

PAP series Flat Type Vacuum Pad

Product features

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Feature

- Uniqueness: The flat shape design improves the adhesion of the workpieces and reduces the wrinkles caused by overlapping adsorption.
- Diversification: Various sizes, materials and brackets can be selected.
- Convenience: The structure is simple and compact, easily to replaced.



Vacuum pad material

Mark	Vacuum pad material	Hardness (HS)	Ambient and fluid temperature	Color	Electrical resistance(Note)
N	NBR(Rubber)	A55/S	-26~120°C	Black	-
S	Silicon, Silicone rubber	A55/S	-20~180°C	White	-
SE	Anti-static rubber	A50/S	-20~180°C	Black	10 ⁴ ~10 ⁶ Ω·cm
E	Low resistance & anti-static rubber	A70/S	-20~180°C	Black	200Ω·cm

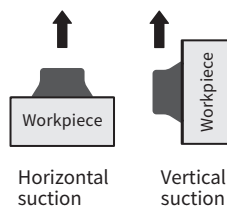
Note: The above value covers only general characteristics of subject rubber materials. Pad materials used by CHELIC pass internal standard.

Vacuum control system

Theoretical suction is calculated from pad size and vacuum value, which is only a number for reference. Theoretical suction is a number under static status. Please reserve enough margin while adding workpieces and movement.

Before confirm the Qty and location of suction pad, please reserve enough margin.

● Suction type

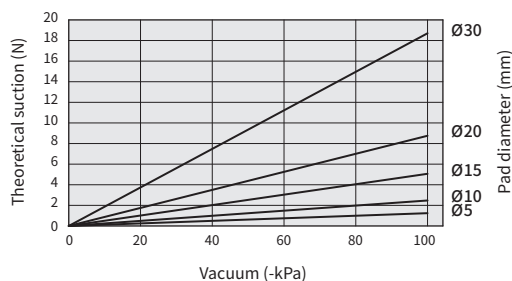


● Calculation formula

$$W = \frac{P \times A}{-10}$$

W: Force N
P: Vacuum pressure kPa
A: Pad area dimensions c

Theoretical suction



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Code of order

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Code of order **PAPFS 10 x 4 N - R**



1	Bracket	Vertical entry	Vertical entry with fitting	Side entry	Vertical entry with spring	Side entry with spring
	Mark	F	K	T	FS	TS
	Image					

2	Mark	05	10	15	20	30
	Pad dia. (mm)	Ø5	Ø10	Ø15	Ø20	Ø30

3 ● Only available to FS, TS series

Mark	Stroke (mm)	Outer diameter (mm)	Mark	Stroke (mm)	Outer diameter (mm)
2.5	2.5	Ø5	6	6	Ø30
5	5				
Mark	Stroke (mm)	Outer diameter (mm)	Mark	Stroke (mm)	
4	4	Ø10, Ø15, Ø20	15	15	
10	10				

4	Mark	Vacuum pad material	Hardness (HS)	Ambient and fluid temperature	Color	Electrical resistance(Note)
	N	NBR(Rubber)	A60/S	-26~120°C	Black	-
	S	Silicon, Silicone rubber	A60/S	-20~180°C	White	-
	SE	Anti-static rubber	A60/S	-20~180°C	Black	10 ⁴ ~10 ⁶ Ω • cm
	E	Low resistance & anti-static rubber	A70/S	-20~180°C	Black	200 Ω • cm

● Note: The above value covers only general characteristics of subject rubber materials. Pad materials used by CHELIC pass internal standard.

5	With ball joint type		
Mark	Outer diameter (mm)		
05	Ø10, Ø15		
20	Ø20, Ø30 Ø40, Ø50		

● Note: According to vacuum pad specification to py proper free holder.
● Note :Please refer to P3-2.96

PAP series selection table:

Pad type	1 Bracket					2 Pad dia.	3 Stroke	4 Vacuum pad material				5 Ball joint type	
	F	K	T	FS	TS			N	S	SE	E	05	20
PAP	●		●	●	●	05	2.5 • 5	●	●	●	●	●	
	●	●	●	●	●			10	4 • 10	●	●	●	●
	●	●	●	●	●	20	6 • 15			●	●	●	●
	●	●	●	●	●			30	6 • 15	●	●	●	●

