



Features

- ◊ Suitable for handling flat objects.
- ◊ Various materials for different workpieces. Conductive silicone can effectively prevent static damage to electronic products.
- ◊ Various sizes are available for workpiece with different shapes and sizes.



Applications

- ◊ Smooth wooden plate
- ◊ Plywood
- ◊ Electronic component
- ◊ Smooth steel plate
- ◊ Plastic plate

How to order

SF 50 N – G2F – EB

① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Inductive valve
SF	15 – ϕ 15mm	N – NBR	55★	Nil – Suction cup only
	20 – ϕ 20mm	S – Silicone	50★	M5M – M5 Male thread
	25 – ϕ 25mm	WS – White silicone	50	G1F – G1/8 Female thread
	30 – ϕ 30mm	CS – Conductive silicone	55	G1M – G1/8 Male thread
	40 – ϕ 40mm			G2F – G1/4 Female thread
	50 – ϕ 50mm			G2M – G1/4 Male thread
	75 – ϕ 75mm			G3F – G3/8 Female thread
	110 – ϕ 110mm			G3M – G3/8 Male thread
	150 – ϕ 150mm			G4F – G1/2 Female thread
	200 – ϕ 200mm			G6F – G3/4 Female thread
	300 – ϕ 300mm			

◊ Note: "★" – common material, in stock. For other materials, please consult with AIRBEST. Inductive valve is available for SF50-SF150.

Selection

Model/Connection thread	M5M	G1F	G1M	G2F	G2M	G3F	G3M	G4F	G6F	EB
SF15	●	–	–	–	–	–	–	–	–	–
SF20 – 30	–	●	●	–	–	–	–	–	–	–
SF40	–	●	●	–	–	–	–	–	–	–
SF50	–	–	–	●	●	●	–	–	–	○
SF75	–	–	–	●	–	–	–	–	–	○
SF110-150	–	–	–	–	–	–	–	●	–	○
SF200	–	–	–	–	–	–	–	●	–	–
SF300	–	–	–	–	–	–	–	–	●	–

◊ Note: "●" – default, in stock; "○" – selective, no stock; "–" unavailable.

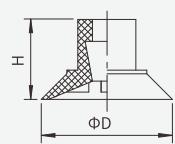
SB
SBA
SBB
SBF
SBOF
SFT
SFA
STP
SBL
SBLP
SBS
SF
SU
SUF
SFG
STU
STC
SFF
SFM
SDM
SHT
SOFA
SOB
SOF
SOG
SFP
SBP
SXP
SGP
SDL
SH
SHB
SZ
SAN
SAO
SPA
SPC
SPF
SPJ
SPU
SNP
SOP

Technical parameters

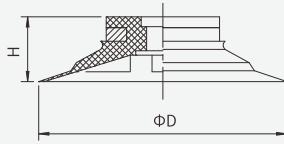
Model	Pull-out force (N)	Inner volume (cm ³)	Recommended hose diameter (mm)
SF15	8	0.5	6
SF20	14.5	0.8	6
SF25	22	1.2	6
SF30	32	1.5	6
SF40	60	3	6
SF50	88	7	6
SF75	200	20	8
SF110	430	60	10
SF150	795	160	10
SF200	1,500	550	12
SF300	3,200	730	12

◇ Note: Testing vacuum level: -60kPa. Testing Workpiece: 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.

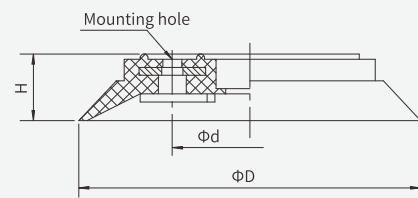
Dimensions(mm)



SF15



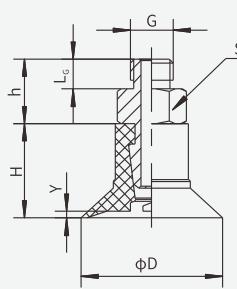
SF20-50



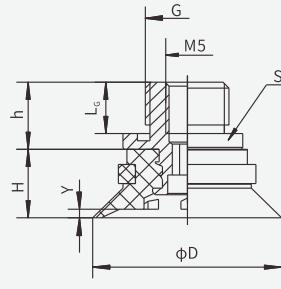
SF75-200

Model/Size	D	H
SF15	16.5	11
SF20	22	8
SF25	27	9
SF30	32	10
SF40	42	13
SF50	53	17.5

