

TERAL

SB 2-Pole SB4 4-Pole
End-Suction Centrifugal Pumps

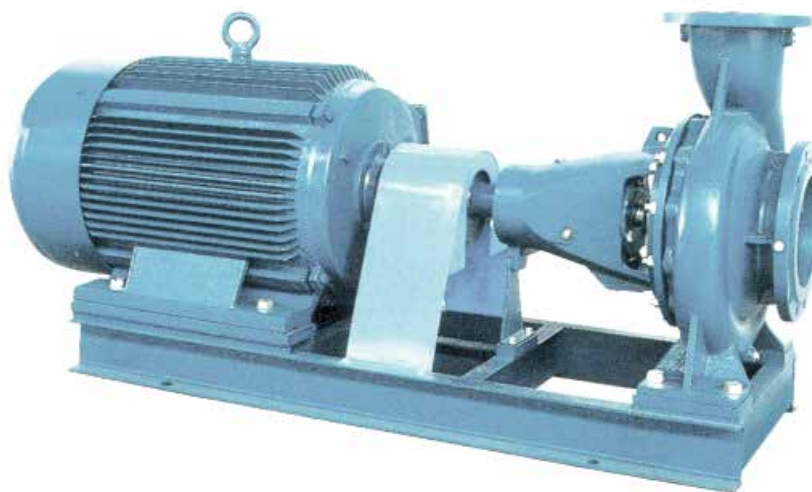
50 Hz



Since 1918 in Japan

■ Applications

- General water supply in dwelling houses, city buildings, etc.
- Circulation of cold or hot water.
- Industrial use.
- Water system.
- Fire fighting and sprinkler.



■ Features

● BACK-PULL-OUT

This back-pull-out construction ensures easy disassembling without removing suction and discharge pipes.

● QUIET

This model permits the long-lived operation without any noise and vibration.

● STABILITY

This is an upright discharge type. It is very strong against the weight of discharge pipes. Besides, any air is not accumulated in the upper part of casing.

● NON-OVERLOAD

As this model is furnished with limit-load property, it is not overload for any discharge capacity.

● CONFORMABLE TO

The SB4/SB pumps are fully complied to the international standard ISO2858 (DIN24255).

■ Specifications

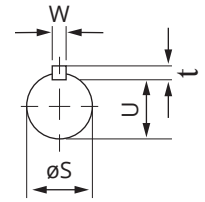
- **Liquid** : Fresh Water
- **Re. NPSH** : See the Characteristic curve.
- **Operation Temp.** : -10°C to 80°C
(Option: up to 105°C)
- **Revolution** : 1500 r.p.m. (SB4)
: 3000 r.p.m. (SB)
- **Max suc. Press** : $10.2\text{kgf/cm}^2 - \frac{\text{shut off head}}{10}$
- **Operation Press.** : Max. 10.2kgf/cm^2

• Structure

- Impeller** : Closed
- Sealing** : Gland packing
(Mechanical seal at option)
- Bearing** : Ball bearing

• Material

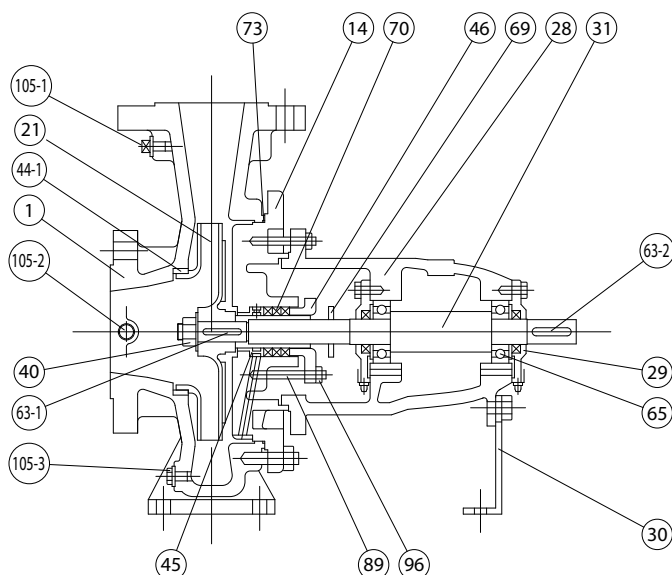
- Casing** : Cast iron (FC200)
- Impeller** : Bronze (BC6)
- Shaft** : Stainless Steel (SUS 420J1)
- Sealing** : Aramid Fiber



