

SHB Series

Heavy Load Bellows Suction Cup

AIRBEST

Suction Cup

RoHS



METAL SHEET



WOOD



HEAVY LOAD



CURVED SURFACE

Features

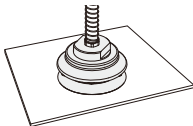
- ◇ 1.5 bellows
- ◇ Split structure design
- ◇ Available in various sizes

Advantages

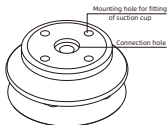
- ◇ Contacting perfectly with unven surface of workpieces and good buffering
- ◇ Wearing parts can be replaced, and suction cup can be recycled to highly reduce cost
- ◇ Suitable for workpieces of various sizes and shapes

Applications

- ◇ Handling of large workpieces with unven and irregular surface, such as wood boards, steel plates and heavy workpieces



Structure



SZ
SP3
SUR
SAN
SAO
SOFA
STP
SFT
SFA
SST
SBL
SBLP
SBS
SFP
SEP
SGP
SGCP
STC
SFF
SOB
SOF
SDG
SFM
SOM
SEP
SOM
SPU
SEK
SHT
SDL
SPG
SFGT
SPD
SB
SBA
SF
SU
SP2P
SPA
SPD
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SGP
SNP

SHB Series

Heavy Load Bellows Suction Cup

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How to order

SHB 40 N

① ② ③

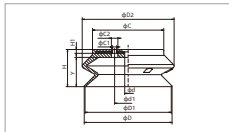
① Series	② Diameter	③ Material & Hardness
SHB	40 - ϕ 40mm	80 - ϕ 80mm
	50 - ϕ 50mm	100 - ϕ 100mm
	63 - ϕ 63mm	125 - ϕ 125mm
		N - NBR 35
		WS - White silicone 38

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SHB40	56	15	16.1	8	1
SHB50	88	27	30	8	1
SHB63	140	45	57.9	8	1
SHB80	226	98	75.3	8	1
SHB100	353	240	197.9	10	1
SHB125	552	384	379.6	10	1

○ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SHB40-125

Model/Size	D	D1	D2	d	d1	H	H1	C	C1	C2	Y
SHB40□	41.5	40	43.2	6	18	20.5	3.5	30	3- ϕ 4	3- ϕ 6.5	13
SHB50□	52	50	54	6	18	24	3.5	40.5	3- ϕ 4	3- ϕ 6.5	16.5
SHB63□	65	63	67.5	8	34	31.5	4.5	50	4- ϕ 5	4- ϕ 8	21.5
SHB80□	83	80	85	8	34	37	5	64	4- ϕ 5	4- ϕ 8	27.5
SHB100□	103	100	106.5	10	40	47.5	6	80	4- ϕ 6	4- ϕ 9.5	35.5
SHB125□	128.5	125	135	10	40	56	6	105	4- ϕ 6	4- ϕ 9.5	44

○ Note: The dimensional tolerance conforms to the GB/T 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SHB Series

Suction Cup with Locking Fitting

AIRBEST

Structure

- ◇ Consisting of suction cup and locking fitting, 3 types of connection
- ◇ FIG.1: Vertical vacuum port, female thread connection
- ◇ FIG.2: Vertical vacuum port, male thread connection
- ◇ FIG.3: Lateral vacuum port, female thread connection



How to order

SHB50N - LR1 - M10F

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②

③

① Model	② Vacuum port direction	③ Connection thread
SHB50N	Nil - Vertical, female thread connection R1 - Vertical, male thread connection LR1 - Lateral, female thread connection	M10F - M10x1.5 female thread M12F - M12x1.75 female thread G2F - G1/4 female thread G3F - G3/8 female thread M14M - M14x1 male thread M16M - M16x1.5 male thread

◇ Please refer to page 342 for suction cup selection

Selection

Model	Vacuum port direction		R1	LR1
	Nil			
SHB40□	SHB40□-M10F	SHB40□-G2F	SHB40□-R1-M14M	SHB40□-LR1-M10F
SHB50□	SHB50□-M10F	SHB50□-G2F	SHB50□-R1-M14M	SHB50□-LR1-M10F
SHB63□	SHB63□-M10F	SHB63□-G2F	SHB63□-R1-M16M	SHB63□-LR1-M10F
SHB80□	SHB80□-M10F	SHB80□-G2F	SHB80□-R1-M16M	SHB80□-LR1-M10F
SHB100□	SHB100□-M12F	SHB100□-G3F	SHB100□-R1-M16M	SHB100□-LR1-M10F
SHB125□	SHB125□-M12F	SHB125□-G3F	SHB125□-R1-M16M	SHB125□-LR1-M10F

