490	78.9	SBE 30L
121.2		2.15	59	3,430	8,040	147	SBE 40L
155.2		2.65	72	6,080	15,900	336	SBE 50L
170		3.15	86.5	7,550	20,000	487	SBE 60L

**SBFE & SBKE TYPE**

- Round Flange Type
- Square Flange Type

This type is a metric dimension series widely used in Europe.

Ordering Example



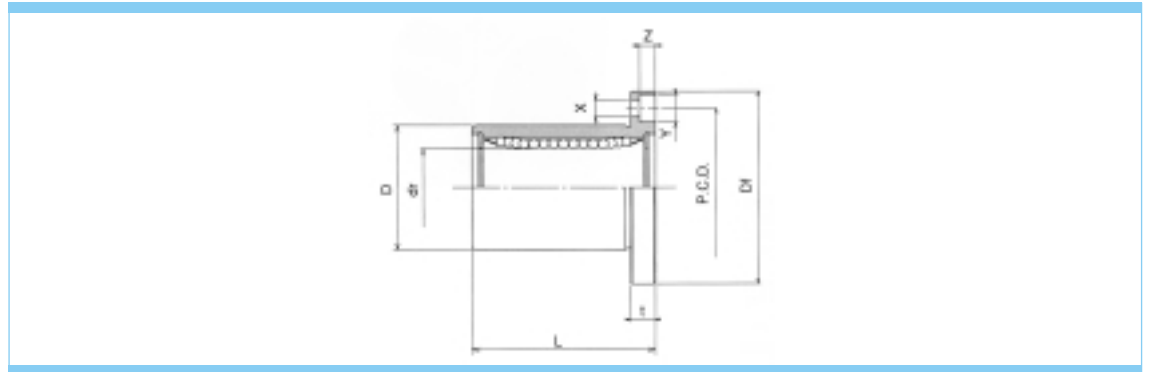
Specification

SBFE	Round Flange Type
SBKE	Square Flange Type

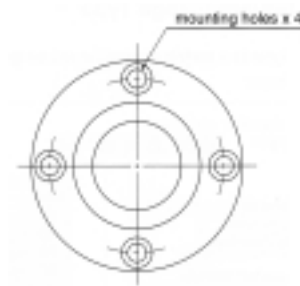
Seals

Blank	Without seal
UU	Seal on both sides

Inner contact diameter



SBFE



SBKE



Part number		Major dimensions							
Round Type	Square Type	Number of ball circuits	Weight g	dr		D		L ± 0.3 mm	Df mm
				mm	Tolerance μm	mm	Tolerance μm		
SBFE 8	SBKE 8	4	41	8	+8	16	0/-13	25	32
SBFE12	SBKE12	4	80	12	0	22	0	32	42
SBFE16	SBKE16	5	103	16	+9	26	-16	36	46
SBFE20	SBKE20	5	182	20	-1	32	0	45	54
SBFE25	SBKE25	6	335	25	+11	40		-19	58
SBFE30	SBKE30	6	560	30	-1	47	0	68	76
SBFE40	SBKE40	6	1175	40	+13	62		-22	80
SBFE50	SBKE50	6	1745	50	-2	75	0/-25	100	112
SBFE60	SBKE60	6	3220	60		90		125	134

Major dimensions				Radial clearance μm	Basic load rating		Part number
t mm	P.C.D mm	X x Y x Z mm	K mm		Dynamic C N	Static Co N	
5	24	3.5 x 6 x 3.1	25	-5	265	402	SBFE8
6	32	4.5 x 7.5 x 4.1	32		510	784	SBFE12
6	36	4.5 x 7.5 x 4.1	35	-7	578	892	SBFE16
8	43	5.5 x 9 x 5.1	42		862	1,370	SBFE20
8	51	5.5 x 9 x 5.1	50	-9	980	1,570	SBFE25
10	62	6.6 x 11 x 6.1	60		1,570	2,740	SBFE30
13	80	9 x 14 x 8.1	75	-13	2,160	4,020	SBFE40
13	84	9 x 14 x 8.1	88		3,820	7,940	SBFE50
18	112	11 x 17 x 11.1	106	-16	4,700	9,800	SBFE60

1N ≒ 0.102kgf

**SBFE-L & SBKE-L TYPE**

- Round Flange Double-Long Type
- Square Flange Double-Long Type

This type is a metric dimension series widely used in Europe.