Design Detail

Model		Shaft dimensions at coupling (mm)			Bearing		Gland packing Size - Nos.
4 Pole	2 Pole	Diameter S	U	Key size W x t	Coupling side	Impeller side	
SB4-50X32L, M, H, K	SB-50X32L, M, H, K	ø 24	20	8 X 7	6305	6305	ø32 X ø48 X 8~ 3
SB4-65X40L, M, H, K	SB-65X40L, M, H, K	ø 24	20	8 X 7	6305	6305	ø32 X ø48 X 8~ 3
SB4-65X40J		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 4
SB4-65X50L, M, H, K	SB-65X50L, M, H, K	ø 24	20	8 X 7	6305	6305	ø32 X ø48 X 8~ 3
SB4-65X50J		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 4
SB4-80X65L, M, H	SB-80X65L, M, H	ø 24	20	8 X 7	6305	6305	ø32 X ø48 X 8~ 3
SB4-80X65K	SB-80X65K	ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 3
SB4-80X65J		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 4
SB4-100X80M	SB-100X80M	ø 24	20	8 X 7	6305	6305	ø32 X ø48 X 8~ 3
SB4-100X80H, K	SB-100X80H, K	ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 3
SB4-100X80J		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 4
SB4-100X80G		ø 42	37	12 X 10	6309	6309	ø55 X ø75 X 10~ 4
SB4-125X100M	SB-125X100M	ø 32	27	10X8	6307	6307	ø40 X ø60 X 10~3
SB4-125X100M, H, K	SB-125X100M, H, K	ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 3
SB4-125X100J		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 4
SB4-125X100G		ø 42	37	12 X 10	6309	6309	ø55 X ø75 X 10~ 4
SB4-150X125H, K		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 3
SB4-150X125J, G		ø 42	37	12 X 10	6309	6309	ø55 X ø75 X 10~ 4
SB4-200X150H		ø 32	27	10 X 8	6307	6307	ø40 X ø60 X 10~ 3
SB4-200X150K, J, G		ø 42	37	12 X 10	6309	6309	ø55 X ø75 X 10~ 4
SB4-250X200K		ø 42	37	12 X 8	6309	6309	ø55 X ø75 X 10~4
SB4-250X200J, G		ø 48	42	14 X 9	6311	6311	ø65 X ø90 X12.5~5
SB4-300X250 J, G		ø 48	42	14 X 9	6311	6311	ø65 X ø90 X12.5~5

