

# 扁平吸盘

## Flat Vacuum Pad

### SF Series



#### Features(产品特点)

- Flat vacuum pad.
- Suitable for transferring flat objects.
- When lifting force is parallel to the surface of objects, it is recommended.
- 扁平吸盘。
- 适用于表面平整物体的传送。
- 当提升力和物体表面平行时，推荐使用。

#### How To Order(型号表示方法)

##### ① Model (型号)

SF15	φ15	SF75	φ75
SF20	φ20	SF90	φ90
SF25	φ25	SF110	φ110
SF30	φ30	SF150	φ150
SF40	φ40	SF200	φ200
SF50	φ50	SF300	φ300

##### ② Material(Shore Hardness) (材质)(肖氏硬度)

N	NBR(55°)(丁腈橡胶55°)
S	Silicone(50°)(导电特殊材质50°)
WS	White Silicone(50°)(白硅胶50°)
CS	Conductive(Special Mat'l)(50°)(导电特殊材质(50°))

##### ④ Valve(锥阀)

EH	Vacuum Efficiency Valve(双流式控制阀) (SF20,25,30,40,50)
EB	Cone Valve(锥阀)(SF20,25,30, 40,50,75,90,110,150)
-	No

#### SF40 N - 18F EH - KE1820-A16 - BH-G1/8

① ② ③ ④ ⑤ ⑥

##### ③ Connection Thread (连接螺纹)

18-F	G1/8 Female Thread (内螺纹) (SF20,25,30,40,50,75,90)
18-FA	G1/8 Female Thread (内螺纹) (SF40)
5 x 18F	G1/8 Female Thread (内螺纹) (SF40,SF50)
14-F	G1/4 Female Thread (内螺纹) (SF75,90)
38-F	G3/8 Female Thread (内螺纹) (SF75,90)
12-F	G1/2 Female Thread (内螺纹) (SF75,90,110,150,200)
34-F	G3/4 Female Thread (内螺纹) (SF75,90,110,150,200)
M5-M	M5 Female Thread (内螺纹) (SF15)
M5/18-MF	M5 Female Thread And (内螺纹和) G1/8 Male Thread (外螺纹) (SF20,25,30)
M5/18-MFL	M5 Female Thread And (内螺纹和) G1/8 Male Thread (外螺纹) (SF20,25,30)
5 x M5F	5 x M5 Female Thread (内螺纹) (SF20,25,30)
18-M	G1/8 Male Thread (内螺纹) (SF50)
14-M	G1/4 Male Thread (内螺纹) (SF40,50)
38-M	G3/8 Male Thread (内螺纹) (SF50)

##### ⑤ Spring Plunger(弹簧缓冲行程)

Model(型号)	Buffer Stroke(mm) (缓冲行程)	⑥ Ball Joint (球状接头)
KE510-A12, KE510-Y-A12	10	-
KE520-A12, KE20-Y-A12	20	
KI506-R-A8, KI506-B-A8, KI506-E-A8, KI506-S-A8	06	
KI510-R-A8, KI510-B-A8, KI510-E-A8, KI510-S-A8	10	
KI525-R-A8, KI525-B-A8, KI525-E-A8, KI525-S-A8	25	
KI507-V-A10	7	
KI515-V-A10	15	
KI520-V-A10	20	
KE1810-A16, KE1810-L-A14, KE1810-V-A16	10	
KE1820-A16, KE1820-L-A14, KE1820-V-A16	20	
KE1830-A16, KE1830-L-A14, KE1830-V-A16	30	
KE1850-A16, KE1850-L-A14, KE1850-V-A16*	50	
KI1810-A16, KI1810-L-A16, KI1810-V-A16	10	
KI1820, KI1820-L-A16, KI1820-V-A16*	20	
KI1830-A16, KI1830-L-A16, KI1830-V-A16	30	
KI1850-A16, KI1850-L-A16, KI1850-V-A16*	50	
KE1210-L-A20, KE1210-A20	10	
KE1220-L-A20, KE1220-A20	20	
KE1230-L-A20, KE1230-A20	30	
KE1250-L-A20, KE1250-A20	50	
KI1210-L-A20, KI1210-A18, KI1210-A22	10	
KI1220-L-A20, KI1220-A18, KI1220-A22	20	
KI1230-L-A20, KI1230-A18, KI1230-A22	30	
KI1250-L-A20, KI1250-A18, KI1250-A22	50	

