

SHB Series

Heavy Load Bellows Suction Cup



METAL SHEET



WOOD



HEAVY LOAD



CURVED SURFACE

Features

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

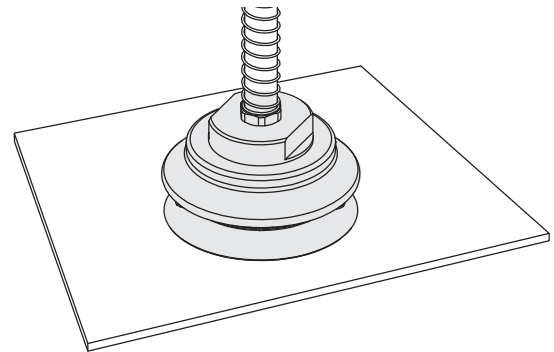
Advantages

- ◇ 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

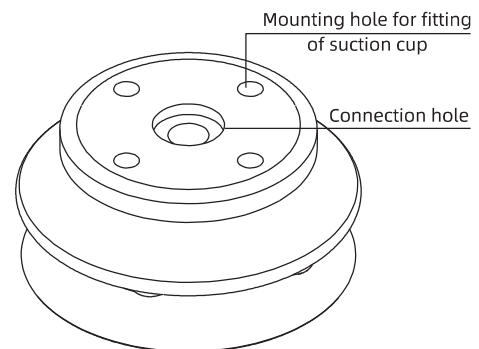


Applications

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



Structure



Suction Cup

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBT
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFGT
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPD
- SPF
- SPC
- SPJ
- SPU
- SH**
- SHB**
- SBB
- SOP
- SNP

SHB Series

Heavy Load Bellows Suction Cup



How to order

SHB 40 N

① ② ③

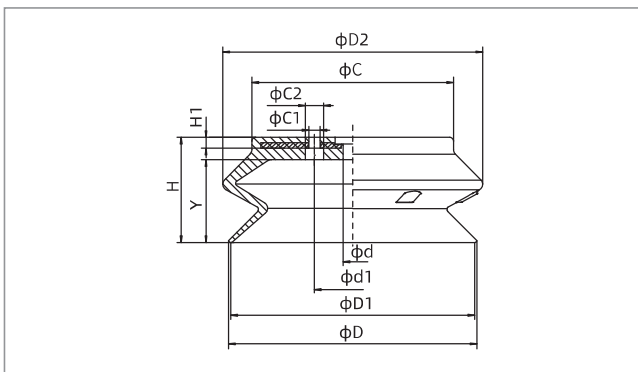
① Series	② Diameter		③ Material & Hardness	
SHB	40 - ϕ 40mm	80 - ϕ 80mm	N - NBR	55
	50 - ϕ 50mm	100 - ϕ 100mm	WS - White silicone	50
	63 - ϕ 63mm	125 - ϕ 125mm		

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 GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SHB Series

Suction Cup with Locking Fitting



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



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- SBB
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- SNP

How to order

SHB50N - LR1 - M10F

① 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 - M10×1.5 female thread M12F - M12×1.75 female thread G2F - G1/4 female thread G3F - G3/8 female thread M14M - M14×1 male thread M16M - M16×1.5 male thread

◇ Please refer to page 327 for suction cup selection

Selection

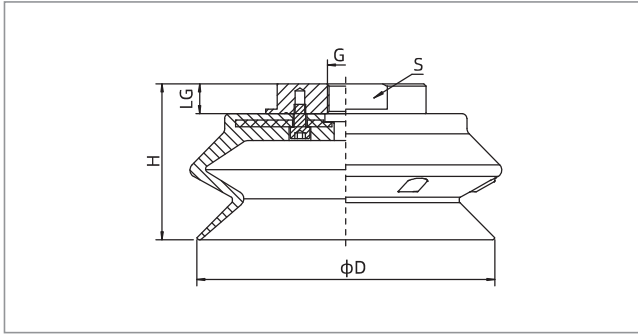
Model	Vacuum port direction			
	Nil		R1	LR1
SHB40□	SHB40□-M10F	SHB40□-G2F	SHB40□-R1-M14M	SHB40□-LR1-M10F
SHB50□	SHB50□-M10F	SHB50□-G2F	SHB50□-R1-M14M	SHB50□-LR1-M10F
SHB63□	SHB63□-M10F	SHB63□-G2F	SHB63□-R1-M16M	SHB63□-LR1-M10F
SHB80□	SHB80□-M10F	SHB80□-G2F	SHB80□-R1-M16M	SHB80□-LR1-M10F
SHB100□	SHB100□-M12F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