Suction Cup

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBT

SBL

SBLP

SBS

SPF

SXP

SGP

SGP

SGOF

STC

SFF

SGB

SGF

SGG

SGM

SOM

SGF

SOM

SOM

SFU

SFK

SHT

SDL

SPG

SPGT

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SFD

SFF

SPC

SPJ

SPU

SH

SHB

SBB

SGP

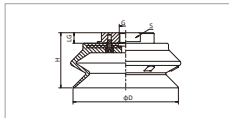
SNP

SHB Series

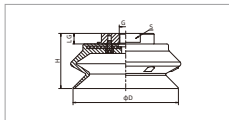
Suction Cup with Locking Fitting

AIRBEST

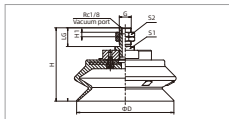
Dimensions(mm)



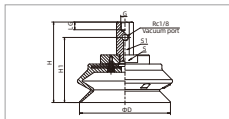
SHB40-125 Vertical, female thread connection



SHB40-125 Vertical, female thread connection



SHB40-125 Vertical, male thread connection



SHB40-125 Lateral, female thread connection

Model/Size	D	H	G	LG	S
SHB40□-G2F	41.5	32	G1/4	11.5	24
SHB50□-G2F	52	35.5	G1/4	11.5	24
SHB63□-G2F	65	43	G1/4	11.5	37
SHB80□-G2F	83	48.5	G1/4	11.5	37
SHB100□-G3F	103	60.5	G3/8	13	60
SHB125□-G3F	128.5	69	G3/8	13	60

Model/Size	D	H	G	LG	S
SHB40□-M10F	41.5	32	M10×1.5	11.5	24
SHB50□-M10F	52	35.5	M10×1.5	11.5	24
SHB63□-M10F	65	43	M10×1.5	11.5	37
SHB80□-M10F	83	48.5	M10×1.5	11.5	37
SHB100□-M12F	103	60.5	M12×1.75	13	60
SHB125□-M12F	128.5	69	M12×1.75	13	60

Model/Size	D	H	H1	G	LG	S1	S2
SHB40□-R1-M14M	41.5	62	5	M14×1	25	19	19
SHB50□-R1-M14M	52	65.5	5	M14×1	25	19	19
SHB63□-R1-M16M	65	73	6	M16×1.5	25	24	22
SHB80□-R1-M16M	83	78.5	6	M16×1.5	25	24	22
SHB100□-R1-M16M	103	90.5	6	M16×1.5	25	24	22
SHB125□-R1-M16M	128.5	99	6	M16×1.5	25	24	22

Model/Size	D	H	H1	G	LG	S	S1
SHB40□-LR1-M10F	41.5	69	47	M10×1.5	11	24	21
SHB50□-LR1-M10F	52	72.5	50.5	M10×1.5	11	24	21
SHB63□-LR1-M10F	65	80	58	M10×1.5	11	37	21
SHB80□-LR1-M10F	83	85.5	63.5	M10×1.5	11	37	21
SHB100□-LR1-M10F	103	97.5	75.5	M10×1.5	11	60	21
SHB125□-LR1-M10F	128.5	106	84	M10×1.5	11	60	21

Suction Cup with Level Compensator

Structure

- Consisting of suction cup and level compensator, 2 types of vacuum connection
- External spring and 2pcs mounting nuts
- Vacuum port connection: Rc1/8 female thread
- FIG.1 vertical vacuum port, FIG.2 lateral vacuum port



FIG.1



FIG.2

How to order

SHB50N - E 25 LR1 - M18

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① Model	② Buffer type	③ Buffer stroke	④ Vacuum port direction	⑤ Mounting thread
SHB50N	E - External spring	25	Nil - Vertical	M18 - M18×1.5
		50	LR1 - Lateral	M22 - M22×1.5
		75		
		100		

Please refer to page 342 for suction cup selection

Selection - Vertical direction

Model	Buffer stroke			
	25	50	75	100
SHB40□	SHB40□-E25-M18	SHB40□-E50-M18	SHB40□-E75-M18	-
SHB50□	SHB50□-E25-M18	SHB50□-E50-M18	SHB50□-E75-M18	-
SHB63□	SHB63□-E25-M18	SHB63□-E50-M18	SHB63□-E75-M18	-
SHB80□	SHB80□-E25-M18	SHB80□-E50-M18	SHB80□-E75-M18	-
SHB100□	SHB100□-E25-M22	SHB100□-E50-M22	SHB100□-E75-M22	SHB100□-E100-M22
SHB125□	SHB125□-E25-M22	SHB125□-E50-M22	SHB125□-E75-M22	SHB125□-E100-M22

