

End-Suction Centrifugal Pumps

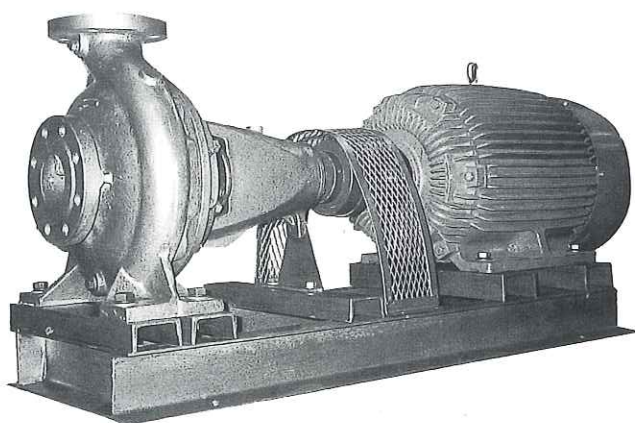
TERAL

SB4/SB

60Hz



TERAL KYOKUTO INC.

MODEL **SB4/SB** End-Suction Centrifugal Pumps**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 (DIN 24255).

Specifications

- Liquid : Fresh water.
- Re . NPSH : See the Characteristic curve.
- Operation Temp. : -10°C to 105°C
- Revolution : 1800 r.p.m. (SB4)
3600 r.p.m. (SB)

- Max. Suct. 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)

