

SH Series

AIRBEST

Heavy Load Flat Suction Cup



METAL SHEET



WOOD



HEAVY LOAD

RoHS

Features

- ◇ Large area support structure at the bottom
- ◇ Flat and short compressed stroke
- ◇ Split structure design
- ◇ Available in various sizes

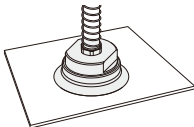
Advantages

- ◇ Be able to prevent permanent deformation of workpieces
- ◇ Handling of workpieces with flat surface and short working cycle
- ◇ Wearing parts can be replaced, and suction cup can be recycled to highly reduce cost
- ◇ Suitable for various workpieces

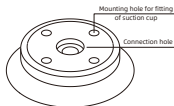


Applications

- ◇ Handling of large workpieces with flat or slightly rough surface, such as wood boards, steel plates and heavy workpieces



Structure



SH Series

Heavy Load Flat Suction Cup

AIRBEST

Suction Cup

How to order

SH 40 N

① ② ③

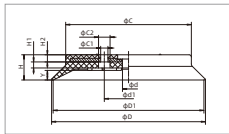
① Series	② Diameter	③ Material & Hardness
SH	40 - ϕ 40mm 80 - ϕ 80mm 50 - ϕ 50mm 100 - ϕ 100mm 63 - ϕ 63mm 125 - ϕ 125mm	N - NBR 55 WS - White silicone 50

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SH40	56	4	13.5	8	1
SH50	88	6.9	25.1	8	1
SH63	140	11.5	47.9	8	1
SH80	226	24	75.4	8	1
SH100	353	55	149.7	10	1
SH125	552	85	263.6	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)



SH40-125

Model/Size	D	D1	d	d1	H	H1	H2	C	C1	C2	Y
SH40□	42	40	6	18	11.5	3.5	3.5	32	3- ϕ 4	3- ϕ 6.5	3.5
SH50□	52	50	6	18	11.5	3.5	3.5	42	3- ϕ 4	3- ϕ 6.5	3.5
SH63□	65	63	8	34	14.5	4.5	4.5	51	4- ϕ 5	4- ϕ 8	3.5
SH80□	82	80	8	34	16.5	4.5	4.5	68	4- ϕ 5	4- ϕ 8	4.5
SH100□	103	100	10	40	21	5	6	80	4- ϕ 6	4- ϕ 9.5	7.5
SH125□	127	125	10	40	21	5	6	104	4- ϕ 6	4- ϕ 9.5	7.5

○ Note: The dimensional tolerance conforms to GB/T3672.1-2002-1 M3 rubber product dimensional tolerance standard

SH Series

Suction Cup with Locking Fitting

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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

SH50N - LR1 - M10F

①

②

③

① Model	② Vacuum port direction	③ Connection thread
SH50N	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 335 for suction cup selection

Selection

Model	Vacuum port direction		R1	LR1
	Nil			
SH40□	SH40□-M10F	SH40□-G2F	SH40□-R1-M14M	SH40□-LR1-M10F
SH50□	SH50□-M10F	SH50□-G2F	SH50□-R1-M14M	SH50□-LR1-M10F
SH63□	SH63□-M10F	SH63□-G2F	SH63□-R1-M16M	SH63□-LR1-M10F
SH80□	SH80□-M10F	SH80□-G2F	SH80□-R1-M16M	SH80□-LR1-M10F
SH100□	SH100□-M12F	SH100□-G3F	SH100□-R1-M16M	SH100□-LR1-M10F
SH125□	SH125□-M12F	SH125□-G3F	SH125□-R1-M16M	SH125□-LR1-M10F

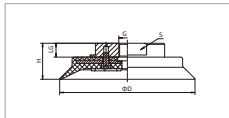
SH Series

Suction Cup with Locking Fitting

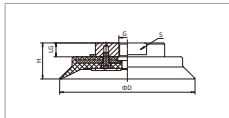
AIRBEST

Suction Cup

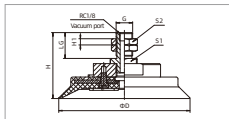
Dimensions(mm)



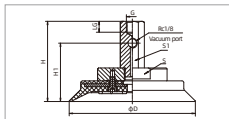
SH40-125 Vertical, female thread connection