Product weight

Item	PAP				
Model	5	10	15	20	30
Weight(g)	0.05	0.32	0.36	0.75	3.17

PA

PB

PC

PAG

PAO

PAP

PAQ

PAW

PAL

PBL

PCL

PAR

PS

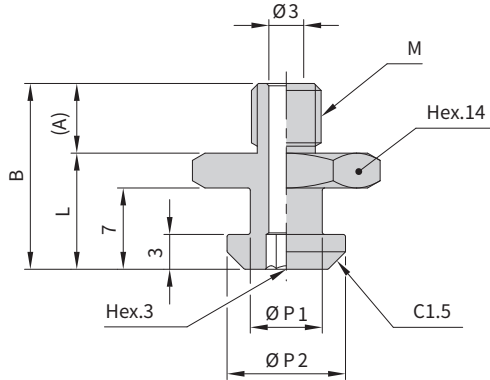
VP

PAP series Flat Type Vacuum Pad

Dimensions

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The joint size

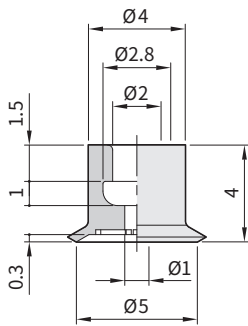


Unit: mm

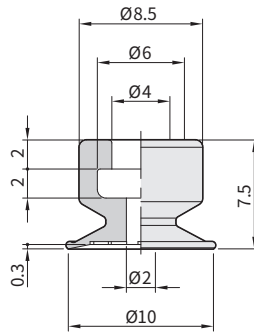
Model	M	A	B	L	ØP1	ØP2	Applicable pad size
PAP 30-M6	M6x1	5.8	16.8	11	6.2	10.3	Ø30

