

SZ Series

Standard Suction Cup

AIRBEST



Suction Cup

Features

- ◇ Available in various shapes: U type, C type, B type and D type
- ◇ Simple structure
- ◇ Conductive material available
- ◇ Available in various sizes

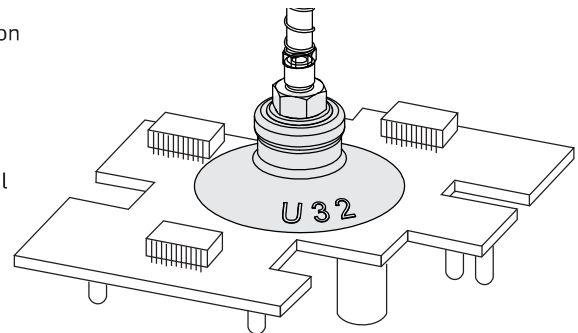
Advantages

- ◇ Small size and light weight
- ◇ Suitable for workpieces of various sizes and shapes



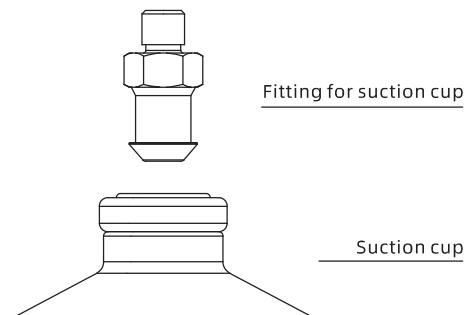
Applications

- ◇ U type suitable for workpieces with even surface and without deformation
- ◇ C type suitable for easily deformed workpieces
- ◇ B type suitable for workpieces with inclined surface
- ◇ D type suitable for spherical objects
- ◇ Suitable for handling of paper box, small sized semiconductor, spherical objects and food, ect.
- ◇ Conductive material suitable for 3C industry



Structure

- ◇ Split structure for easy replacement of wearing parts



- SZ
- SP3
- SUF
- SAN
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- STP
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- 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
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- SPU
- SH
- SHB
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How to order

SZ B 10 N

① ② ③ ④

① Series	② Suction cup type	③ Diameter		④ Material & Hardness	
SZ	U - Flat	2 - ϕ 2mm	16 - ϕ 16mm	N - NBR	50
	C - Flat with ribs	4 - ϕ 4mm	20 - ϕ 20mm	WS - White silicone	45
	B - 1.5 bellows	6 - ϕ 6mm	25 - ϕ 25mm	CN - Conductive NBR	55
	D - Deep	8 - ϕ 8mm	32 - ϕ 32mm	CS - Conductive silicone	55
			10 - ϕ 10mm	40 - ϕ 40mm	HP - Mark free rubber
		13 - ϕ 13mm	50 - ϕ 50mm		

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Diameter of suction cup	Suction cup type U - Flat	C - Flat with ribs	B - 1.5 Bellows	D - Deep
ϕ 2	SZU2□	-	-	-
ϕ 4	SZU4□	-	-	-
ϕ 6	SZU6□	-	SZB6□	-
ϕ 8	SZU8□	-	SZB8□	-
ϕ 10	SZU10□	SZC10□	SZB10□	SZD10□
ϕ 13	SZU13□	SZC13□	SZB13□	-
ϕ 16	SZU16□	SZC16□	SZB16□	SZD16□
ϕ 20	SZU20□	SZC20□	SZB20□	-
ϕ 25	SZU25□	SZC25□	SZB25□	SZD25□
ϕ 32	SZU32□	SZC32□	SZB32□	-
ϕ 40	SZU40□	SZC40□	SZB40□	SZD40□
ϕ 50	SZU50□	SZC50□	SZB50□	-