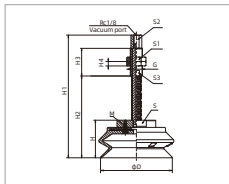
Selection - Lateral direction

Model	Buffer stroke			
	25	50	75	100
SHB40□	SHB40□-E25LR1-M18	SHB40□-E50LR1-M18	SHB40□-E75LR1-M18	-
SHB50□	SHB50□-E25LR1-M18	SHB50□-E50LR1-M18	SHB50□-E75LR1-M18	-
SHB63□	SHB63□-E25LR1-M18	SHB63□-E50LR1-M18	SHB63□-E75LR1-M18	-
SHB80□	SHB80□-E25LR1-M18	SHB80□-E50LR1-M18	SHB80□-E75LR1-M18	-
SHB100□	SHB100□-E25LR1-M22	SHB100□-E50LR1-M22	SHB100□-E75LR1-M22	SHB100□-E100LR1-M22
SHB125□	SHB125□-E25LR1-M22	SHB125□-E50LR1-M22	SHB125□-E75LR1-M22	SHB125□-E100LR1-M22

SHB Series

Suction Cup with Level Compensator

Dimensions(mm)

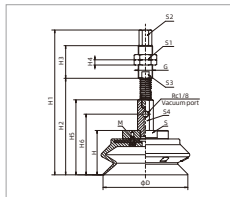


SHB40-125 Vertical direction

Model/Size	D	H	H1	H2	H3	H4	G	M	S	S1	S2	S3
SHB40□-E25-M18	41.5	32	127.5	70	35	6	M18x1.5	3-M3	24	27	14	16
SHB40□-E50-M18	41.5	32	162.5	107	35	6	M18x1.5	3-M3	24	27	14	16
SHB40□-E75-M18	41.5	32	198.5	143	35	6	M18x1.5	3-M3	24	27	14	16
SHB50□-E25-M18	52	35.5	131	75.5	35	6	M18x1.5	3-M3	24	27	14	16
SHB50□-E50-M18	52	35.5	166	110.5	35	6	M18x1.5	3-M3	24	27	14	16
SHB50□-E75-M18	52	35.5	202	146.5	35	6	M18x1.5	3-M3	24	27	14	16
SHB63□-E25-M18	65	43	138.5	83	35	6	M18x1.5	4-M4	37	27	14	16
SHB63□-E50-M18	65	43	173.5	118	35	6	M18x1.5	4-M4	37	27	14	16
SHB63□-E75-M18	65	43	209.5	154	35	6	M18x1.5	4-M4	37	27	14	16
SHB80□-E25-M18	83	48.5	144	88.5	35	6	M18x1.5	4-M4	37	27	14	16
SHB80□-E50-M18	83	48.5	179	123.5	35	6	M18x1.5	4-M4	37	27	14	16
SHB80□-E75-M18	83	48.5	215	159.5	35	6	M18x1.5	4-M4	37	27	14	16
SHB100□-E25-M22	103	60.5	178.5	104.5	50	8	M22x1.5	4-M5	60	30	17	19
SHB100□-E50-M22	103	60.5	214.5	140.5	50	8	M22x1.5	4-M5	60	30	17	19
SHB100□-E75-M22	103	60.5	254.5	180.5	50	8	M22x1.5	4-M5	60	30	17	19
SHB100□-E100-M22	103	60.5	289.5	215.5	50	8	M22x1.5	4-M5	60	30	17	19
SHB125□-E25-M22	128.5	69	187	113	50	8	M22x1.5	4-M5	60	30	17	19
SHB125□-E50-M22	128.5	69	223	149	50	8	M22x1.5	4-M5	60	30	17	19
SHB125□-E75-M22	128.5	69	263	189	50	8	M22x1.5	4-M5	60	30	17	19
SHB125□-E100-M22	128.5	69	298	224	50	8	M22x1.5	4-M5	60	30	17	19

Suction Cup with Level Compensator

Dimensions(mm)



SHB40-125 Lateral direction

Model/Size	D	H	H1	H2	H3	H4	H5	H6	G	M	S	S1	S2	S3	S4
SHB40□-E25LR1-M18	41.5	32	160	109	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB40□-E50LR1-M18	41.5	32	195	144	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB40□-E75LR1-M18	41.5	32	231	180	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E25LR1-M18	52	35.5	163.5	112.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E50LR1-M18	52	35.5	198.5	147.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E75LR1-M18	52	35.5	234.5	183.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB63□-E25LR1-M18	65	43	171	120	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB63□-E50LR1-M18	65	43	206	155	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB63□-E75LR1-M18	65	43	242	191	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E25LR1-M18	83	48.5	176.5	125.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E50LR1-M18	83	48.5	211.5	160.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E75LR1-M18	83	48.5	247.5	196.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB100□-E25LR1-M22	103	60.5	212.5	141.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E50LR1-M22	103	60.5	248.5	177.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E75LR1-M22	103	60.5	288.5	217.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E100LR1-M22	103	60.5	323.5	252.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E25LR1-M22	128.5	69	221	150	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E50LR1-M22	128.5	69	257	186	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E75LR1-M22	128.5	69	297	226	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E100LR1-M22	128.5	69	332	261	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21

S2

SP3

SUR

SAN

SAO

SOFA

STP

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SFA

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SEL

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SXP

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SGOP

STC

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