Sectional View

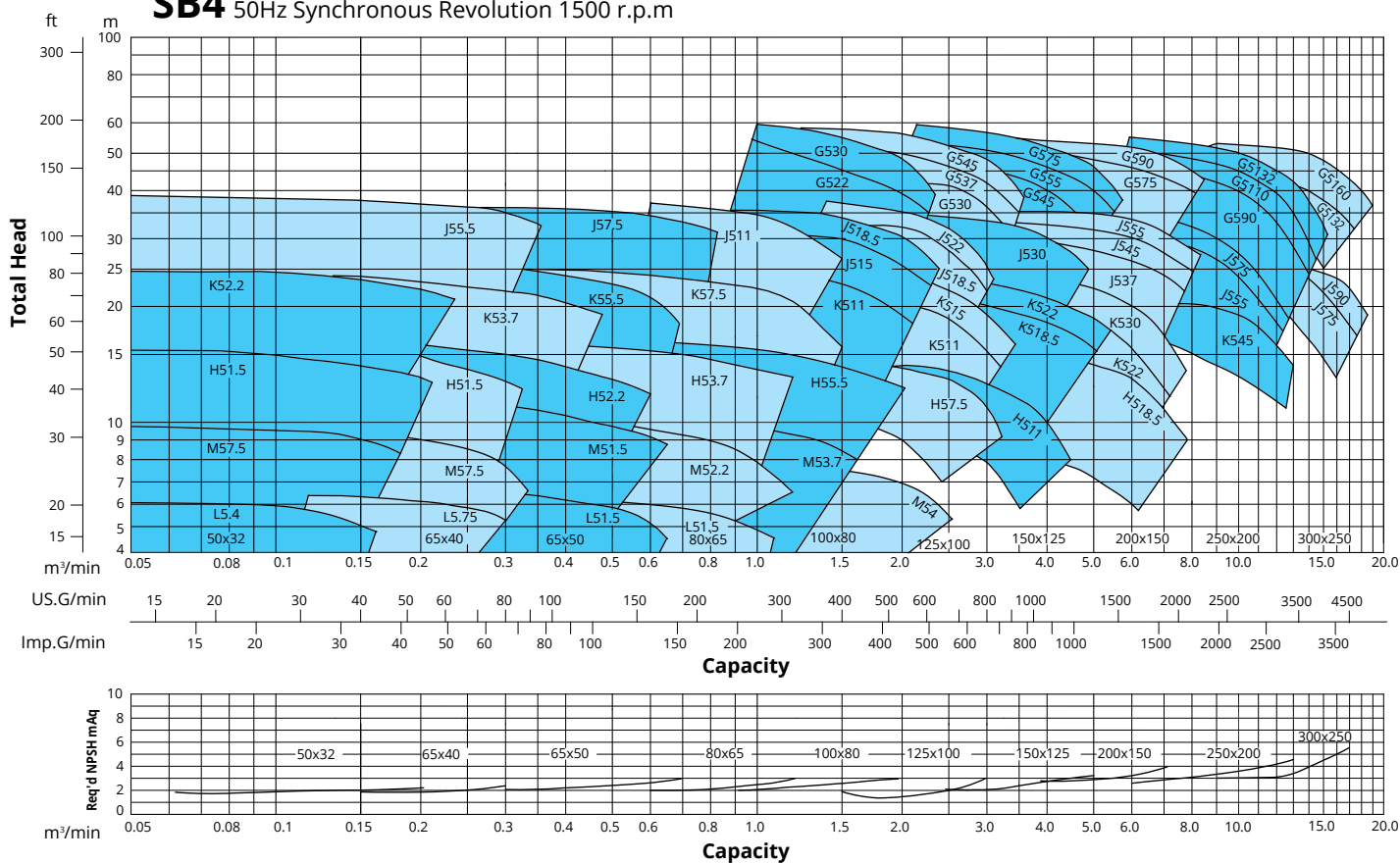


Part No.	Part Name	Material	No./ Unit
1	Casing	Cast Iron	1
14	Casing Cover	Cast Iron	1
21	Impeller	Bronze	1
28	Bearing Casing	Cast Iron	1
29	Bearing Cover	Cast Iron	1
30	Supporter	Steel	1
31	Shaft	Stainless Steel	1
40	Impeller Nut	Bronze	1
44-1	Wearing Ring	Bronze	1
*44-2	Wearing Ring	Bronze	1
45	Lantern Ring	Bronze	1
46	Gland	Cast Iron	1
63-1	Key	Stainless Steel	1
63-2	Key	Steel	1
65	Bearing		2
69	Deflector	Chloroprene Rubber	1
70	Gland Packing	Aramid Fiber	3 (4)
73	O Ring	Nitrile Butadiene Rubber	1
89	Stud Bolt	Steel	2
96	Hex-Nut	Steel	2
105-1	Plug	Steel	1
105-2	Plug	Steel	1
105-3	Plug	Steel	1
	Priming Water Plug	Steel	1