Ordering Example

SBFE 25 L UU - NM

Nickel Plating

Specification

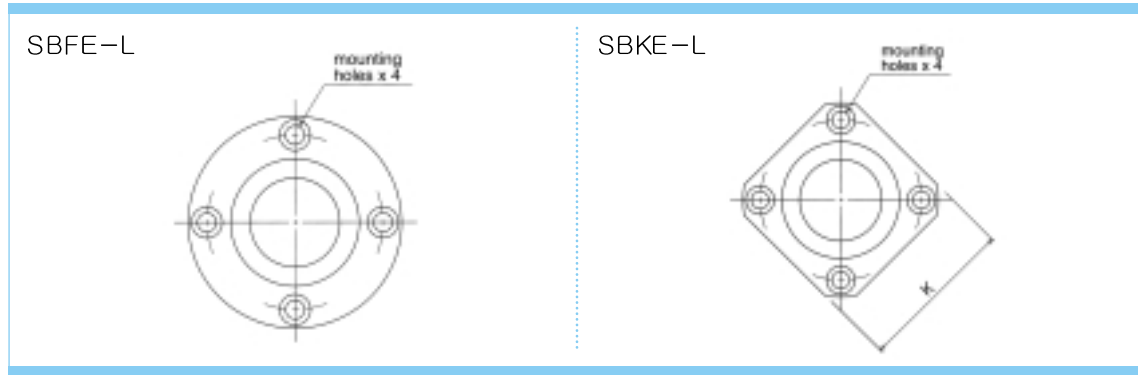
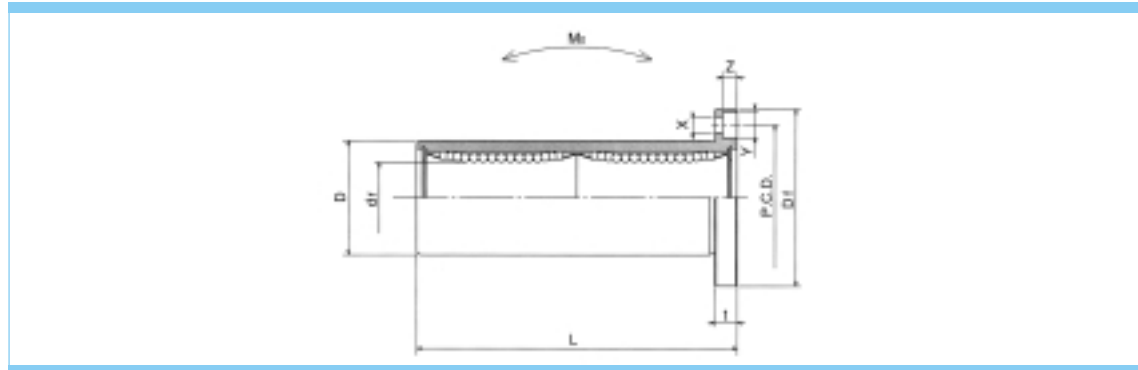
SBFE-L	Round Flange Double-Long Type
SBKE-L	Square Flange Double-Long Type