SH40-125 Vertical, female thread connection



SH40-125 Vertical, male thread connection



SH40-125 Lateral, female thread connection

Model/Size	D	H	G	LG	S
SH40□-G2F	42	23	G1/4	11.5	24
SH50□-G2F	52	23	G1/4	11.5	24
SH63□-G2F	65	26	G1/4	11.5	37
SH80□-G2F	82	28	G1/4	11.5	37
SH100□-G3F	103	34	G3/8	13	60
SH125□-G3F	127	34	G3/8	13	60

Model/Size	D	H	G	LG	S
SH40□-M10F	42	23	M10×1.5	11.5	24
SH50□-M10F	52	23	M10×1.5	11.5	24
SH63□-M10F	65	26	M10×1.5	11.5	37
SH80□-M10F	82	28	M10×1.5	11.5	37
SH100□-M12F	103	34	M12×1.75	13	60
SH125□-M12F	127	34	M12×1.75	13	60

Model/Size	D	H	H1	G	LG	S1	S2
SH40□-R1-M14M	42	53	5	M14×1	25	19	19
SH50□-R1-M14M	52	53	5	M14×1	25	19	19
SH63□-R1-M16M	65	56	6	M16×1.5	25	24	22
SH80□-R1-M16M	82	58	6	M16×1.5	25	24	22
SH100□-R1-M16M	103	64	6	M16×1.5	25	24	22
SH125□-R1-M16M	127	64	6	M16×1.5	25	24	22

Model/Size	D	H	H1	G	LG	S1	S2
SH40□-LR1-M10F	42	60	38	M10×1.5	11	24	21
SH50□-LR1-M10F	52	60	38	M10×1.5	11	24	21
SH63□-LR1-M10F	65	63	41	M10×1.5	11	37	21
SH80□-LR1-M10F	82	65	43	M10×1.5	11	37	21
SH100□-LR1-M10F	103	71	49	M10×1.5	11	60	21
SH125□-LR1-M10F	127	71	49	M10×1.5	11	60	21

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBT

SBL

SBLP

SBS

SFP

SEP

SXP

SGP

SGOF

STC

SFF

SOB

SOB

SOE

SDG

SDM

SOM

SOF

SOM

SFU

SFK

SHT

SOL

SPG

SPGT

SFD

SB

SBA

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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

SH50N - E 25 LR1 - M18

① ② ③ ④ ⑤

① Model	② Buffer type	③ Buffer stroke	④ Vacuum port direction	⑤ Mounting thread
SH50N	E - External spring	25	Nil - Vertical	M18 - M18×1.5
		50	LR1 - Lateral	M22 - M22×1.5
		75		
		100		

Please refer to page 335 for suction cup selection

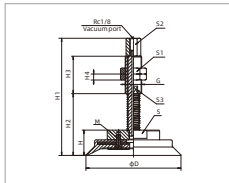
Selection-Vertical direction

Model	Buffer stroke 25	50	75	100
SH40□	SH40□-E25-M18	SH40□-E50-M18	SH40□-E75-M18	-
SH50□	SH50□-E25-M18	SH50□-E50-M18	SH50□-E75-M18	-
SH63□	SH63□-E25-M18	SH63□-E50-M18	SH63□-E75-M18	-
SH80□	SH80□-E25-M18	SH80□-E50-M18	SH80□-E75-M18	-
SH100□	SH100□-E25-M22	SH100□-E50-M22	SH100□-E75-M22	SH100□-E100-M22
SH125□	SH125□-E25-M22	SH125□-E50-M22	SH125□-E75-M22	SH125□-E100-M22

Selection-Lateral direction

Model	Buffer stroke 25	50	75	100
SH40□	SH40□-E25LR1-M18	SH40□-E50LR1-M18	SH40□-E75LR1-M18	-
SH50□	SH50□-E25LR1-M18	SH50□-E50LR1-M18	SH50□-E75LR1-M18	-
SH63□	SH63□-E25LR1-M18	SH63□-E50LR1-M18	SH63□-E75LR1-M18	-
SH80□	SH80□-E25LR1-M18	SH80□-E50LR1-M18	SH80□-E75LR1-M18	-
SH100□	SH100□-E25LR1-M22	SH100□-E50LR1-M22	SH100□-E75LR1-M22	SH100□-E100LR1-M22
SH125□	SH125□-E25LR1-M22	SH125□-E50LR1-M22	SH125□-E75LR1-M22	SH125□-E100LR1-M22