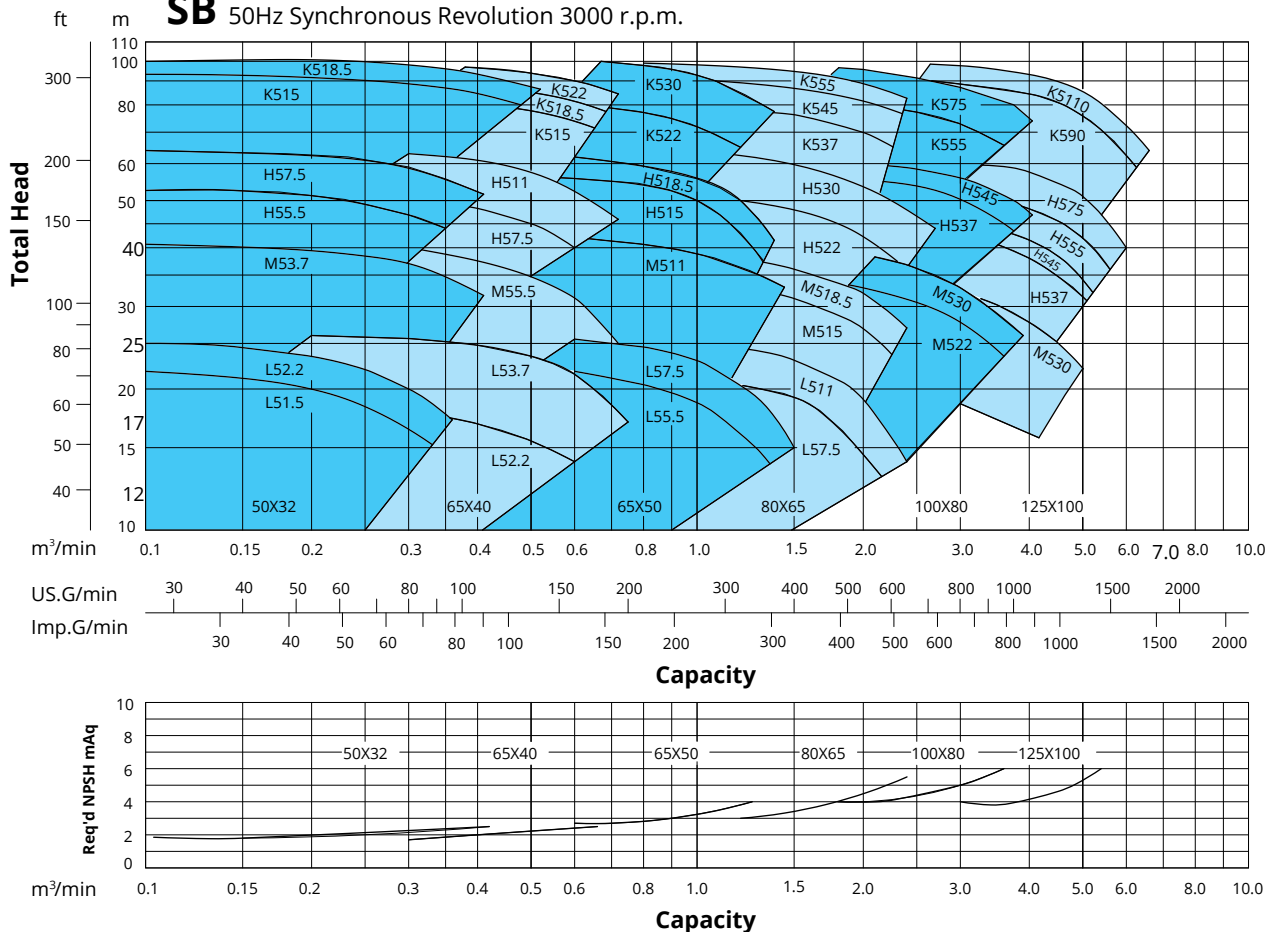
*Certain models have a wearing ring for casing cover.

Selection Charts

SB4 50Hz Synchronous Revolution 1500 r.p.m



SB 50Hz Synchronous Revolution 3000 r.p.m.



Dimensions

FIG. 1

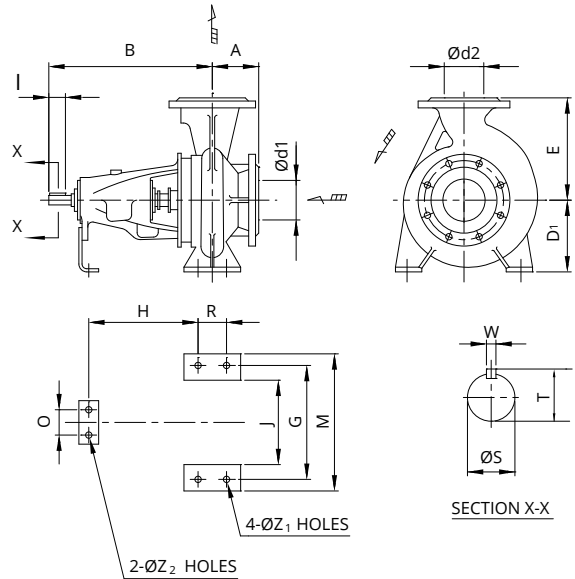
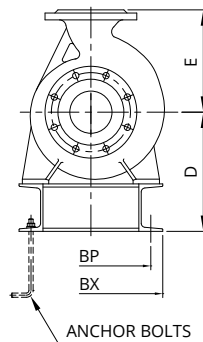
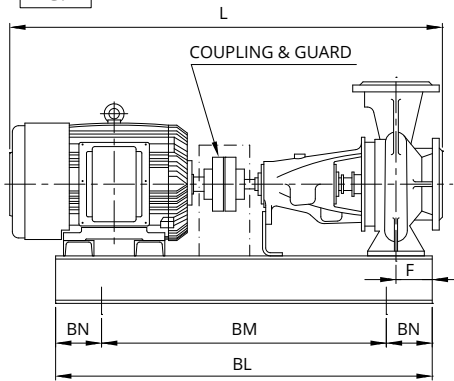
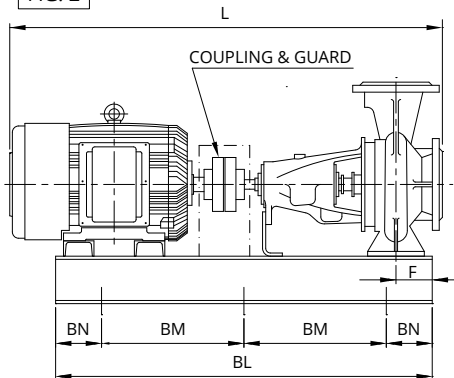
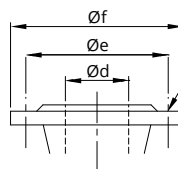