Seals

Blank	Without seal
UU	Seal on both sides

Inner contact diameter

Double-long type



Part number		Major dimensions							
Round Type	Square Type	Number of ball circuits	Weight g	dr		D		L ± 0.3 mm	Df mm
				mm	Tolerance μ m	mm	Tolerance μ m		
SBFE 8-L	SBKE 8-L	4	59	8	+9	16	0/-13	46	32
SBFE12-L	SBKE12-L	4	110	12	-1	22	0	61	42
SBFE16-L	SBKE16-L	5	160	16	+11	26	-16	68	46
SBFE20-L	SBKE20-L	5	260	20	-1	32	0	80	54
SBFE25-L	SBKE25-L	6	540	25	+13	40	-19	112	62
SBFE30-L	SBKE30-L	6	815	30	-2	47	0	123	76
SBFE40-L	SBKE40-L	6	1805	40	+16	62	0	151	98
SBFE50-L	SBKE50-L	6	2820	50	-4	75	-22	192	112
SBFE60-L	SBKE60-L	6	4920	60	-4	90	0/-25	209	134

1N ≒ 0.102kgf

Major dimensions				Radial clearance μ m	Basic load rating		Allowable static moment Mo N.m	Part number
K mm	t mm	P.C.D mm	X x Y x Z mm		Dynamic C N	Static Co N		
25	5	24	3.5 x 6 x 3.1	-5	421	804	4.3	SBFE8-L
32	6	32	4.5 x 7.5 x 4.1		813	1,570	11.7	SBFE12-L
35	6	36	4.5 x 7.5 x 4.1		921	1,780	14.2	SBFE16-L
42	8	43	5.5 x 9 x 5.1	-9	1,370	2,740	25.0	SBFE20-L
50	8	51	5.5 x 9 x 5.1		1,570	3,140	44.0	SBFE25-L
60	10	62	6.6 x 11 x 6.1		2,500	5,490	78.9	SBFE30-L
75	13	80	9 x 14 x 8.1	-13	3,430	8,040	147	SBFE40-L
88	13	94	9 x 14 x 8.1		6,080	15,900	396	SBFE50-L
106	18	112	11 x 17 x 11.1		7,550	20,000	487	SBFE60-L

**SBFCE & SBKCE TYPE**

- Center Mount Round Flange Type
- Center Mount Square Flange Type

This type is a metric dimension series widely used in Europe.

Ordering Example

SBFCE 25 UU - NM

Nickel Plating

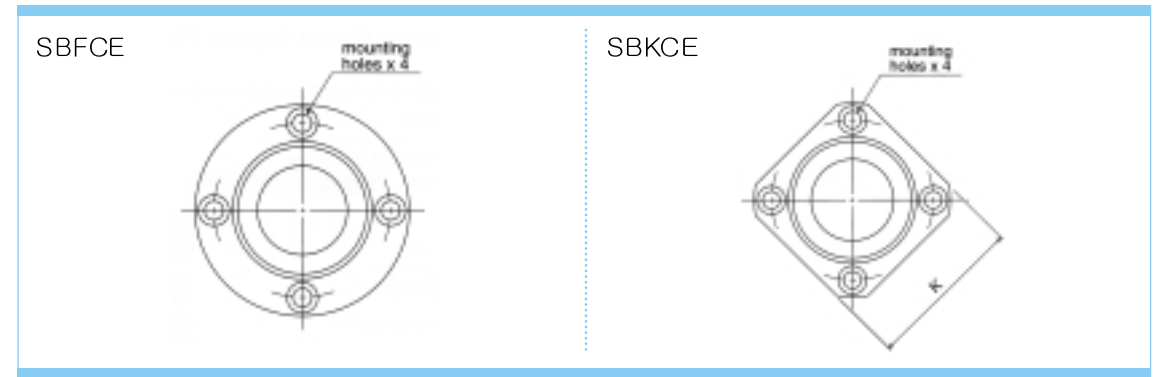
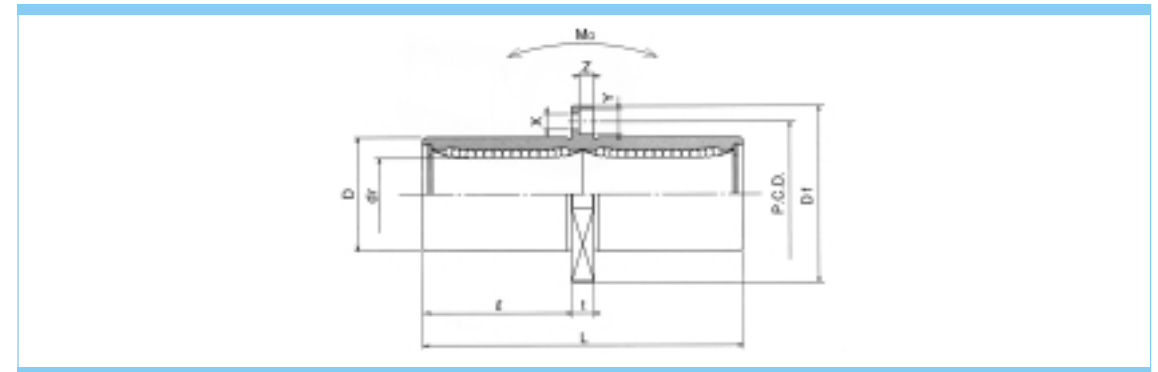
Specification