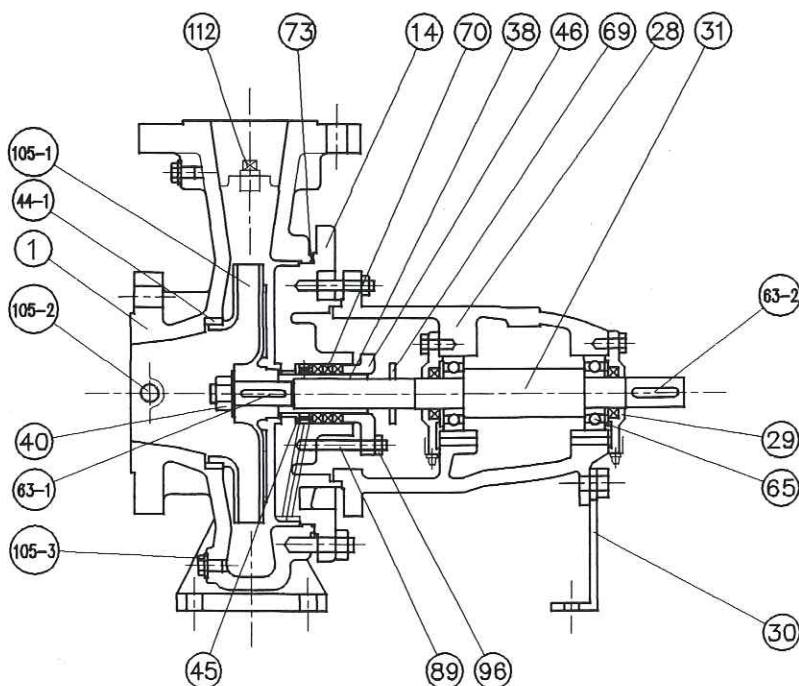
- Bearing : Ball Bearing

● **Material**

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

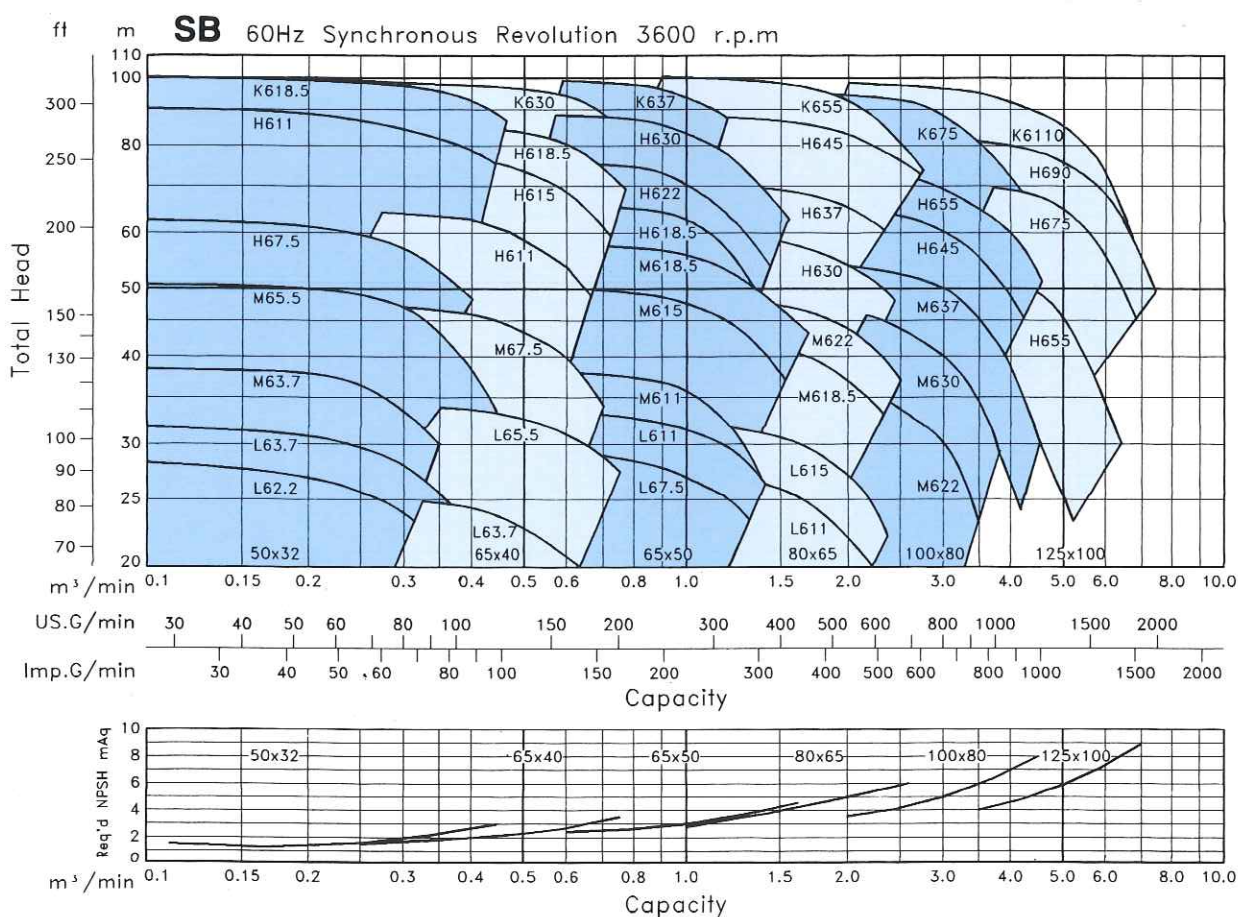
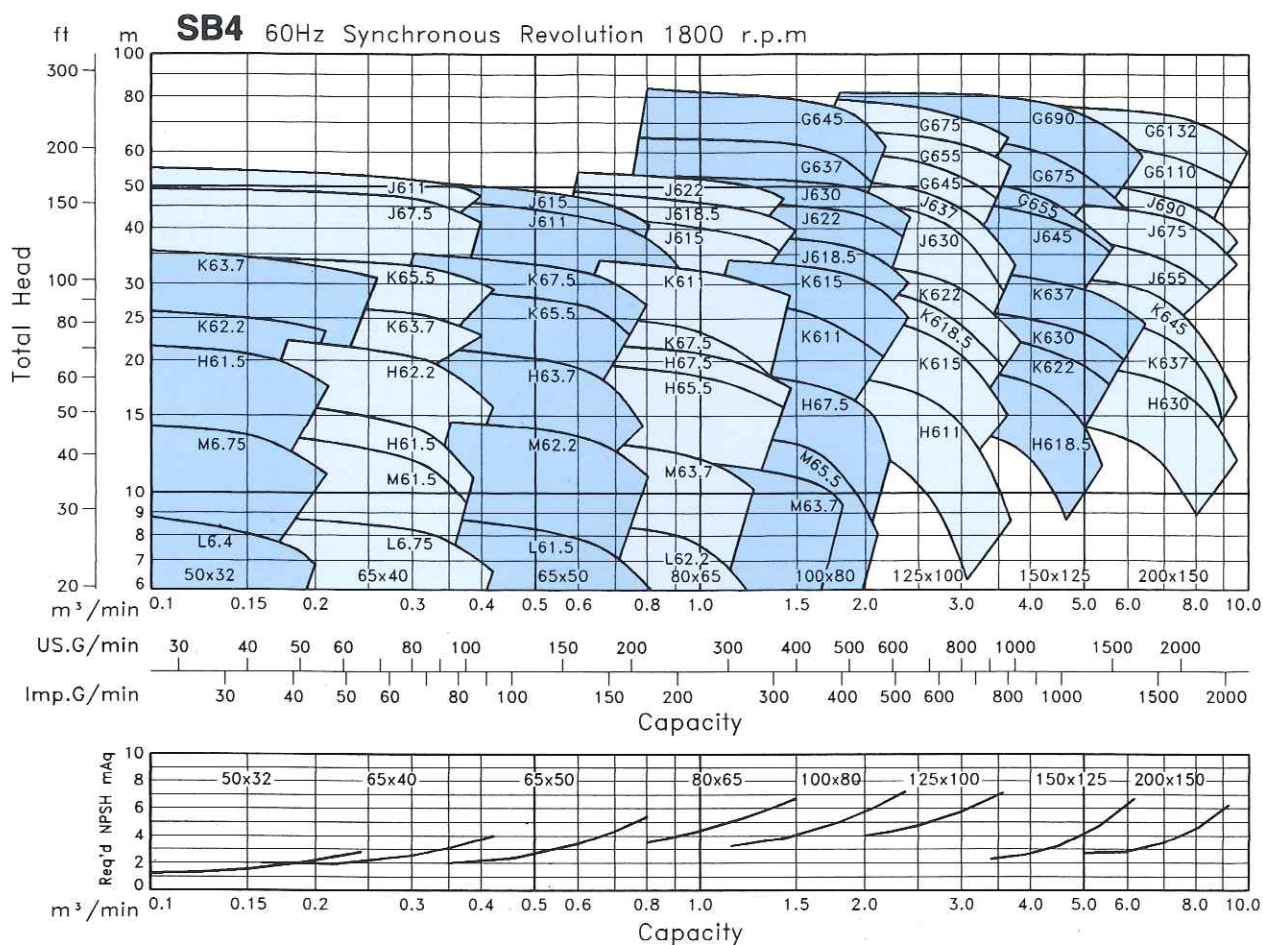
Design Detail