Vacuum pad size

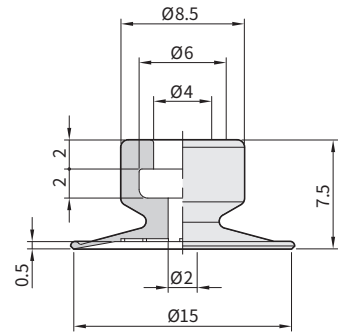
● PAP 05



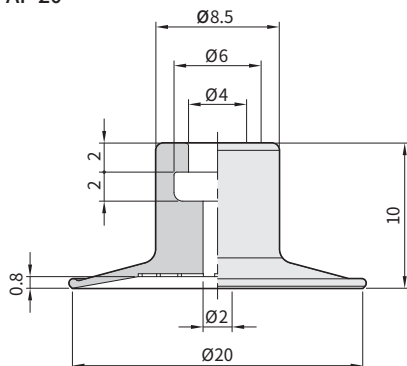
● PAP 10



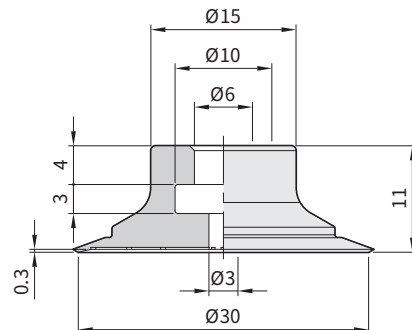
● PAP 15



● PAP 20



● PAP 30

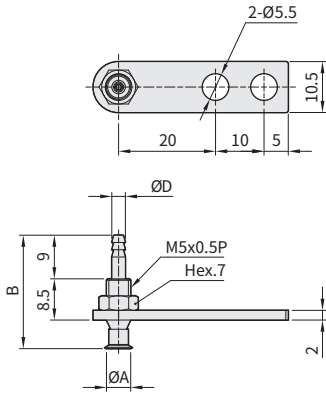


PAP series Flat Type Vacuum Pad

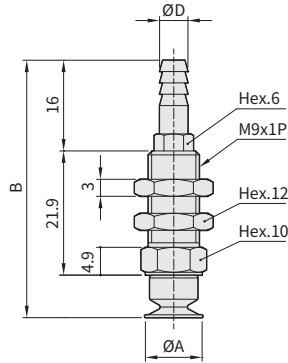
Dimensions

CHELIC

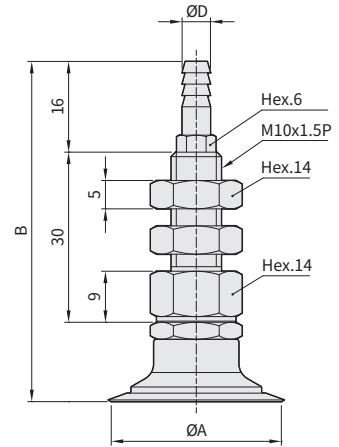
■ PAP [F] - 05



■ PAP [F] - 10, 15, 20



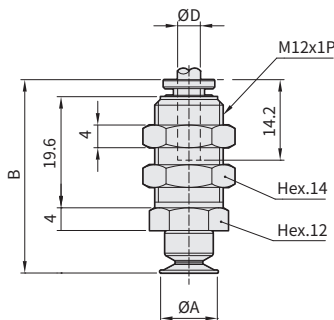
■ PAP [F] - 30



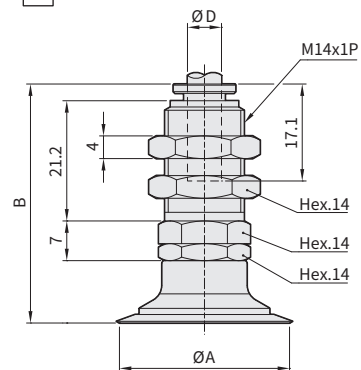
Unit: mm

Model	Size of PU tube Ø D	Pad dia. Ø A	Whole length B
PAP [F] - 05	2.5	5	23.4
PAP [F] - 10	4	10	45.4
PAP [F] - 15	4	15	45.4
PAP [F] - 20	4	20	47.9
PAP [F] - 30	4	30	61

■ PAP [K] - 10, 15, 20



■ PAP [K] - 30



Unit: mm

Model	Size of PU tube Ø D	Pad dia. Ø A	Whole length B
PAP [K] - 10	4	10	29.9
PAP [K] - 15	4	15	29.9
PAP [K] - 20	6	20	32.4
PAP [K] - 30	6	30	47

PA

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PC

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PAO

PAP

PAQ

PAW

PAL

PBL

PCL

PAR

PS

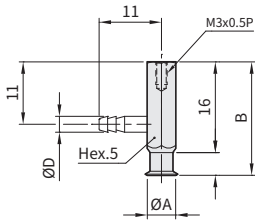
VP

PAP series Flat Type Vacuum Pad

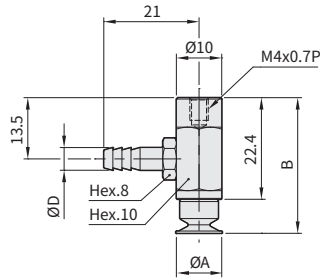
Dimensions

CHELIC

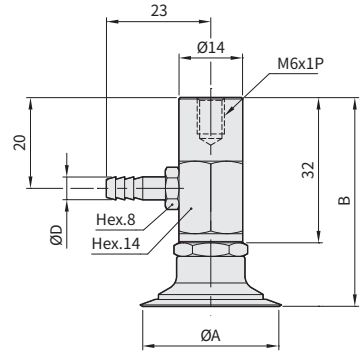
■ PAP T - 05



■ PAP T - 10, 15, 20



■ PAP T - 30



Unit: mm

Model	Size of PU tube ØD	Pad dia. ØA	Whole length B
PAP T - 5	2	5	20
PAP T - 10	4	10	29.9
PAP T - 15	4	15	29.9
PAP T - 20	4	20	32.4
PAP T - 30	4	30	47

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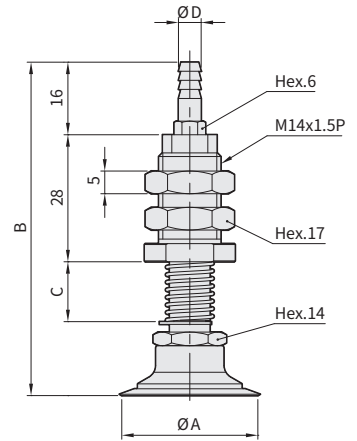
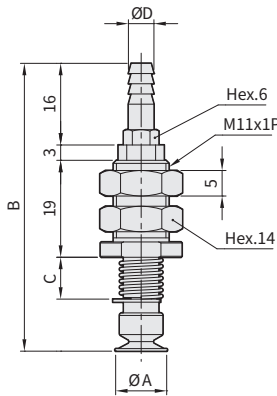
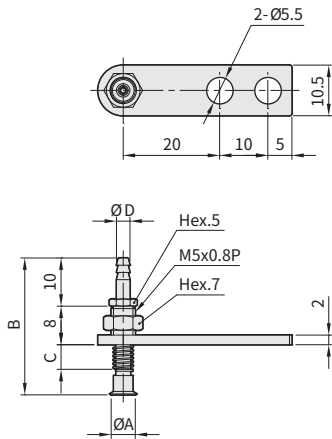
Dimensions-Flat type PAPFS series/ Vertical entry with spring