SBFCE	Center Mount Round Flange Type
SBKCE	Center Mount Square Flange Type

Seals

Blank	Without seal
UU	seal on both sides

Inner contact diameter

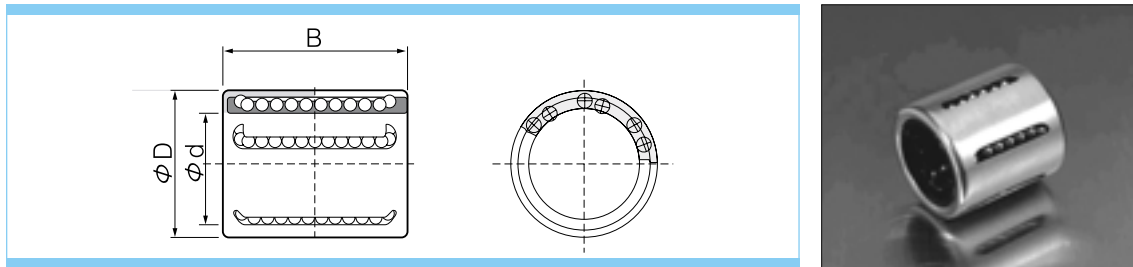


Part number		Major dimensions								
Round Type	Square Type	Number of ball circuits	Weight g	dr		D		L ±0.3 mm	Flange	
				mm	Tolerance μm	mm	Tolerance μm		l mm	Df mm
SBFCE 16	SBKCE 16	5	160	16	+11	26	0/-16	68	31	46
SBFCE 20	SBKCE 20	5	260	20	-1	32	0 -19	80	36	54
SBFCE 25	SBKCE 25	6	540	25	+13	40		112	52	62
SBFCE 30	SBKCE 30	6	815	30	-2	47		123	56.5	76

1N ≒ 0.102kgf

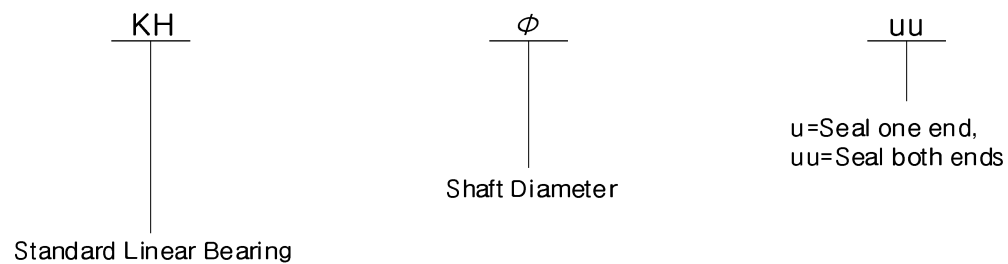
Major dimensions				Radial clearance μm	Basic load rating		Allowable static moment Mo N.m	Part number
Flange					Dynamic C N	Static Co N		
K mm	t mm	P.C.D mm	X x Y x Z mm					
35	6	36	4.5 x 7.5 x 4.1	-7	921	1,780	14.2	SBFCE 16
42	8	43	5.5 x 9 x 5.1	-9	1,370	2,740	25.0	SBFCE 20
50	8	51	5.5 x 9 x 5.1		1,570	3,140	44.0	SBFCE 25
60	10	62	6.6 x 11 x 6.1		2,500	5,490	78.9	SBFCE 30