FIG. 2



Flange Size

Comply with ISO 2084 PN16



n-Øh HOLES

divided at the center

Unit: mm

	32	40	50	65	80	100	125	150	200	250	300
d	100	110	125	145	160	180	210	240	295	355	410
e	140	150	165	185	200	220	250	285	340	405	460
f	4	4	4	4	8	8	8	8	12	12	12
h	17.5	17.5	17.5	17.5	17.5	17.5	17.5	22	22	26	26

SB Dimension Table

Unit: mm

Model	Fig	kw	d ₁	d ₂	A	B	D	D ₁	E	F	G	H	J	L	I	M	O	R	S	T	W	Z ₁	Z ₂	BL	BM	BN	BP	BX	kg
SB-50X32L51.5	1	1.5	50	32	80	360	212	112	140	50	140	232	90	765	50	190	100	70	24	27	8	14	14	750	450	150	140	190	73
SB-50X32L52.2	1	2.2	50	32	80	360	212	112	140	50	140	232	90	765	50	190	100	70	24	27	8	14	14	750	450	150	140	190	75
SB-50X32M53.7	1	3.7	50	32	80	360	238	132	160	50	190	232	140	825	50	240	100	70	24	27	8	14	14	800	500	150	190	240	104
SB-50X32H55.5	1	5.5	50	32	80	360	272	132	160	50	190	232	140	889	50	240	100	70	24	27	8	14	14	800	500	150	220	270	127
SB-50X32H57.5	1	7.5	50	32	80	360	300	160	180	50	190	232	140	889	50	240	110	70	24	27	8	14	14	800	500	150	210	260	137
SB-50X32K515	1	15	50	32	100	360	320	180	225	62.5	250	219.5	190	1067	50	320	110	95	24	27	8	14	14	950	650	150	300	350	219
SB-50X32K518.5	1	18.5	50	32	100	360	320	180	225	62.5	250	219.5	190	1111	50	320	110	95	24	27	8	14	14	1000	700	150	300	350	236
SB-65X40L52.2	1	2.2	65	40	80	360	212	112	140	50	160	232	110	765	50	210	100	70	24	27	8	14	14	750	450	150	160	210	78
SB-65X40L53.7	1	3.7	65	40	80	360	252	112	140	50	160	232	110	825	50	210	100	70	24	27	8	14	14	800	500	150	190	240	98
SB-65X40M55.5	1	5.5	65	40	80	360	272	132	160	50	190	232	140	889	50	240	100	70	24	27	8	14	14	800	500	150	220	270	128
SB-65X40H57.5	1	7.5	65	40	100	360	300	160	180	50	212	232	165	909	50	265	110	70	24	27	8	14	14	850	550	150	230	280	141
SB-65X40H511	1	11	65	40	100	360	300	160	180	50	212	232	165	1067	50	265	110	70	24	27	8	14	14	950	650	150	270	320	192
SB-65X40K515	1	15	65	40	100	360	320	180	225	62.5	250	219.5	190	1067	50	320	110	95	24	27	8	14	14	950	650	150	280	330	220
SB-65X40K518.5	1	18.5	65	40	100	360	320	180	225	62.5	250	219.5	190	1111	50	320	110	95	24	27	8	14	14	1000	700	150	280	330	238
SB-65X40K522	1	22	65	40	100	360	320	180	225	62.5	250	219.5	190	1130	50	320	110	95	24	27	8	14	14	1000	700	150	320	370	288
SB-65X50L55.5	1	5.5	65	50	100	360	272	132	160	50	190	232	140	909	50	240	100	70	24	27	8	14	14	850	550	150	220	270	127
SB-65X50L57.5	1	7.5	65	50	100	360	272	132	160	50	190	232	140	909	50	240	100	70	24	27	8	14	14	850	550	150	220	270	131
SB-65X50M511	1	11	65	50	100	360	300	160	180	50	212	232	165	1067	50	265	110	70	24	27	8	14	14	950	650	150	270	320	185
SB-65X50H515	1	15	65	50	100	360	300	160	200	50	212	232	165	1067	50	265	110	70	24	27	8	14	14	950	650	150	270	320	204
SB-65X50H518.5	1	18.5	65	50	100	360	300	160	200	50	212	232	165	1111	50	265	110	70	24	27	8	14	14	1000	700	150	270	320	222
SB-65X50K522	1	22	65	50	100	360	320	180	225	62.5	250	219.5	190	1130	50	320	110	95	24	27	8	14	14	1050	750	150	320	370	291