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■ PAP **FS** - 05 x **2.5**
 PAP **FS** - 05 x **05**

■ PAP **FS** - 10, 15, 20 x **04**
 PAP **FS** - 10, 15, 20 x **10**

■ PAP **FS** - 30 x **06**
 PAP **FS** - 30 x **15**



Unit: mm

Model	Size of PU tube ØD	Pad dia. ØA	Whole length B	C
PAP FS - 05 x 2.5	2.5	5	28.4	5
PAP FS - 05 x 05			33.4	10
PAP FS - 10 x 04	4	10	56.4	8
PAP FS - 10 x 15			68.4	20
PAP FS - 15 x 04	4	15	56.4	8
PAP FS - 15 x 10			68.4	20
PAP FS - 20 x 04	4	20	58.9	8
PAP FS - 20 x 10			70.9	20
PAP FS - 30 x 06	4	30	74.5	12
PAP FS - 30 x 15			91.5	30

PA

PB

PC

PAG

PAO

PAP

PAQ

PAW

PAL

PBL

PCL

PAR

PS

VP

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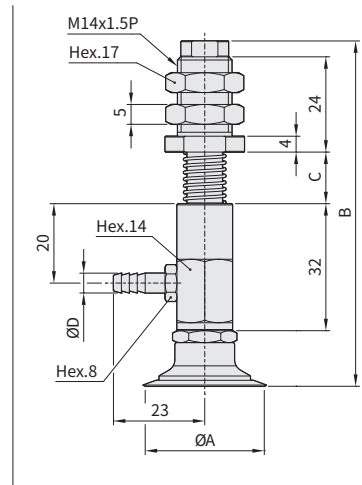
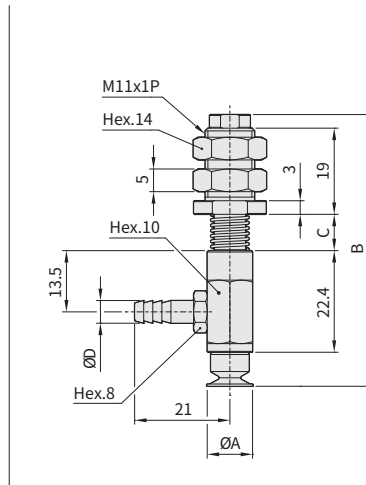
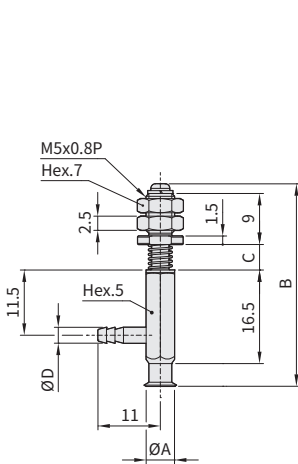
Dimensions-Flat type PAPTS series/ Side entry with spring

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■ PAP **TS** - 05 x **2.5**
 PAP **TS** - 05 x **5**

■ PAP **TS** - 10, 15, 20 x **04**
 PAP **TS** - 10, 15, 20 x **10**

■ PAP **TS** - 30 x **06**
 PAP **TS** - 30 x **15**



Unit: mm

Model	Size of PU tube ØD	Pad dia. ØA	Whole length B	C
PAP TS - 05 x 2.5	3x2	5	35.7	4.5
PAP TS - 05 x 5			40.7	9.5
PAP TS - 10 x 04	6x4	10	59.9	8
PAP TS - 10 x 10			71.9	20
PAP TS - 15 x 04	6x4	15	59.9	8
PAP TS - 15 x 10			71.9	20
PAP TS - 20 x 04	6x4	20	62.4	8
PAP TS - 20 x 10			74.4	20
PAP TS - 30 x 06	6x4	30	88	13
PAP TS - 30 x 15			105	30