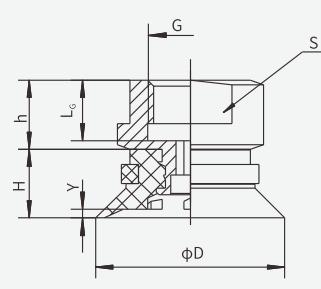
Model/Size	D	H	d	Mounting hole
SF75	77	13	35	4-φ6.5
SF110	112	20	55	8-φ6
SF150	152	26	70	8-φ6
SF200	200	45	40	4-φ9



SF15 Male connection

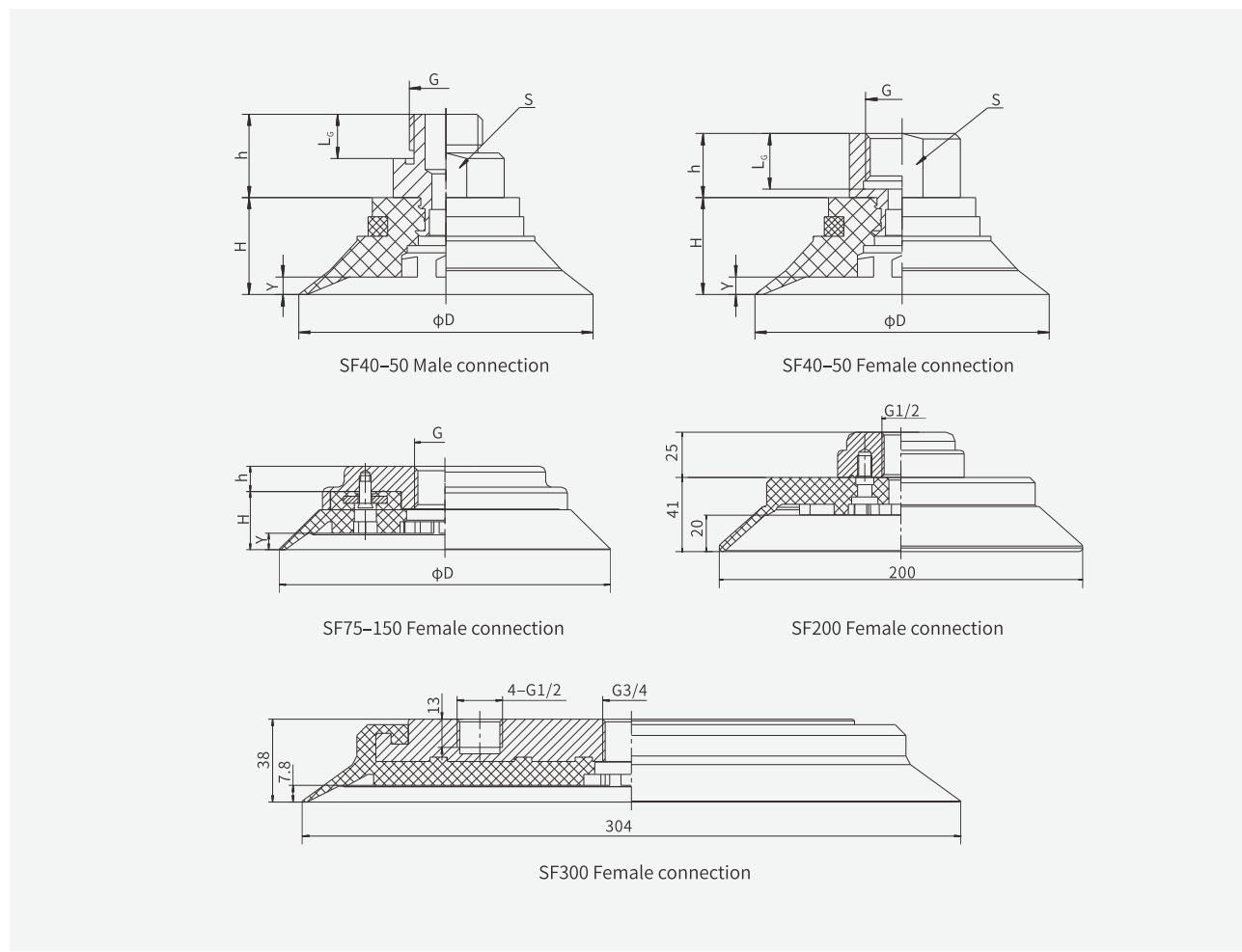


SF20-30 Male connection



SF20-30 Female connection

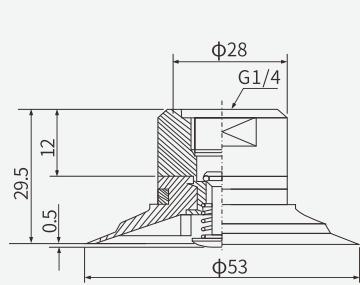
Dimensions(mm)