SB-65X50K530	1	30	65	50	100	360	345	180	225	62.5	250	219.5	190	1168	50	320	110	95	24	27	8	14	14	1100	800	150	310	370	313
SB-80X65L57.5	1	7.5	80	65	100	360	300	160	180	62.5	212	219.5	150	909	50	280	110	95	24	27	8	14	14	850	550	150	240	290	136
SB-80X65L511	1	11	80	65	100	360	300	160	180	62.5	212	219.5	150	1067	50	280	110	95	24	27	8	14	14	950	650	150	270	320	186
SB-80X65M515	1	15	80	65	100	360	300	160	200	62.5	212	219.5	150	1067	50	280	110	95	24	27	8	14	14	950	650	150	270	320	201
SB-80X65M518.5	1	18.5	80	65	100	360	300	160	200	62.5	212	219.5	150	1111	50	280	110	95	24	27	8	14	14	1000	700	150	270	320	209
SB-80X65H522	1	22	80	65	100	360	320	180	225	62.5	250	219.5	190	1130	50	320	110	95	24	27	8	14	14	1050	750	150	310	370	299
SB-80X65H530	1	30	80	65	100	360	345	180	225	62.5	250	219.5	190	1168	50	320	110	95	24	27	8	14	14	1050	750	150	310	370	342
SB-80X65K537	1	37	80	65	100	470	365	200	250	80	280	282	200	1341	80	360	110	120	32	35	10	17.5	14	1200	900	150	350	410	417
SB-80X65K545	1	45	80	65	100	470	365	200	250	80	280	282	200	1341	80	360	110	120	32	35	10	17.5	14	1200	900	150	350	410	432
SB-80X65K555	1	55	80	65	100	470	415	200	250	80	280	282	200	1379	80	360	110	120	32	35	10	17.5	14	1250	950	150	400	470	512
SB-100X80M522	1	22	100	80	125	360	320	180	225	62.5	250	219.5	190	1155	50	320	110	95	24	27	8	14	14	1050	750	150	310	370	282
SB-100X80M530	1	30	100	80	125	360	345	180	225	62.5	250	219.5	190	1193	50	320	110	95	24	27	8	14	14	1100	800	150	310	370	326
SB-100X80H537	1	37	100	80	125	470	370	180	250	62.5	280	294.5	215	1366	80	345	110	95	32	35	10	14	14	1250	950	150	360	420	407
SB-100X80H545	1	45	100	80	125	470	370	180	250	62.5	280	294.5	215	1366	80	345	110	95	32	35	10	14	14	1250	950	150	360	420	422
SB-100X80K555	1	55	100	80	125	470	415	200	280	80	315	282	240	1404	80	400	110	120	32	35	10	17.5	14	1250	950	150	400	470	522
SB-100X80K575	2	75	100	80	125	470	450	200	280	80	315	282	240	1453	80	400	110	120	32	35	10	17.5	14	1300	500	150	450	520	739
SB-125X100M530	1	30	125	100	125	470	339	200	250	145	280	282	200	1369	80	360	110	120	32	35	10	17.5	14	1250	850	200	430	490	550
SB-125X100H537	1	37	125	100	125	470	365	200	280	80	280	282	200	1366	80	360	110	120	32	35	10	17.5	14	1250	950	150	350	410	423
SB-125X100H545	1	45	125	100	125	470	365	200	280	80	280	282	200	1366	80	360	110	120	32	35	10	17.5	14	1250	950	150	350	410	437
SB-125X100H555	1	55	125	100	125	470	415	200	280	80	280	282	200	1404	80	360	110	120	32	35	10	17.5	14	1250	950	150	400	470	516
SB-125X100H575	2	75	125	100	125	470	450	200	280	80	280	282	200	1453	80	360	110	120	32	35	10	17.5	14	1300	500	150	450	520	733
SB-125X100K590	2	90	125	100	140	470	450	225	280	80	315	282	240	1506	80	400	110	120	32	35	10	17.5	14	1350	525	150	450	520	842
SB-125X100K5110	2	110	125	100	140	470	475	225	280	80	315	282	240	1564	80	400	110	120	32	35	10	17.5	14	1400	550	150	510	580	946