**Standard Linear Ball Bearing Steel Drawn Cup/Cage Plastic**



Part No	$\phi d$	$\phi D$	B	Dyn. Load [N]	Stat. Load [N]	Weight[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

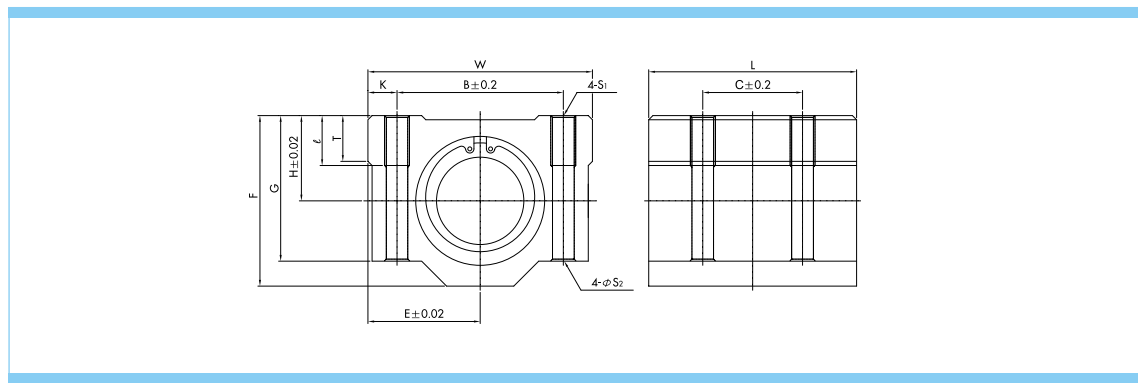
**Ordering Example:**



**SC Type**



Ordering Example  
**SC 12 — UU**  
 :No seal  
 UU:Seals at both ends  
 Reference



Reference	Main Dimension(mm)							Mounting dimension (mm)					Basic Load Ratings		
	H	E	W	L	F	G	T	B	C	K	S <sub>1</sub>	S <sub>2</sub>	l	Dynamic C[N]	Stationary C <sub>0</sub> [N]
SC12	15	21	42	36	28	24	8	30.5	26	5.75	M5	4.3	12	510	780
SC13	15	22	44	39	30	24.5	8	33	26	5.5	M5	4.3	12	510	780
SC16	19	25	50	44	38.5	32.5	9	36	34	7	M5	4.3	12	770	1,180
SC20	21	27	54	50	41	35.0	11	40	40	7	M6	5.2	12	880	1,350
SC25	26	38	76	67	51.5	42	12	54	50	11	M8	7	18	980	1,550
SC30	30	39	78	72	59.5	49	15	58	58	10	M8	7	18	1,570	2,700
SC35	34	45	90	80	68	54	18	70	60	10	M8	7	18	1,670	3,150
SC40	40	51	102	90	78	62	20	80	60	11	M10	8.7	25	2,160	4,020