SZ Series

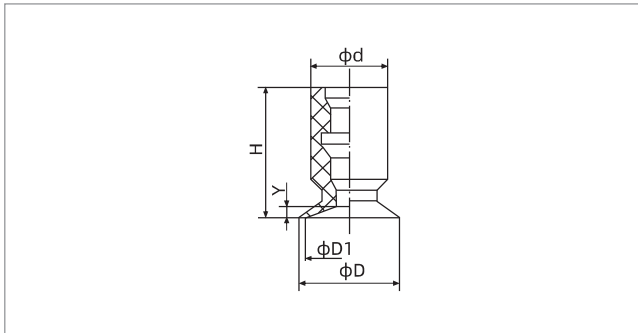
Standard Suction Cup

Technical parameters

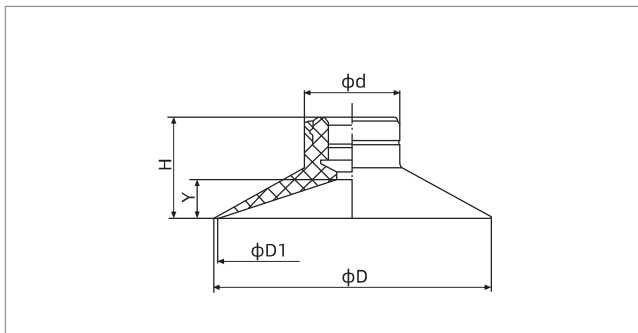
Diameter of suction cup	Pull-out force N	Inner volume(cm ³)				Recommended hose dia. mm	MPQ pcs
		SZU	SZC	SZB	SZD		
φ2	0.15	< 0.1	-	-	-	4	10
φ4	0.6	< 0.1	-	-	-	4	10
φ6	1.2	< 0.1	-	< 0.1	-	4	10
φ8	2.2	< 0.1	-	< 0.1	-	4	10
φ10	3.5	0.15	0.15	0.3	0.3	6	10
φ13	6	0.2	0.2	0.9	-	6	10
φ16	9.6	0.3	0.3	1.3	0.6	6	10
φ20	15	0.6	0.6	2.2	-	6	5
φ25	24	0.9	0.9	3.3	1.5	6	5
φ32	38	1.6	1.6	7.2	-	6	5
φ40	60	3.5	3.5	15	9	6	1
φ50	92	6	6	25	-	6	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)



SZU2-8



SZU10-50

Model/Size	D	D1	H	d	Y	Weight g
SZU2□	2.6	2	12	7	0.5	0.3
SZU4□	4.8	4	12	7	0.8	0.3
SZU6□	7	6	12	7	0.8	0.4
SZU8□	9	8	12	7	1	0.4

Model/Size	D	D1	H	d	Y	Weight g
SZU10□	12	10	12	13	3	0.8
SZU13□	15	13	12	13	3	0.8
SZU16□	18	16	12.5	13	3.5	0.9
SZU20□	23	20	14	15	4	1.6
SZU25□	28	25	14	15	4	1.8
SZU32□	35	32	14.5	15	4.5	2.3
SZU40□	43	40	18.5	18	6.5	5.5
SZU50□	53	50	19.5	18	7.5	6.9