Dimensions(mm)

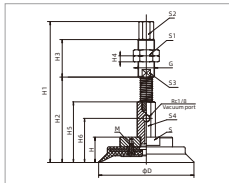


SH40-125 Vertical direction

Model/Size	D	H	H1	H2	H3	H4	G	M	S	S1	S2	S3
SH40□-E25-M18	42	23	118.5	63	35	6	M18x1.5	3-M3	24	27	14	16
SH40□-E50-M18	42	23	153.5	98	35	6	M18x1.5	3-M3	24	27	14	16
SH40□-E75-M18	42	23	189.5	134	35	6	M18x1.5	3-M3	24	27	14	16
SH50□-E25-M18	52	23	118.5	63	35	6	M18x1.5	3-M3	24	27	14	16
SH50□-E50-M18	52	23	153.5	98	35	6	M18x1.5	3-M3	24	27	14	16
SH50□-E75-M18	52	23	189.5	134	35	6	M18x1.5	3-M3	24	27	14	16
SH63□-E25-M18	65	26	121.5	66	35	6	M18x1.5	4-M4	37	27	14	16
SH63□-E50-M18	65	26	156.5	101	35	6	M18x1.5	4-M4	37	27	14	16
SH63□-E75-M18	65	26	192.5	137	35	6	M18x1.5	4-M4	37	27	14	16
SH80□-E25-M18	82	28	123.5	68	35	6	M18x1.5	4-M4	37	27	14	16
SH80□-E50-M18	82	28	158.5	103	35	6	M18x1.5	4-M4	37	27	14	16
SH80□-E75-M18	82	28	194.5	139	35	6	M18x1.5	4-M4	37	27	14	16
SH100□-E25-M22	103	34	152	78	50	8	M22x1.5	4-M5	60	30	17	19
SH100□-E50-M22	103	34	188	114	50	8	M22x1.5	4-M5	60	30	17	19
SH100□-E75-M22	103	34	228	154	50	8	M22x1.5	4-M5	60	30	17	19
SH100□-E100-M22	103	34	263	189	50	8	M22x1.5	4-M5	60	30	17	19
SH125□-E25-M22	127	34	152	78	50	8	M22x1.5	4-M5	60	30	17	19
SH125□-E50-M22	127	34	188	114	50	8	M22x1.5	4-M5	60	30	17	19
SH125□-E75-M22	127	34	228	154	50	8	M22x1.5	4-M5	60	30	17	19
SH125□-E100-M22	127	34	263	189	50	8	M22x1.5	4-M5	60	30	17	19

Suction Cup with Level Compensator

Dimensions(mm)



SH40-125 Lateral direction

Model/Size	D	H	H1	H2	H3	H4	H5	H6	G	M	S	S1	S2	S3	S4
SH40□-E25LR1-M18	42	23	151	100	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH40□-E50LR1-M18	42	23	186	135	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH40□-E75LR1-M18	42	23	222	171	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH50□-E25LR1-M18	52	23	151	100	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH50□-E50LR1-M18	52	23	186	135	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH50□-E75LR1-M18	52	23	222	171	35	6	60	38	M18x1.5	3-M3	24	27	14	16	21
SH63□-E25LR1-M18	65	26	154	103	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH63□-E50LR1-M18	65	26	189	136	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH63□-E75LR1-M18	65	26	225	172	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH80□-E25LR1-M18	82	28	156	105	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH80□-E50LR1-M18	82	28	191	138	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH80□-E75LR1-M18	82	28	227	174	35	6	63	41	M18x1.5	4-M4	37	27	14	16	21
SH100□-E25LR1-M22	103	34	186	115	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH100□-E50LR1-M22	103	34	222	151	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH100□-E75LR1-M22	103	34	262	191	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH100□-E100LR1-M22	103	34	297	226	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH125□-E25LR1-M22	127	34	186	115	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH125□-E50LR1-M22	127	34	222	151	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH125□-E75LR1-M22	127	34	262	191	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21
SH125□-E100LR1-M22	127	34	297	226	50	8	71	49	M22x1.5	4-M5	60	30	17	19	21