SHB Series

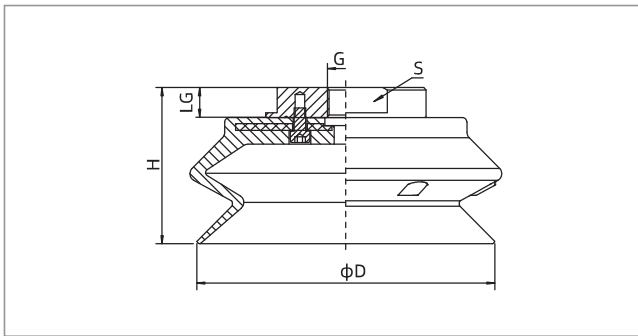
Suction Cup with Locking Fitting



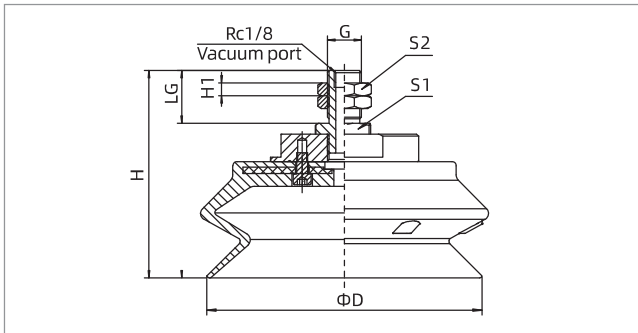
Dimensions(mm)



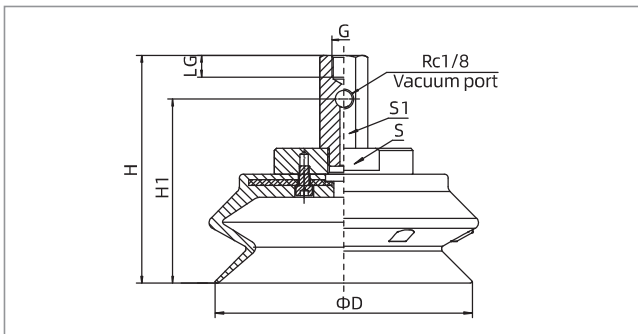
SHB40-125 Vertical, female thread connection



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

SHB Series

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

① ② ③ ④ ⑤

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 327 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

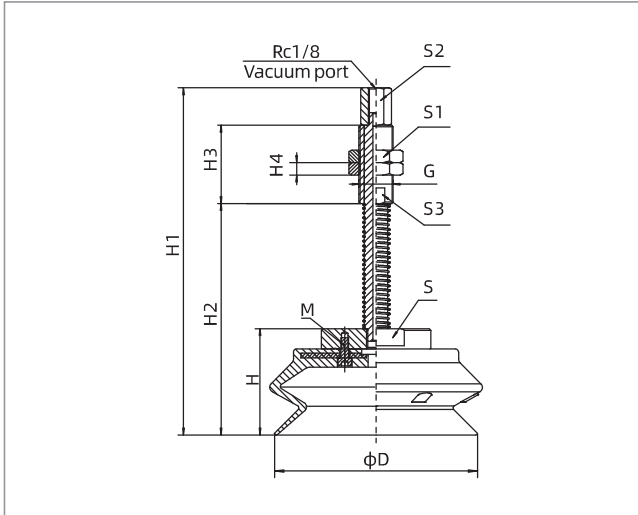
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SHB Series

Suction Cup with Level Compensator



Dimensions(mm)



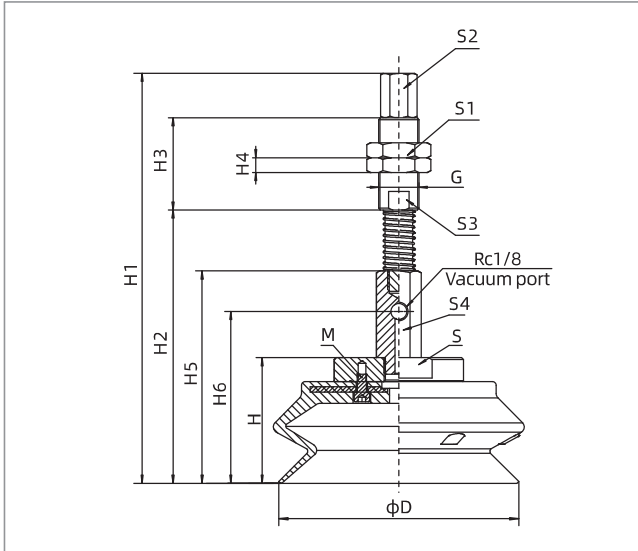
SHB40-125 Vertical direction

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	M18×1.5	3-M3	24	27	14	16
SHB40□-E50-M18	41.5	32	162.5	107	35	6	M18×1.5	3-M3	24	27	14	16
SHB40□-E75-M18	41.5	32	198.5	143	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E25-M18	52	35.5	131	75.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E50-M18	52	35.5	166	110.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E75-M18	52	35.5	202	146.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB63□-E25-M18	65	43	138.5	83	35	6	M18×1.5	4-M4	37	27	14	16
SHB63□-E50-M18	65	43	173.5	118	35	6	M18×1.5	4-M4	37	27	14	16
SHB63□-E75-M18	65	43	209.5	154	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E25-M18	83	48.5	144	88.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E50-M18	83	48.5	179	123.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E75-M18	83	48.5	215	159.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB100□-E25-M22	103	60.5	178.5	104.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E50-M22	103	60.5	214.5	140.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E75-M22	103	60.5	254.5	180.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E100-M22	103	60.5	289.5	215.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E25-M22	128.5	69	187	113	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E50-M22	128.5	69	223	149	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E75-M22	128.5	69	263	189	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E100-M22	128.5	69	298	224	50	8	M22×1.5	4-M5	60	30	17	19

SHB Series

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

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