SB4 Dimension Table

Unit: mm

Model	Fig	kw	d ₁	d ₂	A	B	D	D ₁	E	F	G	H	J	L	I	M	O	R	S	T	W	Z ₁	Z ₂	BL	BM	BN	BP	BX	kg
SB4-50X32L5.4	1	0.4	50	32	80	360	212	112	140	50	140	232	90	682	50	190	100	70	24	27	8	14	14	650	350	150	140	190	60
SB4-50X32M5.75	1	0.75	50	32	80	360	232	132	160	50	190	232	140	715	50	240	100	70	24	27	8	14	14	700	400	150	190	240	72
SB4-50X32H5.1.5	1	1.5	50	32	80	360	260	160	180	50	190	232	140	765	50	240	110	70	24	27	8	14	14	750	450	150	190	240	86
SB4-50X32K52.2	1	2.2	50	32	100	360	280	180	225	62.5	250	219.5	190	826	50	320	110	95	24	27	8	14	14	800	500	150	350	400	120
SB4-65X40L5.75	1	0.75	65	40	80	360	212	112	140	50	160	232	110	715	50	210	100	70	24	27	8	14	14	700	400	150	160	210	66
SB4-65X40M5.75	1	0.75	65	40	80	360	232	132	160	50	190	232	140	715	50	240	100	70	24	27	8	14	14	700	400	150	190	240	73
SB4-65X40H5.1.5	1	1.5	65	40	100	360	260	160	180	50	212	232	165	785	50	265	110	70	24	27	8	14	14	750	450	150	220	265	90
SB4-65X40K53.7	1	3.7	65	40	100	360	280	180	225	62.5	250	219.5	190	845	50	320	110	95	24	27	8	14	14	800	500	150	350	400	127
SB4-65X40J55.5	1	5.5	65	40	125	470	300	200	250	62.5	280	294.5	215	1044	80	345	110	95	32	35	10	14	14	1000	700	150	380	430	197
SB4-65X50L5.1.5	1	1.5	65	50	100	360	232	132	160	50	190	232	140	785	50	240	100	70	24	27	8	14	14	750	450	150	190	240	80
SB4-65X50M5.1.5	1	1.5	65	50	100	360	260	160	180	50	212	232	165	785	50	265	110	70	24	27	8	14	14	750	450	150	220	265	84
SB4-65X50H52.2	1	2.2	65	50	100	360	260	160	200	50	212	232	165	826	50	265	110	70	24	27	8	14	14	800	500	150	220	265	104
SB4-65X50K55.5	1	5.5	65	50	100	360	280	180	225	62.5	250	219.5	190	909	50	320	110	95	24	27	8	14	14	850	550	150	350	400	159
SB4-65X50J57.5	1	7.5	65	50	125	470	333	225	280	62.5	280	294.5	215	1082	80	345	110	95	32	35	10	14	14	1000	700	150	380	430	216
SB4-80X65L5.1.5	1	1.5	80	65	100	360	260	160	180	62.5	212	219.5	150	785	50	280	110	95	24	27	8	14	14	750	450	150	310	360	87
SB4-80X65M52.2	1	2.2	80	65	100	360	260	160	200	62.5	212	219.5	150	826	50	280	110	95	24	27	8	14	14	800	500	150	310	360	103
SB4-80X65H53.7	1	3.7	80	65	100	360	280	180	225	62.5	250	219.5	190	845	50	320	110	95	24	27	8	14	14	800	500	150	350	400	143
SB4-80X65K57.5	1	7.5	80	65	100	470	300	200	250	80	280	282	200	1057	80	360	110	120	32	35	10	17.5	14	1000	700	150	380	430	195
SB4-80X65J51.1	1	11	80	65	125	470	325	225	280	80	315	282	240	1202	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	258
SB4-100X80M53.7	1	3.7	100	80	125	360	280	180	225	62.5	250	219.5	190	870	50	320	110	95	24	27	8	14	14	850	550	150	350	400	127
SB4-100X80H55.5	1	5.5	100	80	125	470	300	180	250	62.5	280	294.5	215	1044	80	345	110	95	32	35	10	14	14	1000	700	150	410	460	170
SB4-100X80K51.1	1	11	100	80	125	470	300	200	280	80	315	282	240	1202	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	251
SB4-100X80J515	1	15	100	80	125	470	350	250	315	80	315	282	240	1246	80	400	110	120	32	35	10	17.5	14	1150	850	150	410	460	303
SB4-100X80J518.5	1	18.5	100	80	125	470	350	250	315	80	315	282	240	1265	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	340