SZ

SP3

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SOF

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SOM

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SFGT

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SBA

SF

SU

SPA

SPD

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

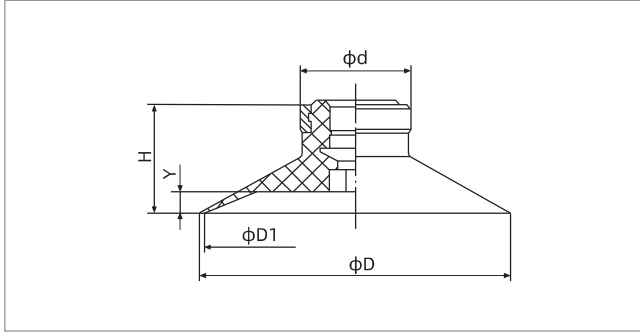
SNP

SZ Series

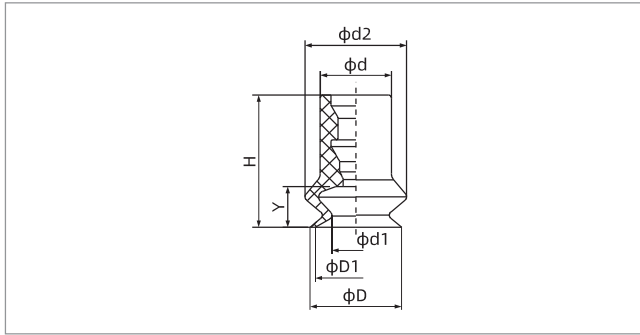
Standard Suction Cup



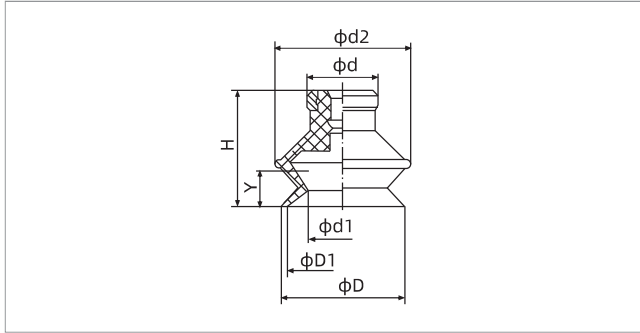
Dimensions(mm)



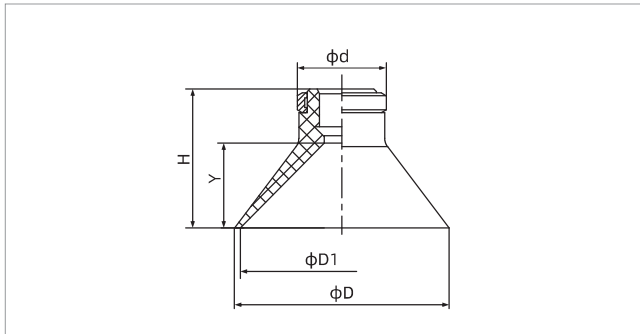
SZC10-50



SZB6-8



SZB10-50



SZD10-40

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	D1	H	d	Y	Weight g
SZC10□	12	10	12	13	1.7	0.8
SZC13□	15	13	12	13	1.8	1.0
SZC16□	18	16	12.5	13	1.2	0.9
SZC20□	23	20	14	15	1.7	1.6
SZC25□	28	25	14	15	1.8	2.1
SZC32□	35	32	14.5	15	2.3	2.4
SZC40□	43	40	18.5	18	3.3	5.5
SZC50□	53	50	19.5	18	3.8	7.3

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB6□	7	6	13	7	3.3	9.1	4	0.4
SZB8□	9	8	13	7	4.7	10.1	4	0.4

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB10□	12	10	16	13	5.5	13.8	4	1.1
SZB13□	15	13	18.5	13	8.7	19	4	1.7
SZB16□	18	16	20	13	9.9	21	4	2.1
SZB20□	22	20	23.5	15	12.4	25	4	2.9
SZB25□	27	25	24	15	15.6	28	4	3.9
SZB32□	34	32	29	15	18.9	37	4	6.7
SZB40□	43	40	34	18	24.4	48	4	13.3
SZB50□	53	50	38	18	32.4	57	4	18.8

Model/Size	D	D1	H	d	Y	Weight g
SZD10□	12	10	15	13	6	1.0
SZD16□	18	16	16	13	7	1.2
SZD25□	28	25	20	15	10	1.8
SZD40□	43.5	40	28	18	17	5.9

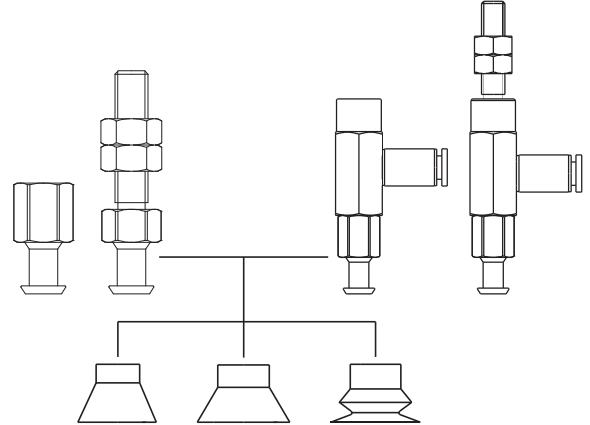
SZ Series

Suction Cup with Locking Fitting

Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, male and female thread for mounting
- ◇ Lateral vacuum port, male and female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