Model		Dimensions at coupling (mm)			Bearing		Gland packing Size - Nos.
		Diameter		Key size	Coupling	Impeller	
4 Pole	2 Pole	S	U	W x T	side	side	
SB4-50X32L, M, H, K	SB-50X32L, M, H, K	φ 24	20	8 X 7	6305	6305	φ32 X φ48 X 8□ ~ 3
SB4-65X40L, M, H, K	SB-65X40L, M, H, K	φ 24	20	8 X 7	6305	6305	φ32 X φ48 X 8□ ~ 3
SB4-65X40J		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 4
SB4-65X50L, M, H, K	SB-65X50L, M, H, K	φ 24	20	8 X 7	6305	6305	φ32 X φ48 X 8□ ~ 3
SB4-65X50J		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 4
SB4-80X65L, M, H	SB-80X65L, M, H	φ 24	20	8 X 7	6305	6305	φ32 X φ48 X 8□ ~ 3
SB4-80X65K	SB-80X65K	φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 3
SB4-80X65J		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 4
SB4-100X80M	SB-100X80M	φ 24	20	8 X 7	6305	6305	φ32 X φ48 X 8□ ~ 3
SB4-100X80H, K	SB-100X80H, K	φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 3
SB4-100X80J		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 4
SB4-100X80G		φ 42	37	12 X 10	6309	6309	φ55 X φ75 X 10□ ~ 4
SB4-125X100H, K	SB-125X100H, K	φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 3
SB4-125X100J		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 4
SB4-125X100G		φ 42	37	12 X 10	6309	6309	φ55 X φ75 X 10□ ~ 4
SB4-150X125H, K		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 3
SB4-150X125J, G		φ 42	37	12 X 10	6309	6309	φ55 X φ75 X 10□ ~ 4
SB4-200X150H		φ 32	27	10 X 8	6307	6307	φ40 X φ60 X 10□ ~ 3
SB4-200X150K, J, G		φ 42	37	12 X 10	6309	6309	φ55 X φ75 X 10□ ~ 4

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
38	Shaft Sleeve	Stainless Steel	1
40	Impeller Nut	Steel	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
112	Priming Water Plug	Steel	1

* Certain models have a wearing ring for casing cover.