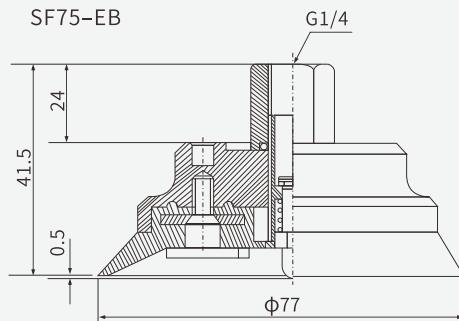
Model/Size	D	H	G	L_g	h	S	Y
SF15-M5M	16.5	11	M5	3.5	7.5	7	0.8
SF20-G1F	22	8	$G1/8$	7	8	13	1
SF20-G1M	22	8	$G1/8$	6	7.8	13	1
SF25-G1F	27	9	$G1/8$	7	8	13	1
SF25-G1M	27	9	$G1/8$	6	7.8	13	1
SF30-G1F	32	10	$G1/8$	7	8	13	1.2
SF30-G1M	32	10	$G1/8$	6	7.8	13	1.2
SF40-G1F	42	13	$G1/8$	7	10	17	1.2
SF40-G1M	42	13	$G1/8$	6	12	17	1.2
SF50-G2F	53	17.5	$G1/4$	10	13	24	3.2
SF50-G2M	53	17.5	$G1/4$	9	17	24	3.2
SF50-G3F	53	17.5	$G3/8$	11	13	24	3.2
SF50-G3M	53	17.5	$G3/8$	10	18	24	3.2
SF75-G2F	77	13	$G1/4$	-	13	-	4
SF110-G4F	112	20	$G1/2$	-	9	-	6
SF150-G4F	152	26	$G1/2$	-	10	-	8