SZ

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How to order

SZU10N - LA6 - M5M

① ② ③

① Model	② Vacuum port direction	③ Mounting thread
SZU10N	Nil - Vertical	M5M - M5x0.8 male thread
SZC	LA4 - Lateral, one-touch fitting ϕ 4 hose	M6M - M6x1 male thread
SZB	LA6 - Lateral, one-touch fitting ϕ 6 hose	M8M - M8x1 male thread
SZD		M5F - M5x0.8 female thread
		M8F - M8x1.25 female thread

◇ Please refer to page 147 for suction cup selection

Selection

Diameter of suction cup	Vacuum port direction			Mounting thread				
	Nil	LA4	LA6	M5M	M6M	M8M	M5F	M8F
2-8	●	●	●	●	-	-	●	-
10-16	●	●	●	●	-	-	●	-
20-32	●	●	●	-	●	-	●	-
40-50	●	-	●	-	-	●	-	●

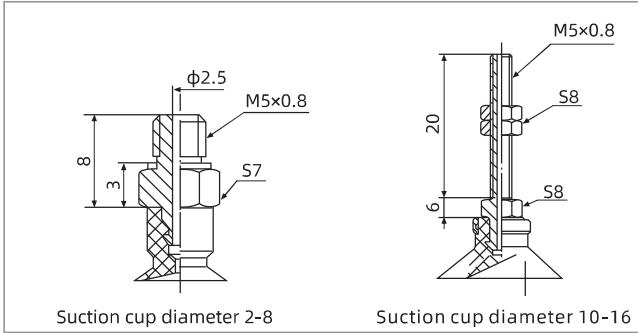
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SZ Series

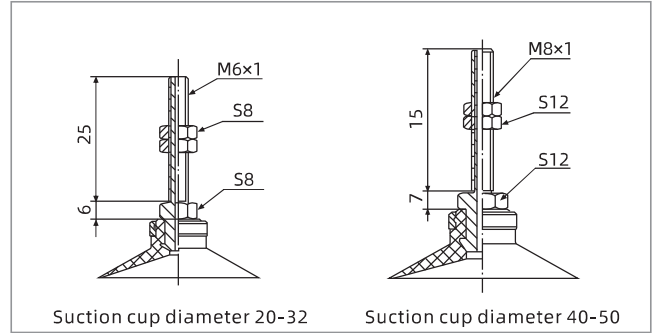
Suction Cup with Locking Fitting



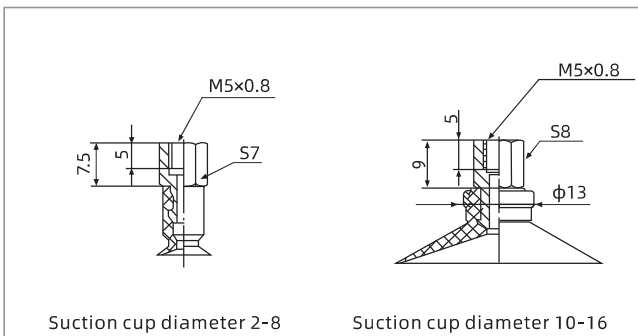
Dimensions(mm)