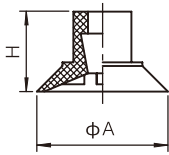
#### Recommended(Max.)Lifting Force(N)(不同真空度的最大传力)

Model (型号)	Volume (内部容量)cm <sup>3</sup>	Vertical Lifting Force (垂直传力)(N)			Parallel Lifting Force (水平传力)(N)		
		-20kPa	-60kPa	-90kPa	-20kPa	-60kPa	-90kPa
SF15	0.037	3.25	8.4	11	3.45	6.48	7.5
SF20	1	6	15	18.7	5	7.95	8.45
SF25	1.1	9.2	19.3	24.9	7.95	8.95	10
SF30	2	13	24.8	30.8	11	15.98	20
SF40	4.8	20	40	50	15	25	29.5
SF50	10	37	74	96	24	40	50
SF75	20	80	201	272	60	110	140
SF90	50	99.8	272.8	365.8	86.8	156.5	193.5
SF110	70	141	418.5	562	140	24.8	299.7
SF150	160	300	845	1098	250	600	800
SF200	460	749	1899.5	2702	375.5	949.8	1347.8
SF300	820	1598	4293	6398	1323	3008	4665

\*Not available with ball joint.  
\*不能与球状接头共同使用

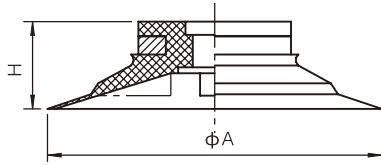
Dimensions (mm)(外形尺寸(毫米))

▼ SF15

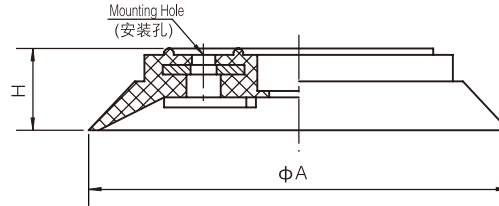


Model(型号)	ΦA	H
SF15	16.5	11
SF20	22	8
SF25	27	9
SF30	32	10
SF40	42	13
SF50	53	17.5

▼ SF20/25/30/40/50



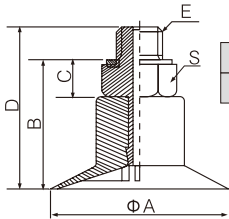
▼ SF75/90/110/150/200



Model(型号)	ΦA	H	Mounting Hole(安装孔)
SF75	77	13	4-Φ6.5 Circle Diameter(圆周直径) Φ35
SF90	92	12.5	4-Φ6.5 Circle Diameter(圆周直径) Φ35
SF110	112	20	8-Φ6 Circle Diameter(圆周直径) Φ55
SF150	152	26	8-Φ6 Circle Diameter(圆周直径) Φ70
SF200	200	41	-

▼ SF15-M5M

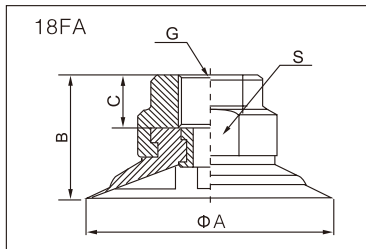
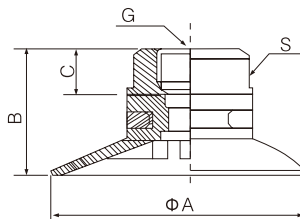
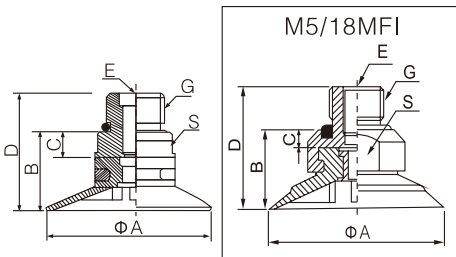
Male(Female) Thread Connection(mm)  
(外(内)螺纹连接(mm))



Model(型号)	ΦA	B	C	D	E	S
SF15-M5M	16.5	11	5	19.5	M5	S7

Male(female) Thread Connection(mm)(外(内)螺纹连接(mm))

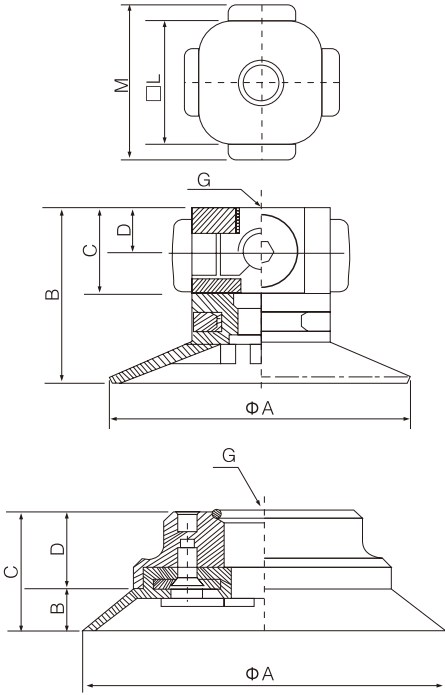
Model(型号)	ΦA	B	C	D	E	G	S
SF20-M5/18MF	22	9.5	1.5	15.5	M5	G1/8	S12
SF20-M5/18MFI	22	11	3	18	M5	G1/8	S16
SF25-M5/18MF	27	10.5	1.5	16.5	M5	G1/8	S12
SF25-M5/18MFI	27	12	3	19	M5	G1/8	S16
SF30-M5/18MF	32	11.5	1.5	17.5	M5	G1/8	S12
SF30-M5/18MFI	32	13	3	20	M5	G1/8	S16
SF40-18M	42	18	5	25	-	G1/8	S17
SF40-14M	42	19	6	28	-	G1/4	S17
SF50-14M	53	22.5	6	32.5	-	G1/4	S24
SF50-38M	53	23.5	6	33.5	-	G3/8	S24



Female Thread Connection(mm)(内螺纹连接(mm))

Model(型号)	ΦA	B	C	G	S
SF20-18F	22	16	8	G1/8	S15
SF25-18F	27	17	8	G1/8	S15
SF30-18F	32	18	8	G1/8	S15
SF40-18F	43	21	8	G1/4	S17
SF40-18FI	42	22	9	G1/8	S21
SF50-18F	53	26.5	9	G1/8	S21

Dimensions (mm)(外形尺寸(毫米))



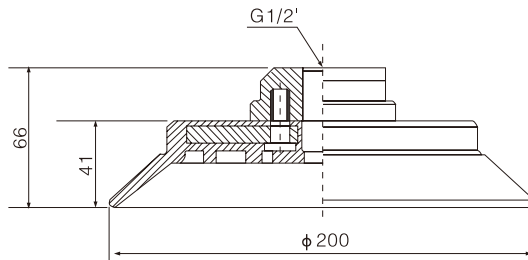
Female Thread Connection x5(mm)(内螺纹连接x5(mm))

Model(型号)	ΦA	B	C	D	G	□L	M
SF20-5 × M5F	22	17	9	5	M5 × 5	15	22
SF25-5 × M5F	27	18	9	5	M5 × 5	15	22
SF30-5 × M5F	32	19	9	5	G1/8 × 5	15	22
SF40-5 × 18F	42	31	18	10	G1/8 × 5	22	30
SF50-5 × 18F	53	35.5	18	10	G1/8 × 5	28	36

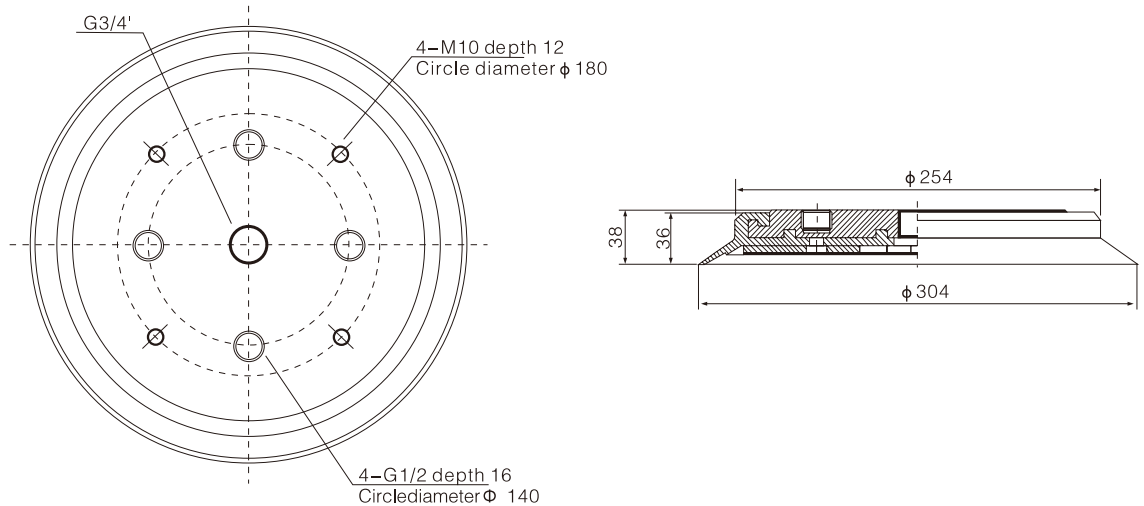
Female Thread Connection (mm)(内螺纹连接(mm))

Model(型号)	ΦA	B	C	D	G
SF75-18F	77	8	26	18	G1/8
SF75-14F	77	8	26	18	G1/4
SF75-38F	77	8	26	18	G3/8
SF75-12F	77	8	26	18	G1/2
SF90-18F	92	7.5	25.5	18	G1/8
SF90-14F	92	7.5	25.5	18	G1/4
SF90-38F	92	7.5	25.5	18	G3/8
SF90-12F	92	7.5	25.5	18	G1/2
SF110-12F	112	14	29	15	G1/2
SF150-12F	152	18	33	14	G1/2

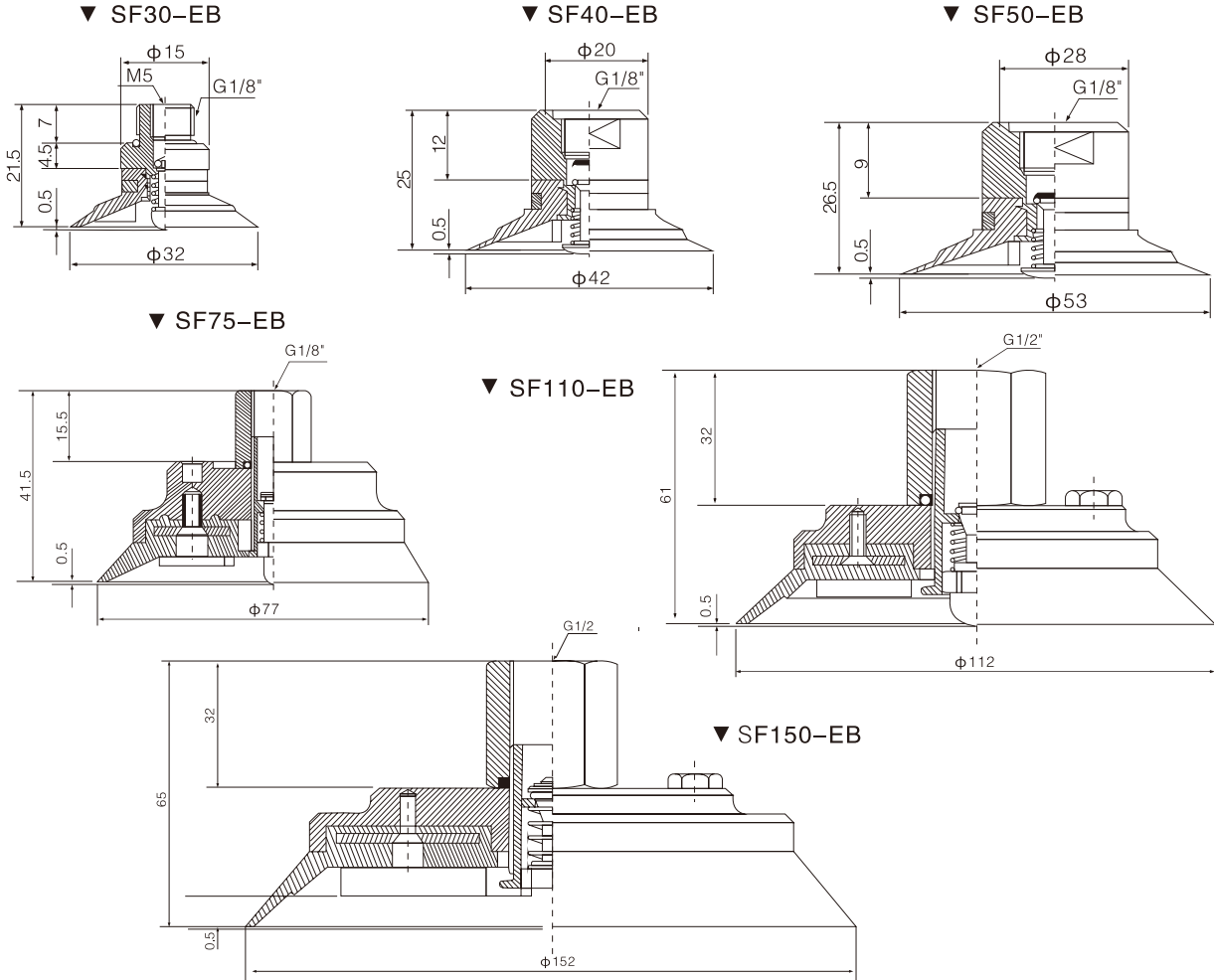
▼ SF200-12F



▼ SF300-34F



Cone Valve Dimensions(内部装置锥阀尺寸)



Accessories(配件)

Vacuum Efficiency Valve(EH)(双流式控制阀(EH))

It can compensate the level differences of the lifting objects. When the shape, dimension and location of the lifting object is not the same, the valve can work as an absorber. When the vacuum pad is not in contact with the object, the vacuum efficiency valve fitting can reduce leakage minimally.

可以补偿提升物体水平上的差异，当被提升物体在形状，尺寸和位置不一致，不规则情况下可以起到减振的作用。当吸盘没有接触物体时，带有双流式控制阀的接头可最低限度减少泄漏。

Cone Valve(EB)(锥阀(EB))

When the vacuum pad is not in contact with the object, the valve closes the opening in the fitting. It prevents vacuum leakage. When the vacuum pad contacts with the object, the valve first opens, then vacuum is created in the pad.

当吸盘没有接触物体时，带内设锥阀的接头会关闭接头打开处，防止产生真空泄漏。当吸盘和被提升物体有接触时，阀就首先打开接头，吸盘就产生真空了。