Dimensions(mm)-suction cup with contact inductive valve

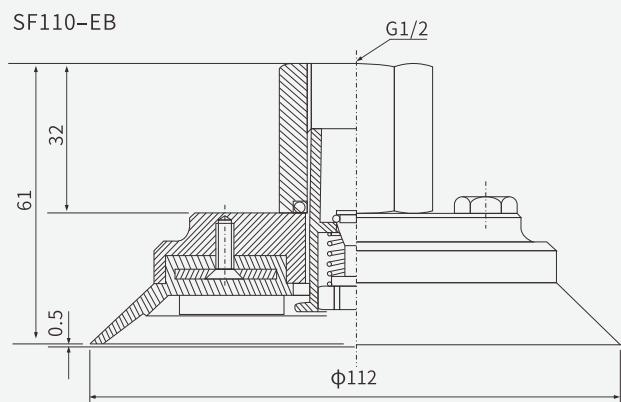
SF50-EB



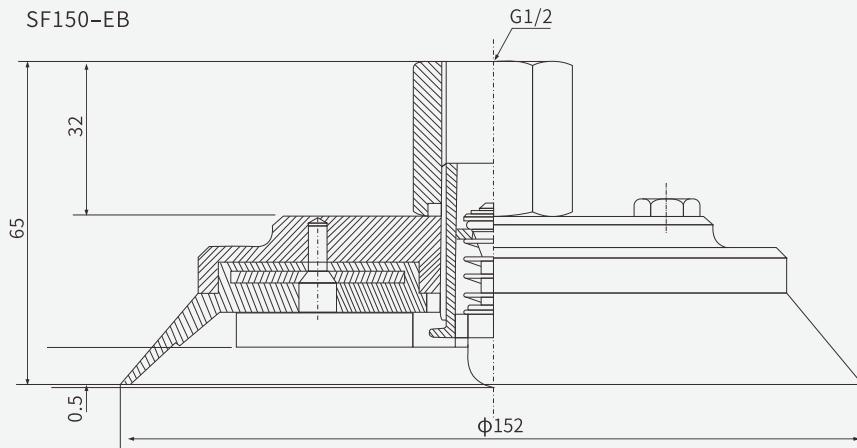
SF75-EB



SF110-EB



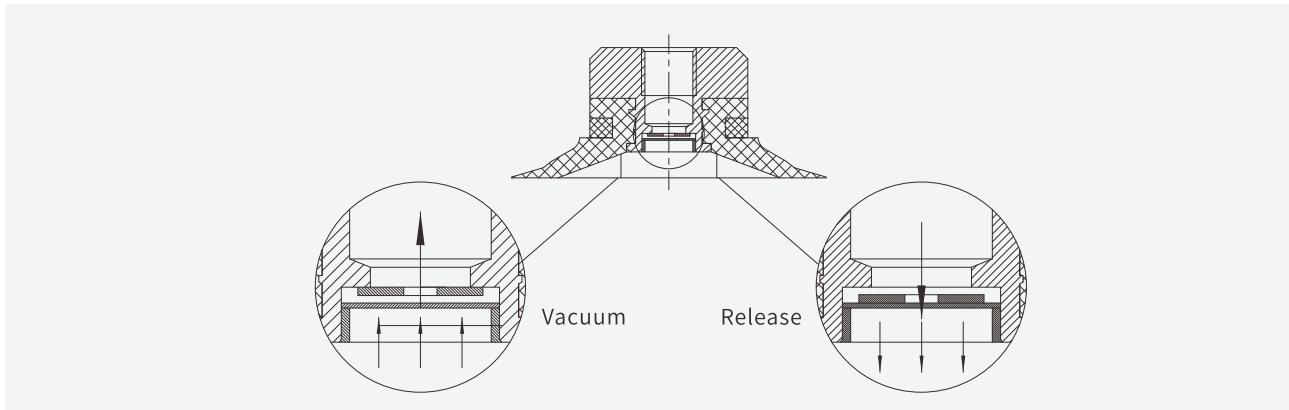
SF150-EB



Accessories

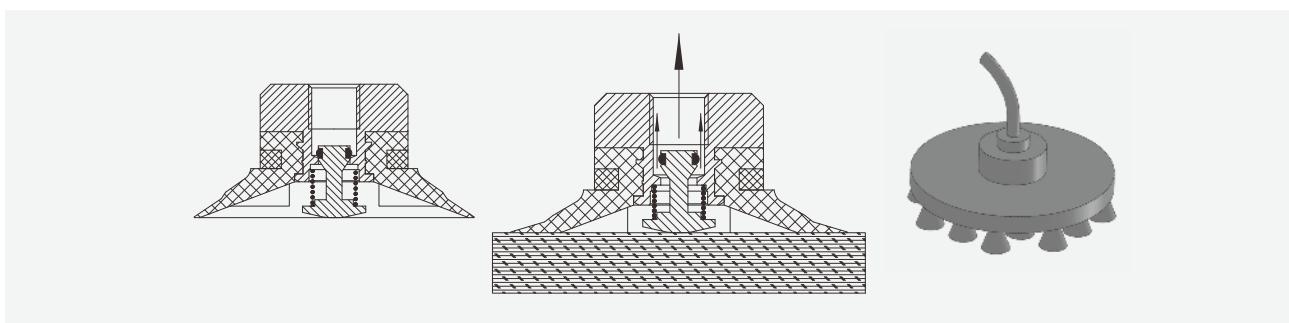
Throttle Valve (EH)

The flow through the vacuum port increases when the suction cup doesn't contact the workpiece, the valve plate fits the vacuum port, just little vacuum flow leaks from the small hole. The flow through the vacuum port reduced when the suction cup sucks the workpiece, the valve plate leaves the vacuum port, and the circuit works normally (The suction cup must work vertically when it is equipped with throttle valve.)



Contact Inductive Valve (EB)

When the suction cup doesn't contact the workpiece, the inductive valve closes the vacuum port, to prevent the vacuum flow leakage. When the suction cup contact the workpiece, compress the valve rod of the inductive valve, the vacuum port opens and the suction cup works normally.



Mounting parts

Item	Model		Applicable suction cup
	F - Female thread	M - Male thread	
Fitting for suction cup	-	PJS-M5M-SC3	SF15
	PJS-G1F-SF1	PJS-G1M-SF1	SF20, 25, 30
	PJS-G1F-SF2	PJS-G1M-SF2	SF40
	PJS-G2F-SF3	PJS-G2M-SF3	SF50
	PJS-G3F-SF3	PJS-G3M-SF3	SF50
	PJS-G2F-SF4	-	SF75
	PJS-G4F-SF5	-	SF110
	PJS-G4F-SF6	-	SF150
	PJS-G4F-SF7	-	SF200

◇ Note: Please refer to page 22 for mounting parts selection.

SB
SBA
SBB
SBF
SBOF
SFT
SFA
STP
SBL
SBLP
SBS
SF
SU
SUF
SFG
STU
STC
SFF
SFM
SDM
SHT
SOFA
SOB
SOF
SOG
SFP
SBP
SXP
SGP
SDL
SH
SHB
SZ
SAN
SAO
SPA
SPC
SPF
SPJ
SPU
SNP
SOP