Selection Charts

Dimensions

FIG. 1

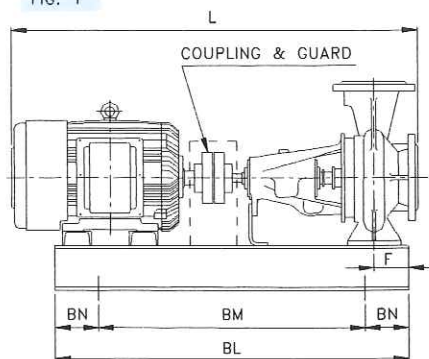
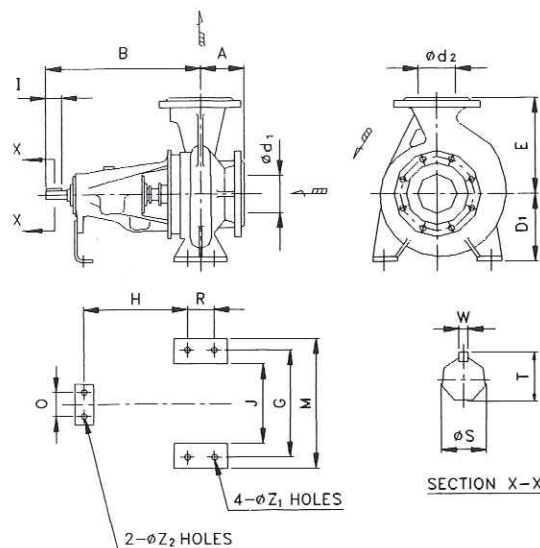
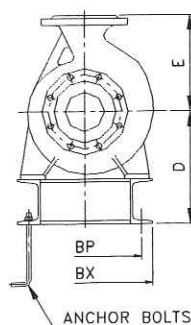
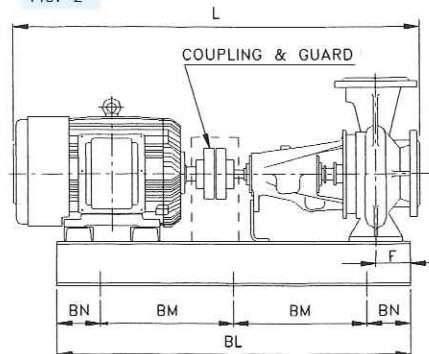
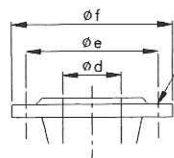


FIG. 2



Flange Size

Comply with ISO 2084 PN16



n-Øh HOLES
divided at the center

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

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-50X32L62.2	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	73
SB-50X32L63.7	1	3.7	50	32	80	360	252	112	140	50	140	232	90	825	50	190	100	70	24	27	8	14	14	750	450	150	190	240	92
SB-50X32M63.7	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-50X32M65.5	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	124
SB-50X32H67.5	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-50X32H611	1	11	50	32	80	360	300	160	180	50	190	232	140	1047	50	240	110	70	24	27	8	14	14	950	650	150	260	310	182
SB-50X32K618.5	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-65X40L63.7	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-65X40L65.5	1	5.5	65	40	80	360	272	112	140	50	160	232	110	889	50	210	100	70	24	27	8	14	14	800	500	150	220	270	118
SB-65X40M67.5	1	7.5	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	131
SB-65X40H611	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-65X40H615	1	15	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	202
SB-65X40H618.5	1	18.5	65	40	100	360	300	160	180	50	212	232	165	1111	50	265	110	70	24	27	8	14	14	1000	700	150	270	320	212
SB-65X40K630	1	30	65	40	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	320
SB-65X50L67.5	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-65X50L611	1	11	65	50	100	360	300	132	160	50	190	232	140	1067	50	240	100	70	24	27	8	14	14	950	650	150	270	320	175
SB-65X50M611	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-65X50M615	1	15	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	195
SB-65X50M618.5	1	18.5	65	50	100	360	300	160	180	50	212	232	165	1111	50	265	110	70	24	27	8	14	14	1000	700	150	270	320	206
SB-65X50H618.5	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-65X50H622	1	22	65	50	100	360	320	160	200	50	212	232	165	1130	50	265	110	70	24	27	8	14	14	1000	700	150	270	320	262
SB-65X50H630	1	30	65	50	100	360	345	160	200	50	212	232	165	1168	50	265	110	70	24	27	8	14	14	1050	750	150	310	370	305
SB-65X50K637	1	37	65	50	100	360	365	180	225	62.5	250	219.5	190	1231	50	320	110	95	24	27	8	14	14	1100	800	150	350	410	380
SB-80X65L611	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-80X65L615	1	15	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	196
SB-80X65M618.5	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-80X65M622	1	22	80	65	100	360	320	160	200	62.5	212	219.5	150	1130	50	280	110	95	24	27	8	14	14	1000	700	150	320	370	259
SB-80X65H630	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-80X65H637	1	37	80	65	100	360	365	180	225	62.5	250	219.5	190	1231	50	320	110	95	24	27	8	14	14	1100	800	150	350	410	369
SB-80X65H645	1	45	80	65	100	360	365	180	225	62.5	250	219.5	190	1231	50	320	110	95	24	27	8	14	14	1100	800	150	350	410	383
SB-80X65K655	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-100X80M622	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-100X80M630	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-100X80M637	1	37	100	80	125	360	365	180	225	62.5	250	219.5	190	1256	50	320	110	95	24	27	8	14	14	1100	800	150	350	410	368
SB-100X80H645	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-100X80H655	1	55	100	80	125	470	415	180	250	62.5	280	294.5	215	1404	80	345	110	95	32	35	10	14	14	1250	950	150	400	470	482
SB-100X80K675	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-125X100H655	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-125X100H675	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-125X100H690	2	90	125	100	125	470	450	200	280	80	280	282	200	1491	80	360	110	120	32	35	10	17.5	14	1350	525	150	450	520	778
SB-125X100K6110	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
SB4-50X32L6.4	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
SB4-50X32M6.75	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
SB4-50X32H61.5	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
SB4-50X32K62.2	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
SB4-50X32K63.7	1	2.2	50	32	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	128
SB4-65X40L6.75	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
SB4-65X40M61.5	1	1.5	65	40	80	360	232	132	160	50	190	232	140	765	50	240	100	70	24	27	8	14	14	700	400	150	190	240	79
SB4-65X40H61.5	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
SB4-65X40H62.2	1	2.2	65	40	100	360	260	160	180	50	212	232	165	826	50	265	110	70	24	27	8	14	14	750	450	150	220	265	98
SB4-65X40K63.7	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
SB4-65X40K65.5	1	5.5	65	40	100	360	280	180	225	62.5	250	219.5	190	909	50	320	110	95	24	27	8	14	14	800	500	150	350	400	150
SB4-65X40J67.5	1	7.5	65	40	125	470	300	200	250	62.5	280	294.5	215	1082	80	345	110	95	32	35	10	14	14	950	650	150	380	430	202
SB4-65X40J611	1	11	65	40	125	470	300	200	250	62.5	280	294.5	215	1202	80	345	110	95	32	35	10	14	14	1050	750	150	380	430	246
SB4-65X50L61.5	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
SB4-65X50M62.2	1	2.2	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	92
SB4-65X50H63.7	1	3.7	65	50	100	360	260	160	200	50	212	232	165	845	50	265	110	70	24	27	8	14	14	750	450	150	220	265	110
SB4-65X50K65.5	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
SB4-65X50K67.5	1	7.5	65	50	100	360	280	180	225	62.5	250	219.5	190	947	50	320	110	95	24	27	8	14	14	850	550	150	350	400	167
SB4-65X50J611	1	11	65	50	125	470	325	225	280	62.5	280	294.5	215	1202	80	345	110	95	32	35	10	14	14	1050	750	150	380	430	250
SB4-65X50J615	1	15	65	50	125	470	325	225	280	62.5	280	294.5	215	1246	80	345	110	95	32	35	10	14	14	1100	800	150	380	430	271
SB4-80X65L62.2	1	2.2	80	65	100	360	260	160	180	62.5	212	219.5	150	826	50	280	110	95	24	27	8	14	14	750	450	150	310	360	96
SB4-80X65M63.7	1	3.7	80	65	100	360	260	160	200	62.5	212	219.5	150	845	50	280	110	95	24	27	8	14	14	750	450	150	310	360	109
SB4-80X65H65.5	1	5.5	80	65	100	360	280	180	225	62.5	250	219.5	190	909	50	320	110	95	24	27	8	14	14	800	500	150	350	400	142
SB4-80X65H67.5	1	7.5	80	65	100	360	280	180	225	62.5	250	219.5	190	947	50	320	110	95	24	27	8	14	14	850	550	150	350	400	156
SB4-80X65K67.5	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
SB4-80X65K611	1	11	80	65	100	470	300	200	250	80	280	282	200	1177	80	360	110	120	32	35	10	17.5	14	1050	750	150	380	430	230
SB4-80X65J615	1	15	80	65	125	470	325	225	280	80	315	282	240	1246	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	280
SB4-80X65J618.5	1	18.5	80	65	125	470	325	225	280	80	315	282	240	1265	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	314
SB4-80X65J622	1	22	80	65	125	470	325	225	280	80	315	282	240	1265	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	327
SB4-100X80M63.7	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
SB4-100X80M65.5	1	5.5	100	80	125	360	280	180	225	62.5	250	219.5	190	934	50	320	110	95	24	27	8	14	14	850	550	150	350	400	148
SB4-100X80H67.5	1	7.5	100	80	125	470	300	200	250	62.5	280	294.5	215	1082	80	345	110	95	32	35	10	14	14	950	650	150	410	460	177
SB4-100X80K611	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
SB4-100X80K615	1	15	100	80	125	470	300	200	280	80	315	282	240	1246	80	400	110	120	32	35	10	17.5	14	1100	800	150	410	460	270
SB4-100X80J618.5	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
SB4-100X80J622	1	22	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	353
SB4-100X80J630	1	30	100	80	125	470	375	250	315	80	315	282	240	1303	80	400	110	120	32	35	10	17.5	14	1200	900	150	425	490	389
SB4-100X80G637	2	37	100	80	125	532	405	280	355	80	340	308	270	1458	110	440	110	120	42	45	12	23	14	1300	500	150	450	515	499
SB4-100X80G645	2	45	100	80	125	532	405	280	355	80	340	308	270	1458	110	440	110	120	42	45	12	23	14	1300	500	150	450	515	531
SB4-125X100H611	1	11	125	100	125	470	300	200	280	80	280	282	200	1202	80	360	110	120	32	35	10	17.5	14	1050	750	150	380	430	235
SB4-125X100K615	1	15	125	100	140	470	325	225	280	80	315	282	240	1261	80	400	110	120	32	35	10	17.5	14	1150	850	150	410	460	300
SB4-125X100K618.5	1	18.5	125	100	140	470	325	225	280	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1150	850	150	410	460	334
SB4-125X100K622	1	22	125	100	140	470	325	225	280	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1150	850	150	410	460	347
SB4-125X100J630	1	30	125	100	140	470	375	250	315	80	315	282	240	1318	80	400	110	120	32	35	10	17.5	14	1200	900	150	425	490	403
SB4-125X100J637	1	37	125	100	140	470	375	250	315	80	315	282	240	1411	80	400	110	120	32	35	10	17.5	14	1250	950	150	425	490	468
SB4-125X100G645	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
SB4-125X100G655	2	55	125	100	140	530	430	280	355	100	400	295	300	1509	110	500	110	150	42	45	12	23	14	1350	525	150	530	600	614
SB4-125X100G675	2	75	125	100	140	530	430	280	355	100	400	295	300	1558	110	500	110	150	42	45	12	23	14	1400	550	150	530	600	824
SB4-150X125H618.5	1	18.5	150	125	140	470	350	250	315	80	315	282	240	1280	80	400	110	120	32	35	10	17.5	14	1					