1N=0.102kgf

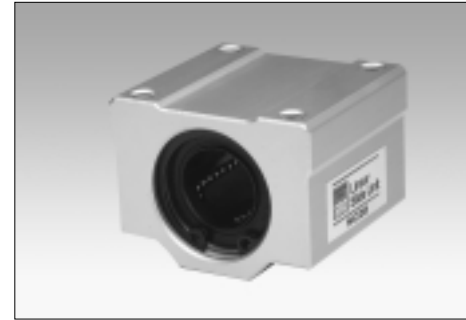
**SC-L Type (Long Type)**



Ordering Example

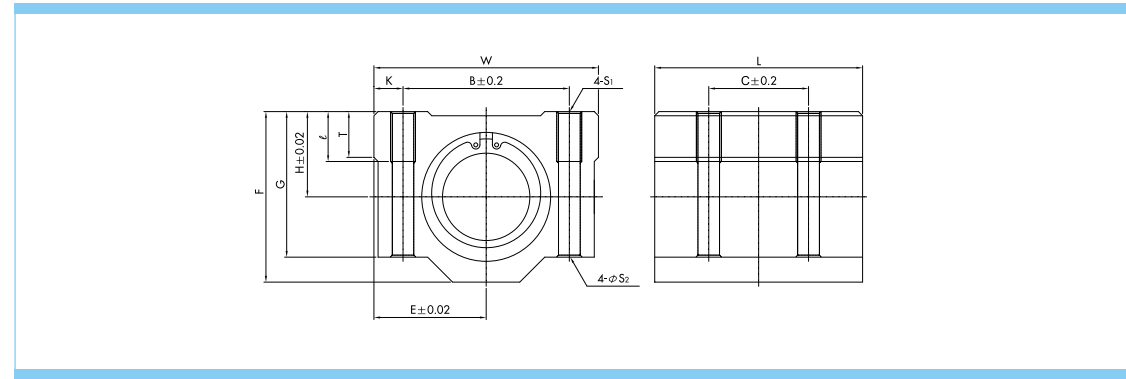
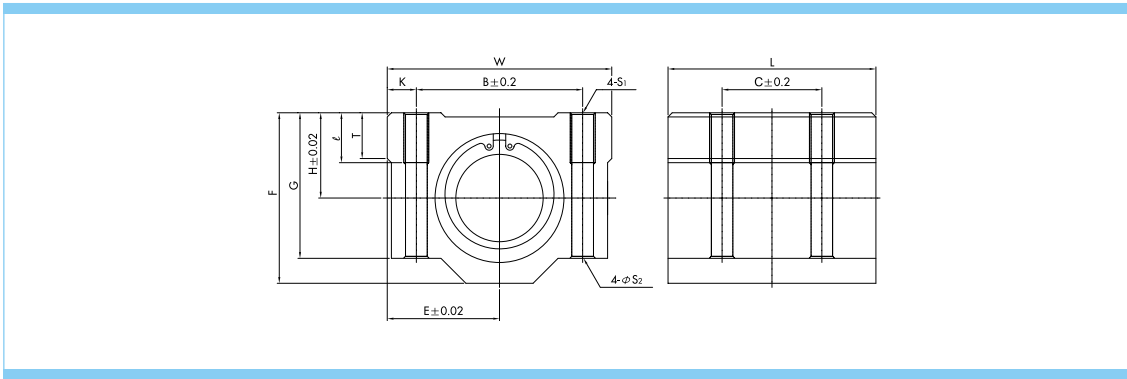
SC 12 — L — UU  
 :No seal  
 UU:Seals at both ends  
 Long Type  
 Reference

**SCE Type (Europe Type)**



Ordering Example

SCE 12 — UU  
 :No seal  
 UU:Seals at both ends  
 Reference



Reference	Main Dimension(mm)							Mounting dimension (mm)						Basic Load Ratings	
	H	E	W	L	F	G	T	B	C	K	S <sub>1</sub>	S <sub>2</sub>	ℓ	Dynamic C(N)	Stationary C <sub>0</sub> (N)
SC12L	15	21	42	70	28	24	8	30.5	50	5.75	M5	4.3	12	813	1570
SC13L	15	22	44	75	30	24.5	8	33	50	5.5	M5	4.3	12	813	1570
SC16L	19	25	50	85	38.5	32.5	9	36	60	7	M5	4.3	12	1230	2350
SC20L	21	27	54	96	41	35.0	11	40	70	7	M6	5.2	12	1400	2740
SC25L	26	38	76	130	51.5	42	12	54	100	11	M8	7	18	1560	3140
SC30L	30	39	78	140	59.5	49	15	58	110	10	M8	7	18	2490	5490
SC35L	34	45	90	155	68	54	18	70	120	10	M8	7	18	2650	6270
SC40L	40	51	102	175	78	62	20	80	140	11	M10	8.7	25	3430	8040