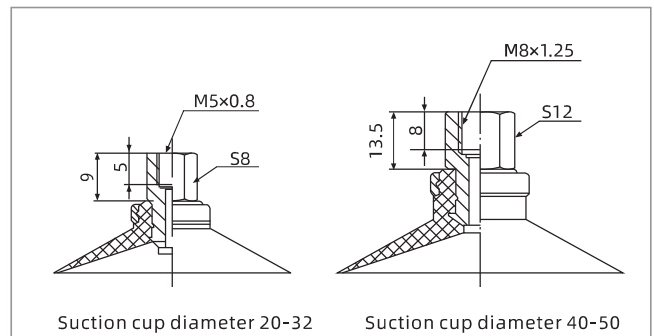
Vertical-Male thread connection



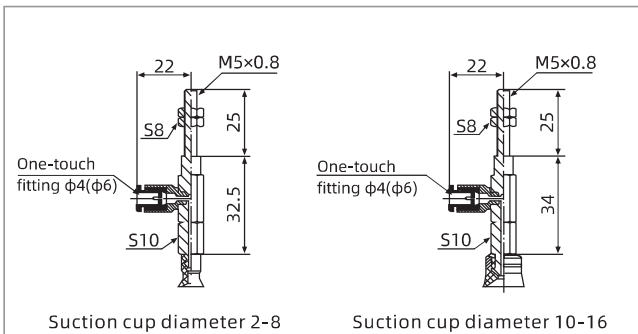
Vertical-Male thread connection



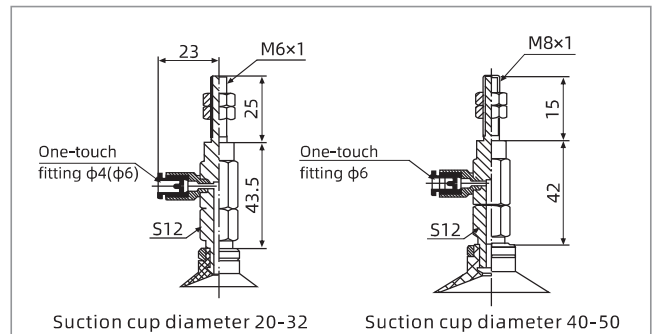
Vertical-Female thread connection



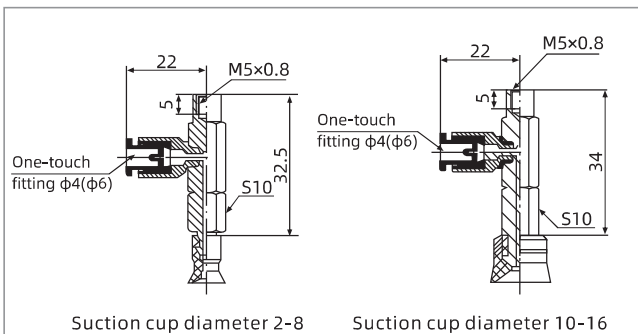
Vertical-Female thread connection



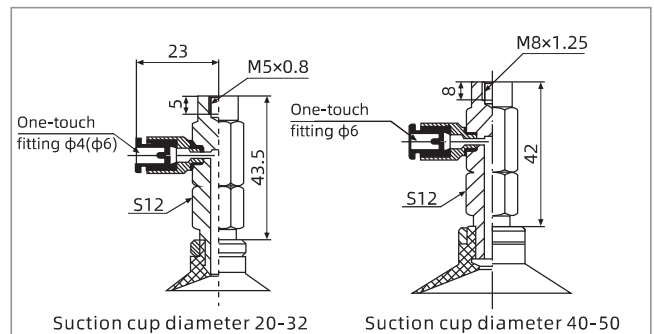
Lateral-Male thread connection



Lateral-Male thread connection



Lateral-Female thread connection



Lateral-Female thread connection

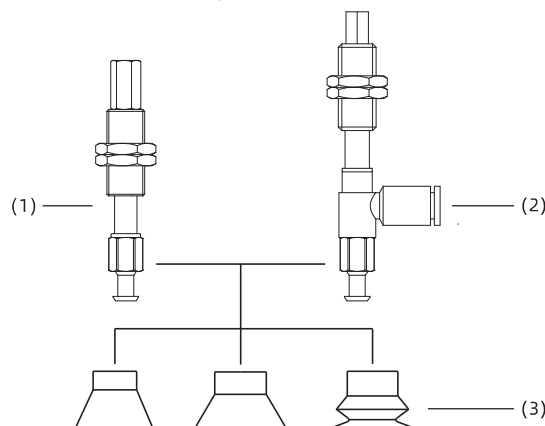
SZ Series

Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SZU10N - E I 10 R A6 - M10

① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Rotary type	⑥ Vacuum port connection	⑦ Mounting thread
SZU10N	E - PSPE Series	I - Internal spring	6 20	Nil - Vertical rotating	Nil - M5×0.8 female thread	M8 - M8×1
SZC			10 30	R - Vertical non-rotating	A4 - one-touch fitting φ4 hose	M10 - M10×1
SZB			15 40	L - Lateral rotating	A6 - one-touch fitting φ6 hose	M14 - M14×1
SZD			25 50	B - Lateral non-rotating	B4 - Pagoda fitting φ4 hose B6 - Pagoda fitting φ6 hose	