SB4-100X80G52.2	1	22	100	80	125	470	380	280	355	80	340	308	270	1327	110	440	110	120	42	45	12	17.5	14	1200	900	150	440	490	397
SB4-100X80G530	1	30	100	80	125	532	405	280	355	80	340	308	270	1365	110	440	110	120	42	45	12	17.5	14	1250	950	150	450	515	449
SB4-125X100M54	1	4	125	100	125	470	399	200	250	145	280	282	200	989.5	80	360	110	120	32	35	10	17.5	14	950	650	150	385	445	180
SB4-125X100H57.5	1	7.5	125	100	125	470	300	200	280	80	280	282	200	1082	80	360	110	120	32	35	10	17.5	14	1000	700	150	380	430	200
SB4-125X100K511	1	11	125	100	140	470	300	200	280	80	280	282	200	1202	80	360	110	120	32	35	10	17.5	14	1100	800	150	380	430	245
SB4-125X100K515	1	15	125	100	140	470	325	225	315	80	315	282	240	1261	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	300
SB4-125X100J518.5	1	18.5	125	100	140	470	350	250	315	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	354
SB4-125X100J522	1	22	125	100	140	470	350	250	315	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	368
SB4-125X100G530	2	30	125	100	140	530	405	280	355	100	400	295	300	1378	110	500	110	150	42	45	12	23	14	1300	500	150	510	575	466
SB4-125X100G537	2	37	125	100	140	530	405	280	355	100	400	295	300	1471	110	500	110	150	42	45	12	23	14	1350	525	150	510	575	536
SB4-125X100G545	2	45	125	100	140	530	405	280	355	100	400	295	300	1471	110	500	110	150	42	45	12	23	14	1350	525	150	510	575	569
SB4-150X125H511	1	11	150	125	140	470	415	250	315	80	315	282	240	1217	80	400	110	120	32	35	10	17.5	14	1100	800	150	500	550	274
SB4-150X125K518.5	1	18.5	150	125	140	470	350	250	355	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	335
SB4-150X125K522	1	22	150	125	140	470	350	250	355	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1200	900	150	410	460	348
SB4-150X125J530	1	30	150	125	140	530	405	280	355	100	400	295	300	1378	110	500	110	150	42	45	12	23	14	1250	950	150	510	575	453
SB4-150X125G545	2	45	150	125	140	530	440	315	400	100	400	295	300	1471	110	500	110	150	42	45	12	23	14	1350	525	150	510	575	577
SB4-150X125G555	2	55	150	125	140	530	465	315	400	100	400	295	300	1509	110	500	110	150	42	45	12	23	14	1350	525	150	530	600	644
SB4-150X125G575	2	75	150	125	140	530	465	315	400	100	400	295	300	1558	110	500	110	150	42	45	12	23	14	1400	550	150	530	600	865
SB4-200X150H518.5	1	18.5	200	150	160	495	380	280	400	100	450	292	350	1325	80	550	110	150	32	35	10	23	14	1250	950	150	550	600	365
SB4-200X150K522	1	22	200	150	160	530	350	250	355	100	350	295	250	1360	110	450	110	150	42	45	12	23	14	1250	950	150	450	500	402
SB4-200X150K530	2	30	200	150	160	530	375	250	355	100	350	295	250	1398	110	450	110	150	42	45	12	23	14	1300	500	150	460	525	454
SB4-200X150J537	2	37	200	150	160	530	405	280	400	100	450	295	350	1491	110	550	110	150	42	45	12	23	14	1350	525	150	560	625	533
SB4-200X150J545	2	45	200	150	160	530	405	280	400	100	450	295	350	1491	110	550	110	150	42	45	12	23	14	1350	525	150	560	625	567
SB4-200X150J555	2	55	200	150	160	530	430	280	400	100	450	295	350	1529	110	550	110	150	42	45	12	23	14	1400	550	150	580	650	637
SB4-200X150G575	2	75	200	150	160	530	465	315	4																				