1N≒0.102kgf

Reference	Main Dimension(mm)							Mounting dimension (mm)						Basic Load Ratings	
	H	E	W	L	F	G	T	B	C	K	S <sub>1</sub>	S <sub>2</sub>	ℓ	Dynamic C(N)	Stationary C <sub>0</sub> (N)
SCE12	15	21	42	36	28	24	8	30.5	26	5.75	M5	4.3	12	510	780
SCE13	15	22	44	39	30	24.5	8	33	26	5.5	M5	4.3	12	510	780
SCE16	19	25	50	44	38.5	32.5	9	36	34	7	M5	4.3	12	770	1,180
SCE20	21	27	54	53	41	35.0	11	40	40	7	M6	5.2	12	880	1,350
SCE25	26	38	76	67	51.5	42	12	54	50	11	M8	7	18	980	1,550
SCE30	30	39	78	76	59.5	49	15	58	58	10	M8	7	18	1,570	2,700
SCE35	34	45	90	80	68	54	18	70	60	10	M8	7	18	1,670	3,150
SCE40	40	51	102	90	78	62	20	80	60	11	M10	8.7	25	2,160	4,020

1N≒0.102kgf

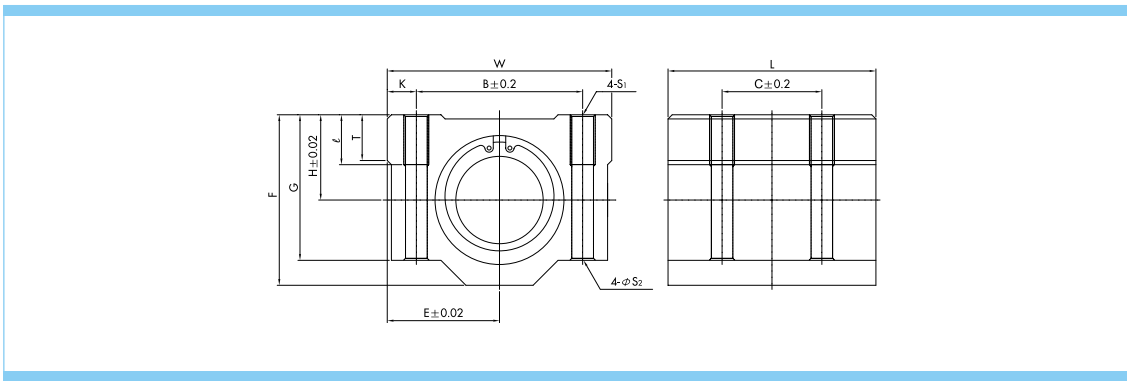
**SCE-L Type (Long Type-Europe)**



Ordering Example

SCE 12 — L — UU

Reference  
 Long Type  
 UU:Seals at both ends  
 :No seal



Reference	Main Dimension(mm)							Mounting dimension (mm)					Basic Load Ratings		
	H	E	W	L	F	G	T	B	C	K	S <sub>1</sub>	S <sub>2</sub>	l	Dynamic C <sub>d</sub> [N]	Stationary C <sub>s</sub> [N]
SCE12L	15	21	42	70	28	24	8	30.5	50	5.75	M5	4.3	12	813	1570
SCE13L	15	22	44	75	30	24.5	8	33	50	5.5	M5	4.3	12	813	1570
SCE16L	19	25	50	85	38.5	32.5	9	36	60	7	M5	4.3	12	1230	2350
SCE20L	21	27	54	102	41	35.0	11	40	70	7	M6	5.2	12	1400	2740
SCE25L	26	38	76	130	51.5	42	12	54	100	11	M8	7	18	1560	3140
SCE30L	30	39	78	148	59.5	49	15	58	110	10	M8	7	18	2490	5490
SCE35L	34	45	90	155	68	54	18	70	120	10	M8	7	18	2650	6270
SCE40L	40	51	102	175	78	62	20	80	140	11	M10	8.7	25	3430	8040

1N ≒ 0.102kgf

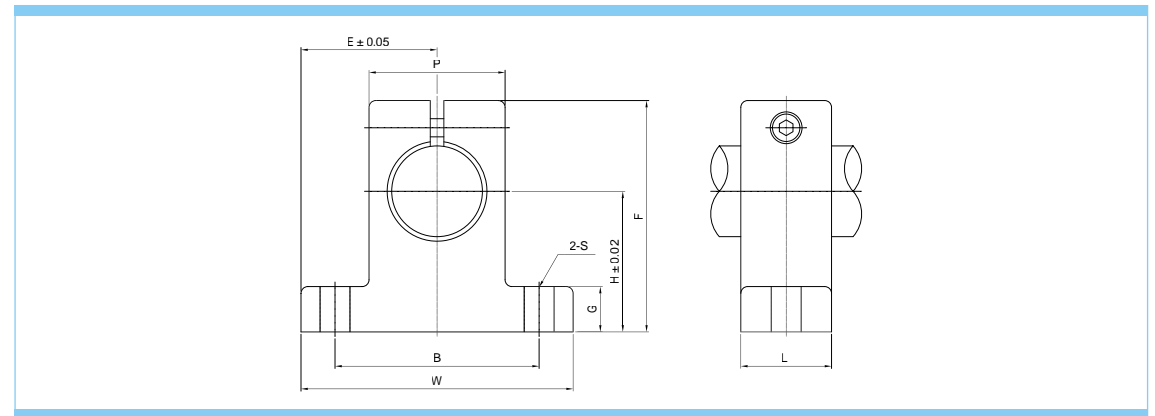
**SK Type**



Ordering example

SK 10

Reference

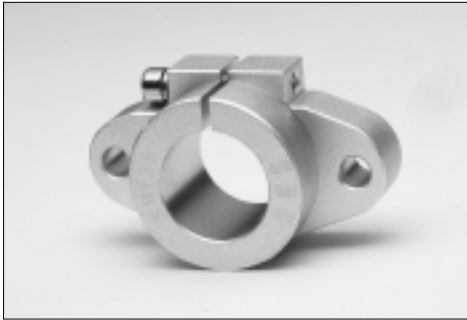


Reference	Main dimension (mm)									Fixing bolt	Mounting bolt
	H	E	W	L	F	G	P	B	S		
SK10	20	21	42	14	32.8	6	18	32	5.5	M4	M5
SK12	23	21	42	14	37.5	6	20	32	5.5	M4	M5
SK13	23	21	42	14	37.5	6	20	32	5.5	M4	M5
SK16	27	24	48	16	44	8	25	38	5.5	M4	M5
SK20	31	30	60	20	51	10	30	45	6.6	M5	M6
SK25	35	35	70	24	60	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

1N ≒ 0.102kgf



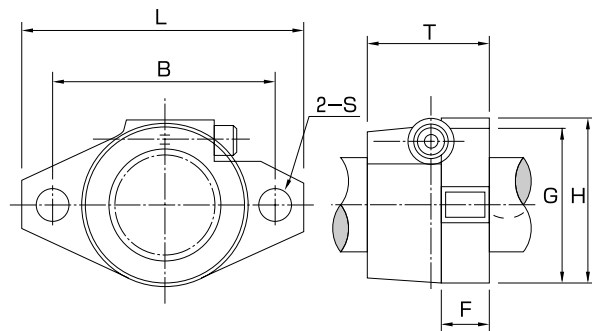
**SHF Type**



Ordering example

SHF 25

Reference



Reference	Main dimension (mm)									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