◇ Please refer to page 147 for suction cup selection

Selection

Diameter of suction cup	Buffer stroke	Rotary type				Vacuum port connection					Mounting thread
		Nil	R	L	B	Nil	A4	A6	B4	B6	
2-8	6, 10, 15, 25	●	●	●	●	●	●	●	●	-	M8
10-32	10, 20, 30, 40, 50	●	●	●	●	●	●	●	-	●	M10
40-50	10, 20, 30, 50	●	-	-	-	●	-	-	-	-	M14

◇ Note: "●" default, in stock, "-" unavailable

SZ

SP3

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SGP

SBOF

STC

SFF

SOB

SOF

SOG

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SOM

SBF

SDM

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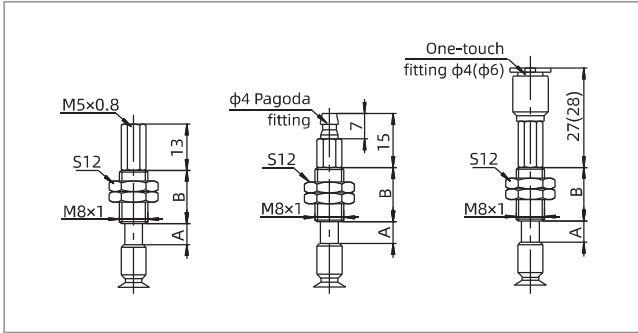
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SZ Series

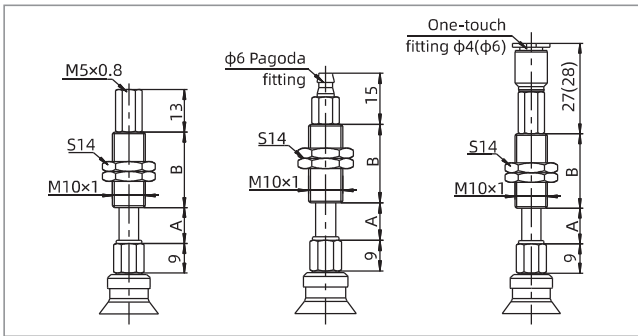
Suction Cup with Level Compensator



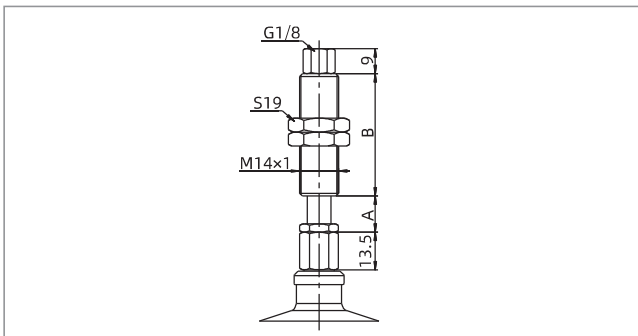
Dimensions(mm)



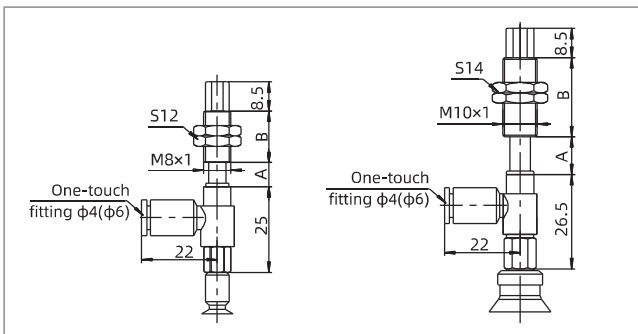
Vertical direction Suction cup diameter 2-8



Vertical direction Suction cup diameter 10-32



Vertical direction Suction cup diameter 40-50



Lateral direction Suction cup diameter 2-8 Suction cup diameter 10-32

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	6	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
10-32	11.5	23	10	1.0	3.0
	21.5	51	20	1.0	3.0
	31.5	51	30	1.0	3.0
	41.5	77	40	1.0	3.0
	51.5	77	50	1.0	3.0

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
40-50	13	44	10	2.0	5.5
	23	44	20	2.0	5.5
	33	44	30	2.0	5.5
	53	75	50	2.0	5.5

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	8	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2
10-32	11	23	10	1.0	3.0
	21	51	20	1.0	3.0
	31	51	30	1.0	3.0
	41	77	40	1.0	3.0
	51	77	50	1.0	3.0

◇ Note: "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke