



VACUUM TECHNOLOGY - III

Magic Gripper



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The world best in Vacuum



**Specializing in
Vacuum products since 1991**

VMECA headquarter / R&D center



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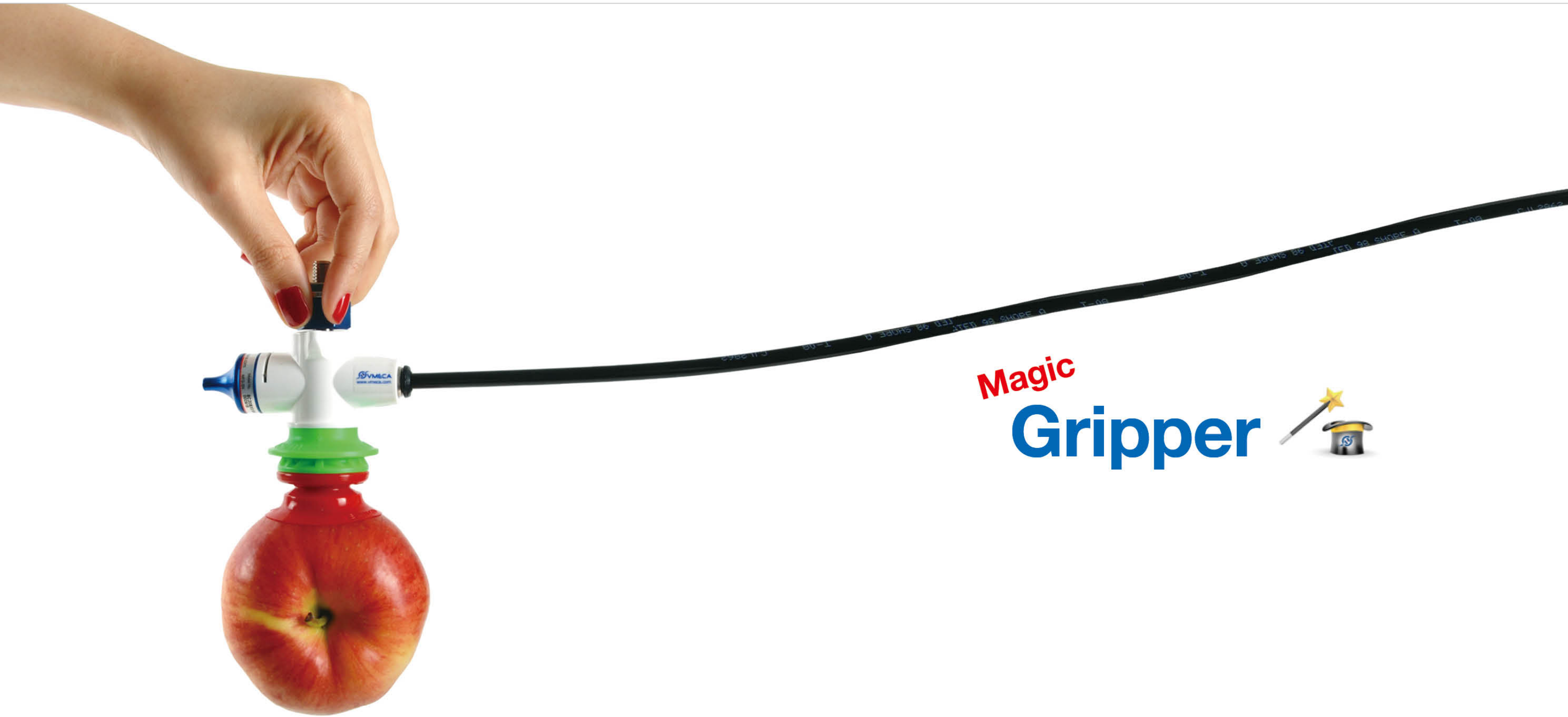
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EASY!!!



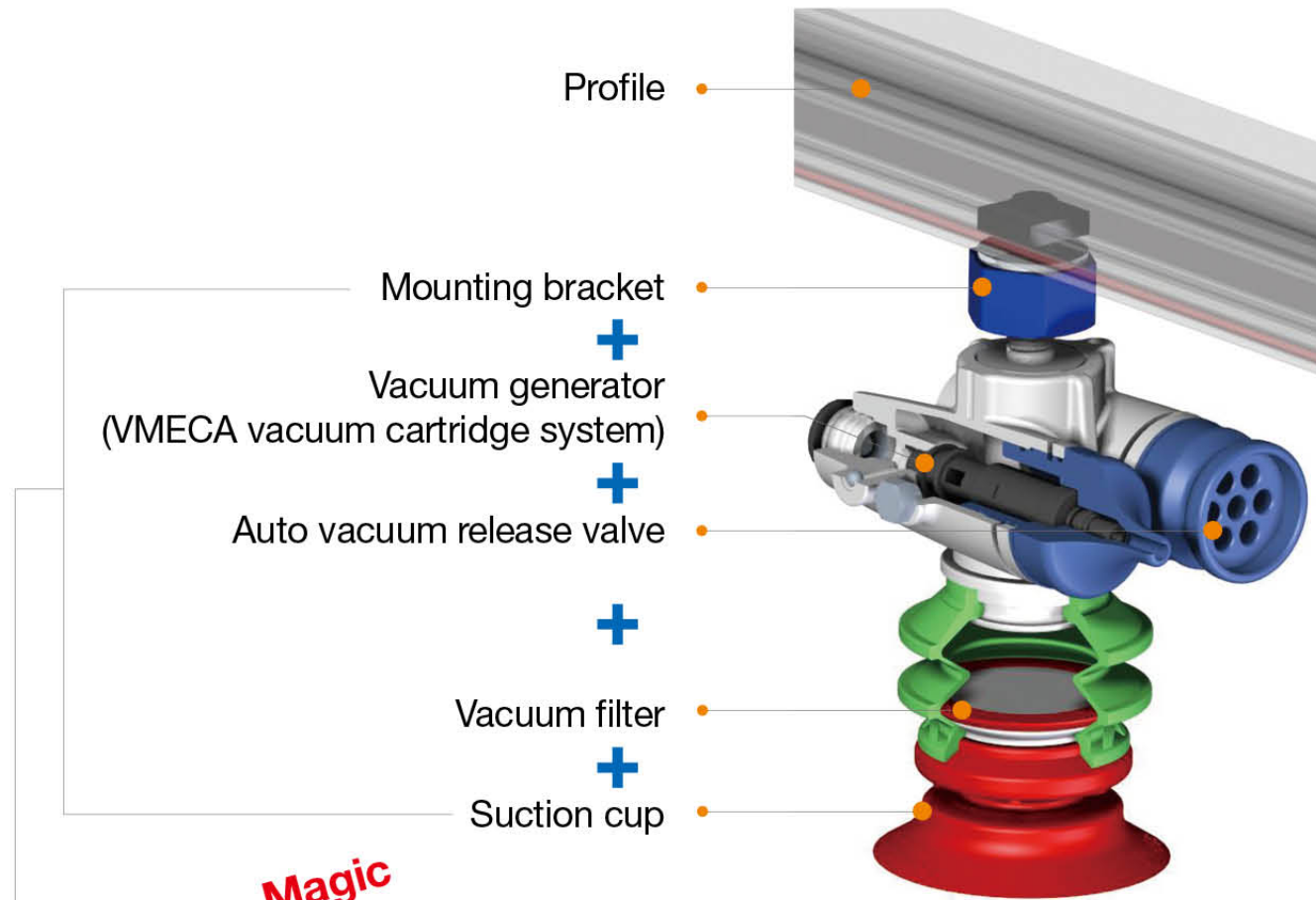
Magic Gripper





What is ^{Magic} Gripper

Patent & Patent pending



^{Magic} All in Gripper

Conventional system

- ✓ High cost for installation and process
- ✓ Need of many pipe lines and connectors
- ✓ High energy consumption
- ✓ Difficult installation and complicated structure
- ✓ Difficult to select suitable model without vacuum knowledge
- ✓ Not available for individual vacuum system



Features

- ✓ Saving cost for system
- ✓ Easy to build vacuum system
- ✓ Various suction lips for different application
- ✓ Fast response & Excellent performance
- ✓ Individual vacuum system
- ✓ 73% less energy consumption
- ✓ Flexible profile options – Easy mounting
- ✓ Various model options for selection according to flow rate
- ✓ VMECA multi stage vacuum cartridge pump integrated





Magic Gripper

Excellent Gripping system

Features

- ✓ Easy to build vacuum system
- ✓ Saving cost for system
- ✓ Fast response & Excellent performance
- ✓ Quick release without release control valve
- ✓ Flexible profile options – Easy mounting
- ✓ Individual vacuum system
- ✓ Various model options for selection according to flow rate
- ✓ VMECA multi stage vacuum cartridge pump integrated

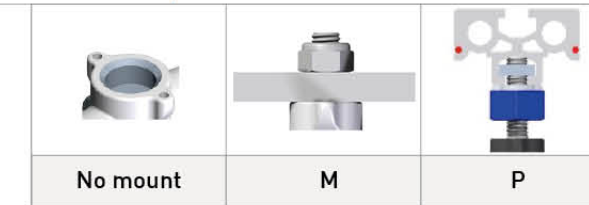


Suction lip

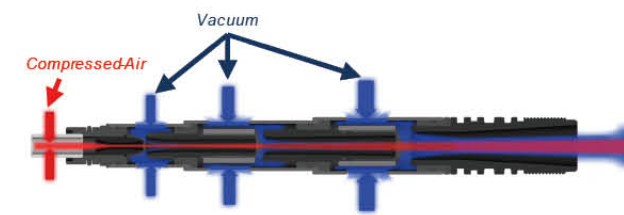
Various Suction lips

X lip	U lip	P lip	F lip	MBL lip	MBU lip	MD lip	SF lip	MU / MF lip	
P.110	P.114	P.118	P.122	P.126	P.130	P.134	P.138	P.142	P.146

Mount options



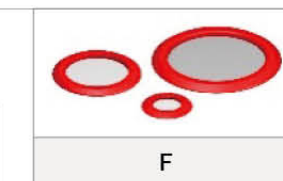
Vacuum generator (VMECA vacuum cartridge technology)



Top bellows options



Vacuum filter



Stopper options



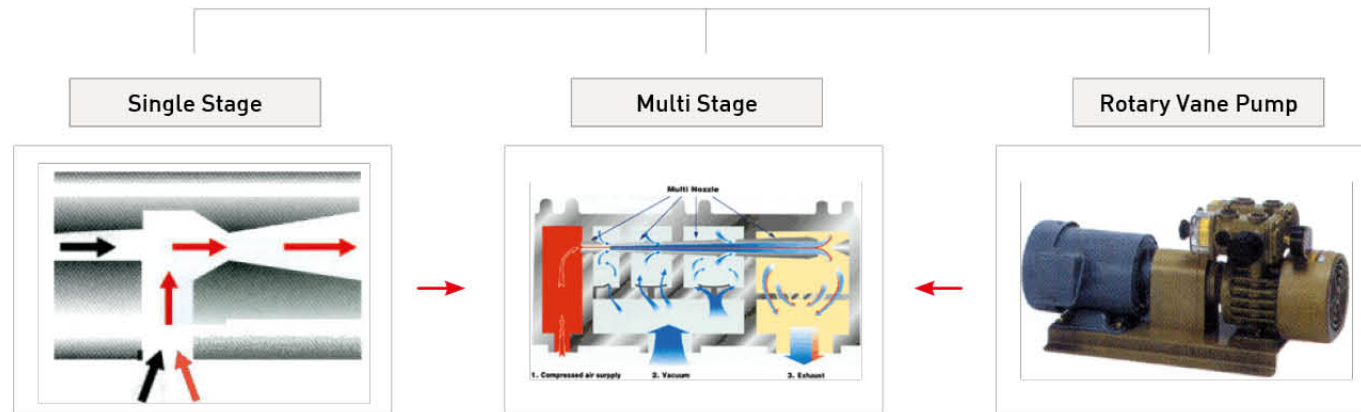
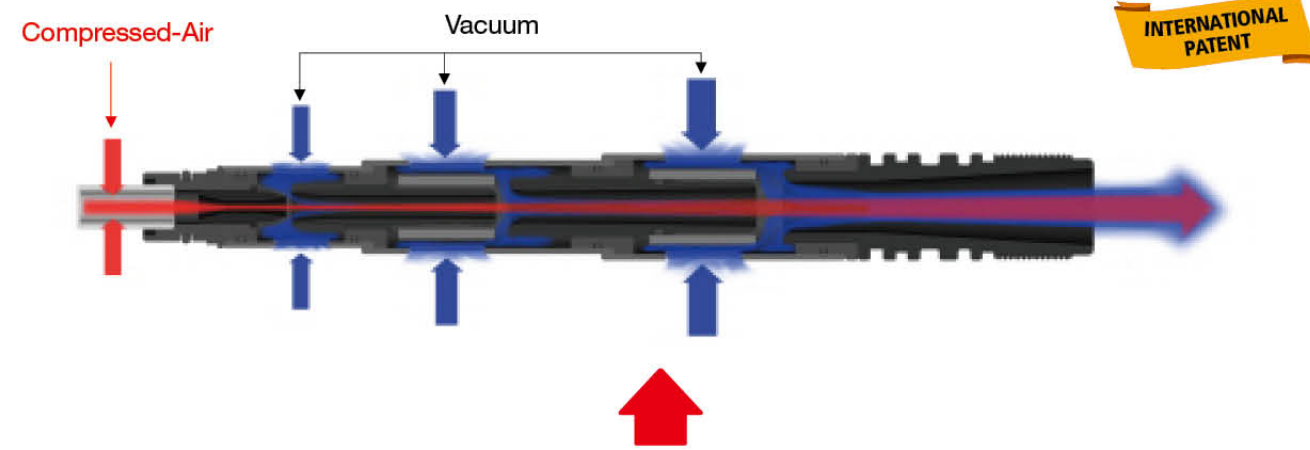


Integrated with Innovative VMECA Vacuum cartridge systems

- ✓ Low energy consumption
- ✓ Excellent performance
 - High vacuum flow and vacuum level
- ✓ Stable performance despite fluctuation or drop of compressed air pressure
- ✓ Easy installation
- ✓ Long life time



73% less energy consumption & Vacuum flow **3times higher**



Compact and Light weight

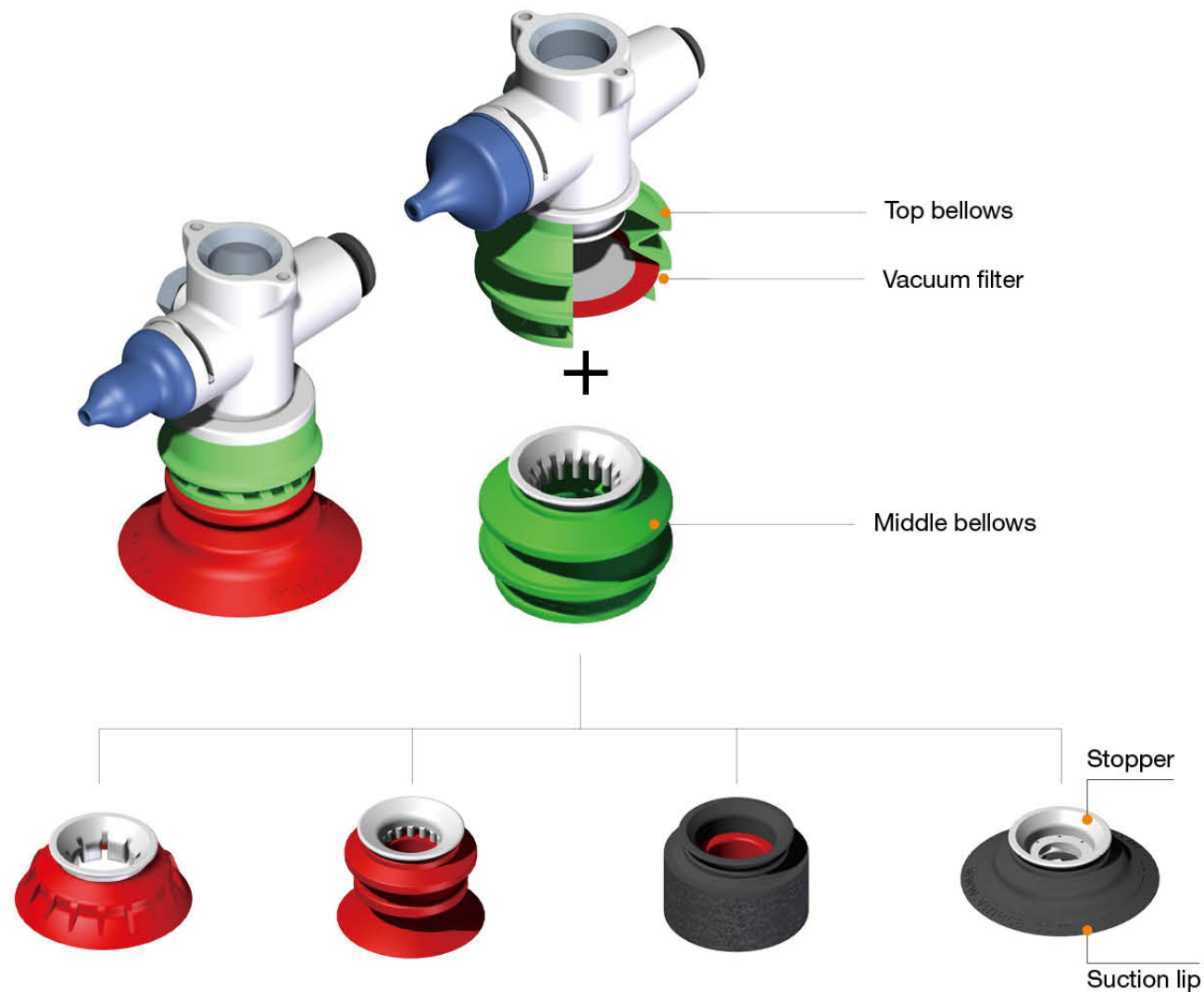
70% more energy saving & Less weight 40% Lighter





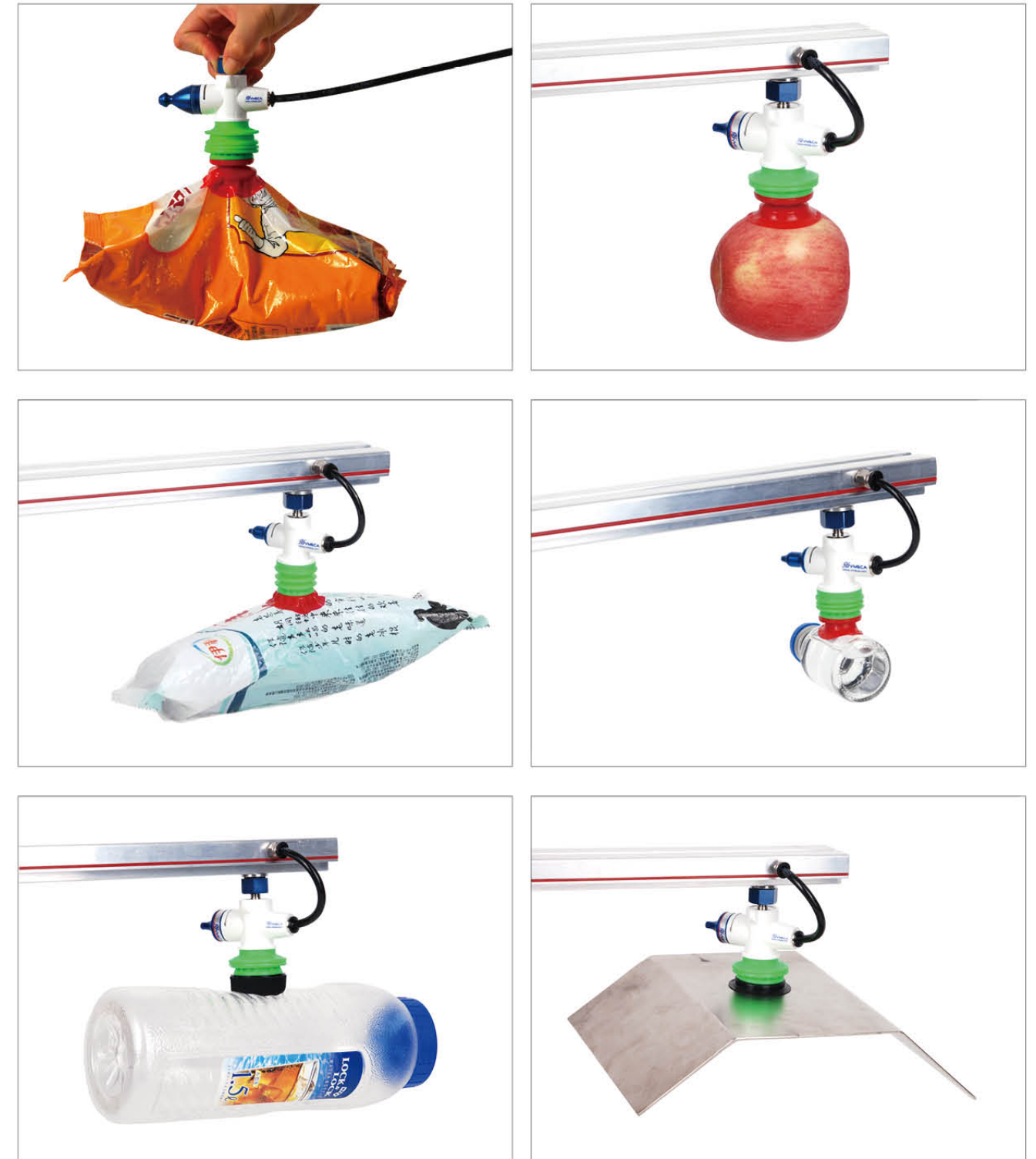
Combination with Magic suction cups

- ✓ Excellent performance in various industry with wide range of lips
- ✓ Modular suction cup (Configurable structure)
- ✓ Various combination for different application
- ✓ Replacement suction lips only (Cost saving)
- ✓ Easy to assemble & disassemble




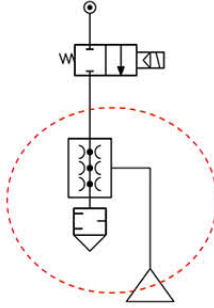

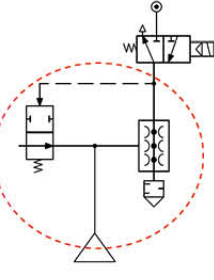

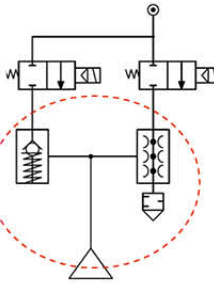

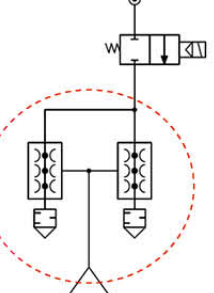
* Suction lip is required on page 110 ~ 149.

Application
















Standard options – 4 Types

	1. Single Vacuum Cartridge – “A type”
S series	 <p>Single cartridge capacity</p> 
	2. Automatic vacuum release with single vacuum cartridge – “B type”
	 <p>Auto vacuum release function integrated (No need of vacuum release control valve)</p> 
	3. Check valve with single vacuum cartridge – “C type”
H series	 <p>Check valve integrated at vacuum release port for fast evacuation time</p> <p>* Control valve for vacuum release is required.</p> 
	4. Dual Vacuum Cartridge – “D type”
	 <p>Dual cartridges for double capacity</p> 

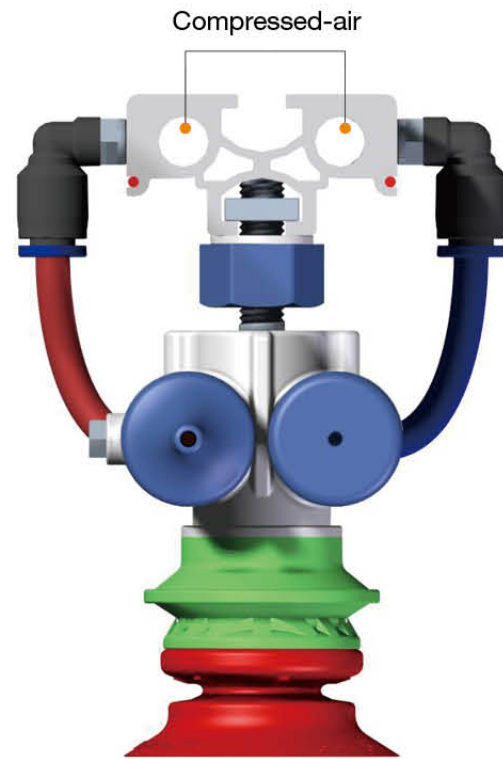
Pump Characteristics

Type	Product view	Type	Model	Supply Air Pressure (bar)	Max. Vacuum (- kPa)	Max. Vacuum Flow (NI/m)	Air Consumption (NI/m)	Required page	
S series		A	SC10A	1.1	48	9.2	5.9	P. 22	
				1.8	83	12.3	8.7		
				2.2	81	14	9.9		
		A	SC20A	2.2	63	36.8	21	P. 30	
				3.3	92	40.5	27		
				4.0	91	42.2	32		
	A	SC25A	4.5	88.2	71.3	75	P. 38		
			5.2	95.2	73.8	85			
			6.0	94.6	77.8	96			
H series		B	HC10B	1.1	48	9.2	5.9	P. 46	
				1.8	83	12.3	8.7		
				2.2	81	14	9.9		
		C	HC10C	1.1	48	9.2	5.9	P. 54	
				1.8	83	12.3	8.7		
				2.2	81	14	9.9		
		D	HC10D	1.1	48	16.4	11.3	P. 62	
				1.8	83	20.2	16.4		
		B	HC20B	2.2	63	36.8	21	P. 70	
				3.3	92	40.5	27		
				4.0	91	42.2	32		
			C	HC20C	2.2	63	36.8	21	P. 78
					3.3	92	40.5	27	
					4.0	91	42.2	32	
		D	HC20D	2.2	63	66.2	40	P. 86	
				3.3	92	74	55		
				4.0	91	75.7	56		
		B	HC25B	4.5	88.2	71.3	75	P. 94	
5.2				95.2	73.8	85			
6.0				94.6	77.8	96			
	C	HC25C	4.5	88.2	71.3	75	P. 102		
			5.2	95.2	73.8	85			
			6	94.6	77.8	96			

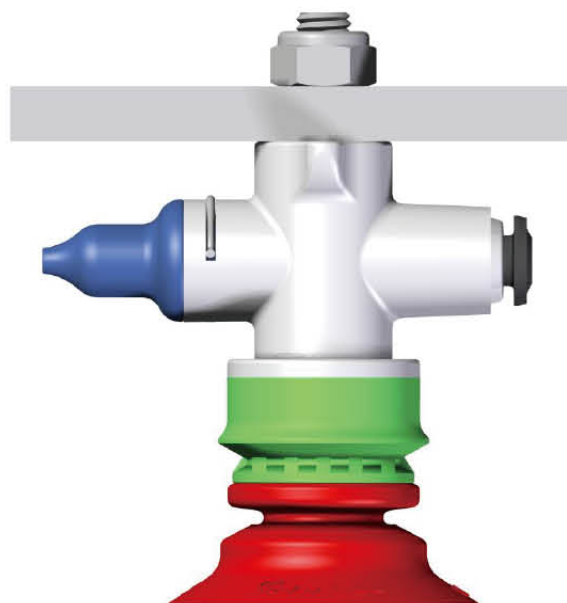


MOUNTING options

Profile Mount



Direct Mount

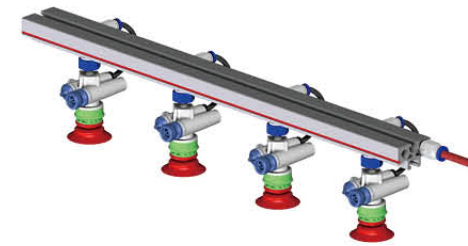


Application

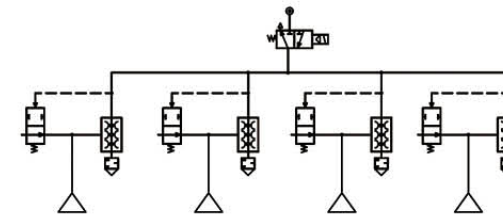
— Compressed air (Vacuum on)
— Vacuum release (Vacuum off)



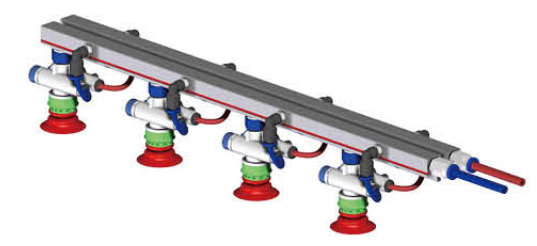
B type on profile



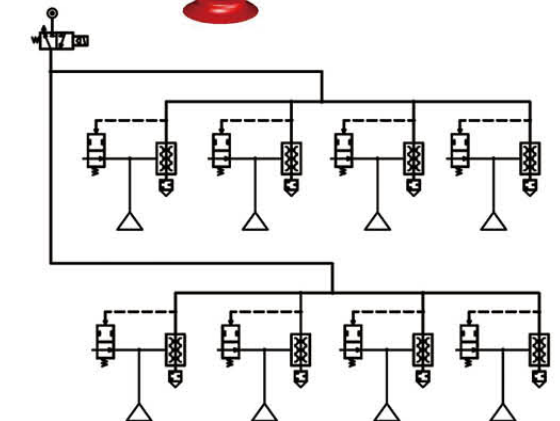
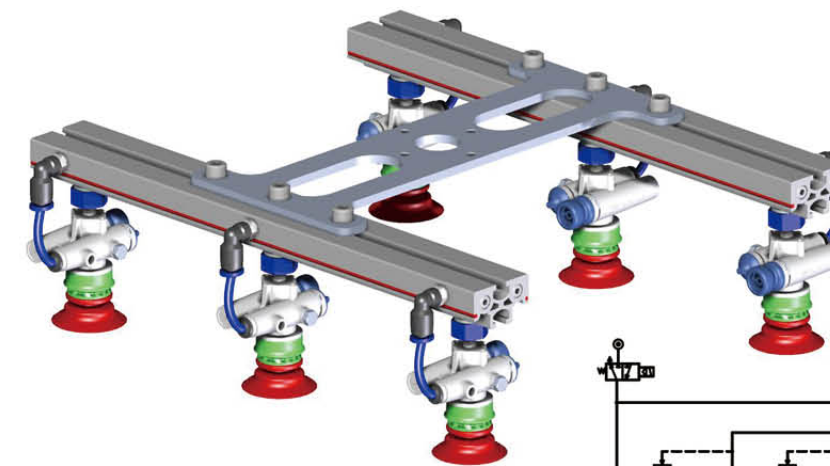
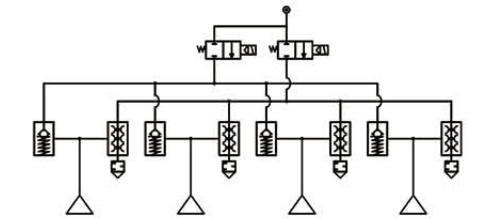
Auto vacuum release function integrated
* No need of vacuum release control valve



C type on profile

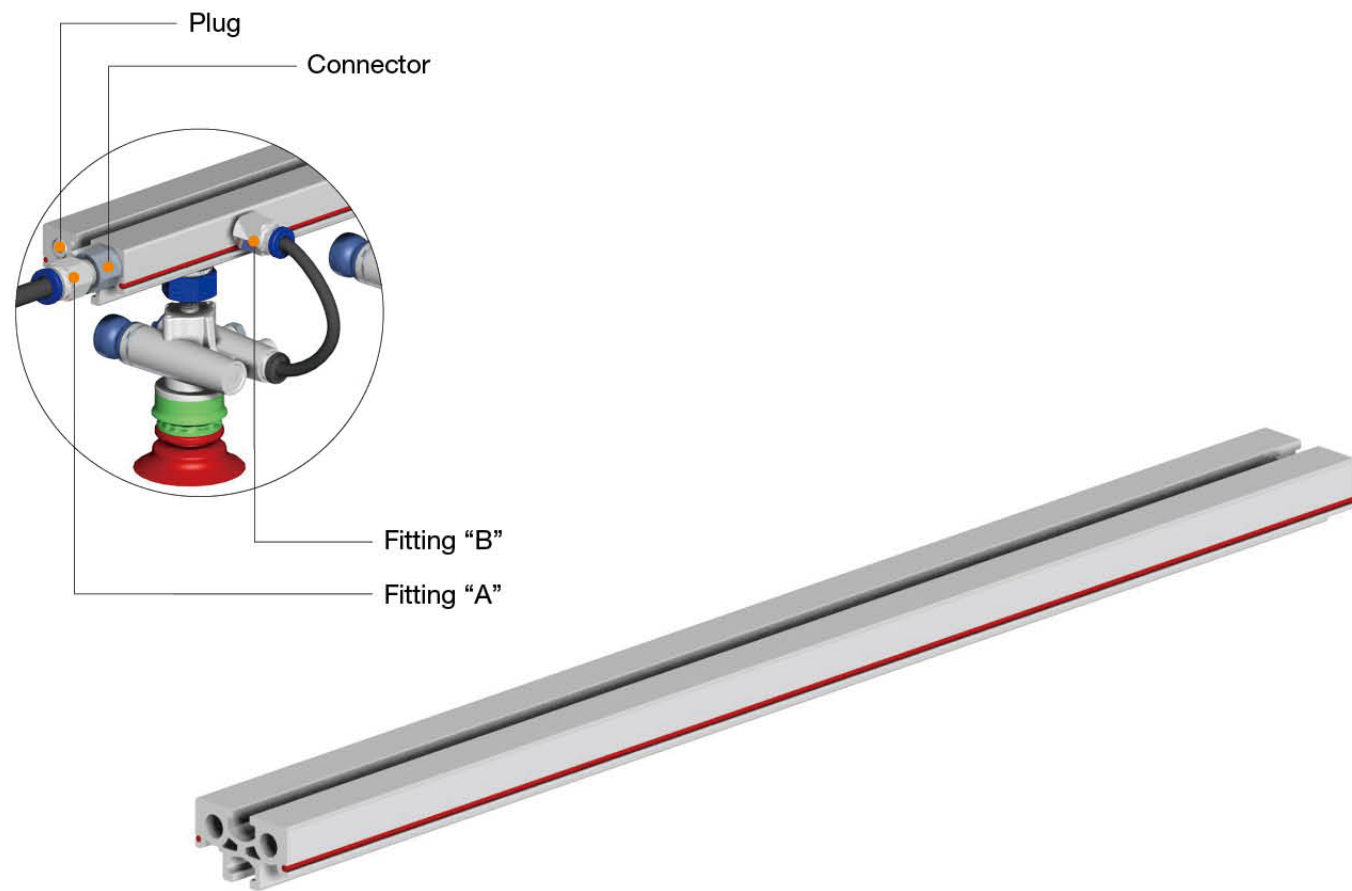


Check valve integrated at vacuum release port for fast evacuation time
* Control valve for vacuum release is required.





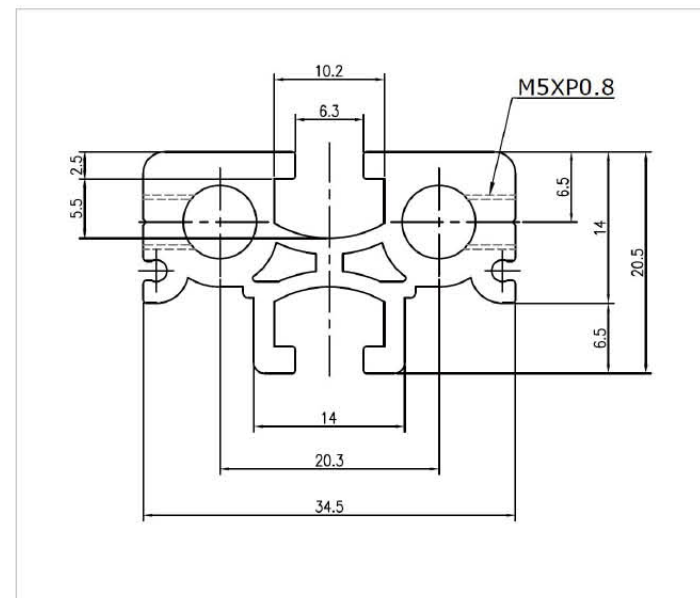
Profile – T06 series



Profile

Model	Description
T06 – 500	Profile length 0.5m
T06 – 1000	Profile length 1m
T06 – 1500	Profile length 1.5m
T06 – 2000	Profile length 2.0m

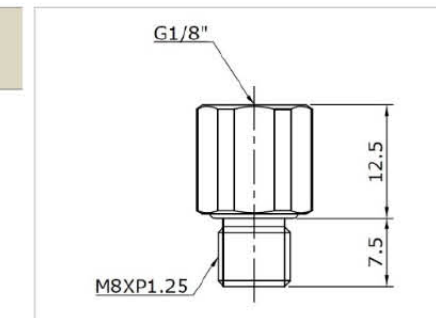
* Specific length of profile is required to contact VMECA.



Dimensional Data

Connector

Product view	Model	Description
	CF18	Connector for T06 profile

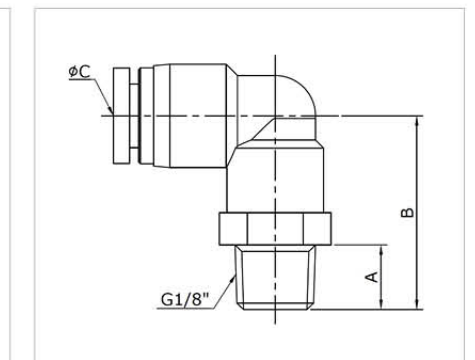
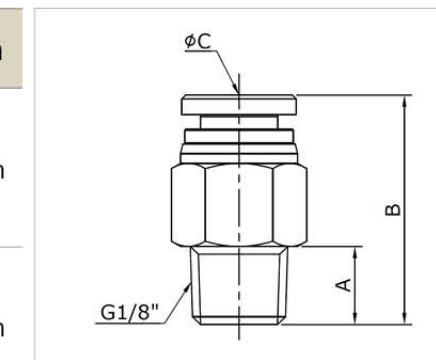


Plug

Product view	Model	Description
	HL8	Plug for profile

Fitting "A"

Product view	Model	Description
	FI1806	G1/8 thread, 6Ø one touch fitting
	FI1808	G1/8 thread, 8Ø one touch fitting



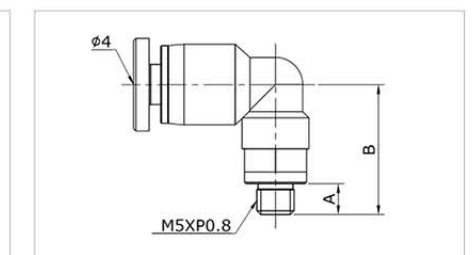
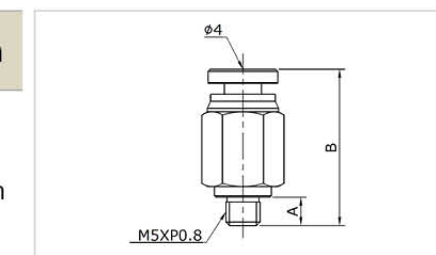
[Unit : mm]

Product view	Model	Description
	FL1806	G1/8 thread, 6Ø one touch fitting
	FL1808	G1/8 thread, 8Ø one touch fitting

Model	A	B	C
FI1806	8	23.2	6
FI1808	8	28.5	8
FL1806	8	24	6
FL1808	8	27	8

Fitting "B"

Product view	Model	Description
	FIM504	M5 thread, 4Ø one touch fitting
	FLM50	M5 thread, 4Ø one touch fitting

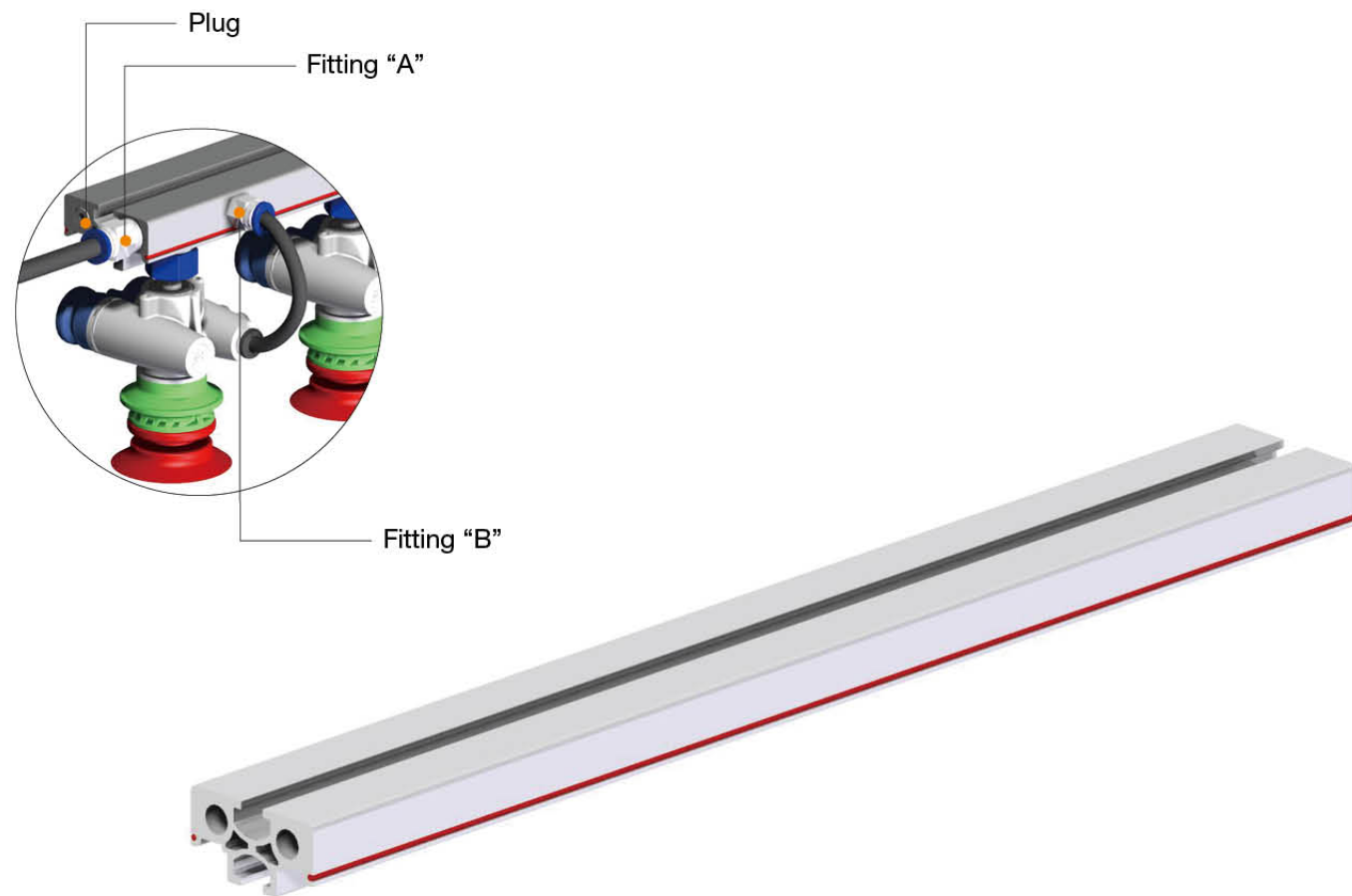


[Unit : mm]

Model	A	B
FIM504	4	22
FLM504	4	16.8



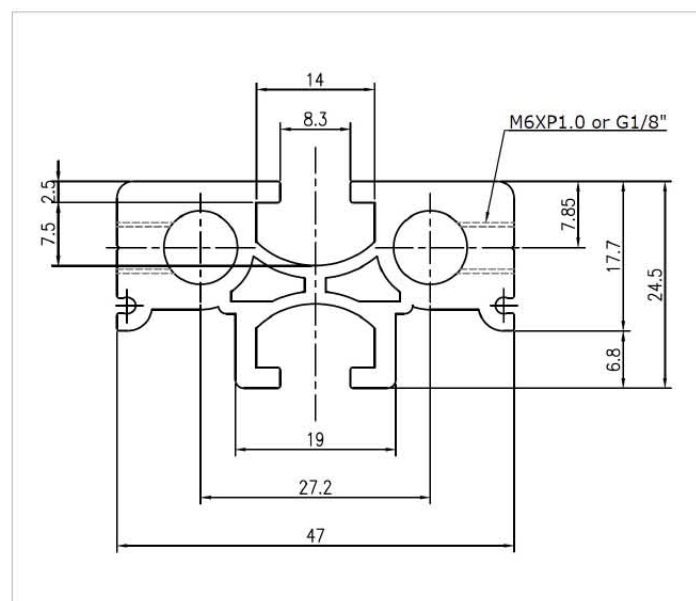
Profile – T08 series



Profile

Model	Description
T08 – 500	Profile length 0.5m
T08 – 1000	Profile length 1m
T08 – 1500	Profile length 1.5m
T08 – 2000	Profile length 2.0m

* Specific length of profile is required to contact VMECA.



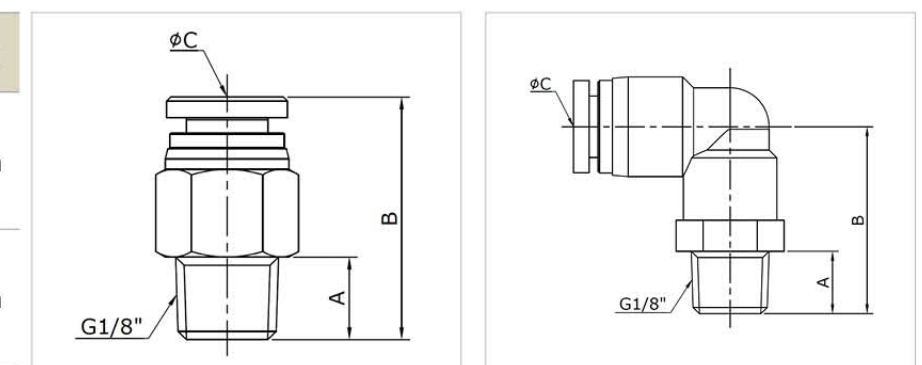
Dimensional Data

Plug

Product view	Model	Description
	HL8	Plug for profile

Fitting "A"

Product view	Model	Description
	FI1806	G1/8 thread, 6Ø one touch fitting
	FI1808	G1/8 thread, 8Ø one touch fitting
	FL1806	G1/8 thread, 6Ø one touch fitting
	FL1808	G1/8 thread, 8Ø one touch fitting

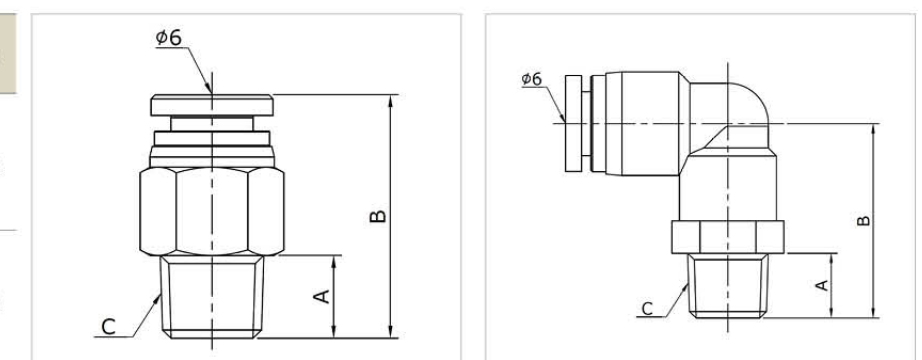


[Unit : mm]

Model	A	B	C
FI1808	8	28.5	8
FI1810	8	31	10
FL1808	8	27	8
FL1810	8	32	10

Fitting "B"

Product view	Model	Description
	FIM606	M6 thread, 6Ø one touch fitting
	FI1806	G1/8 thread, 6Ø one touch fitting
	FLM606	M6 thread, 6Ø one touch fitting
	FL1806	G1/8 thread, 6Ø one touch fitting

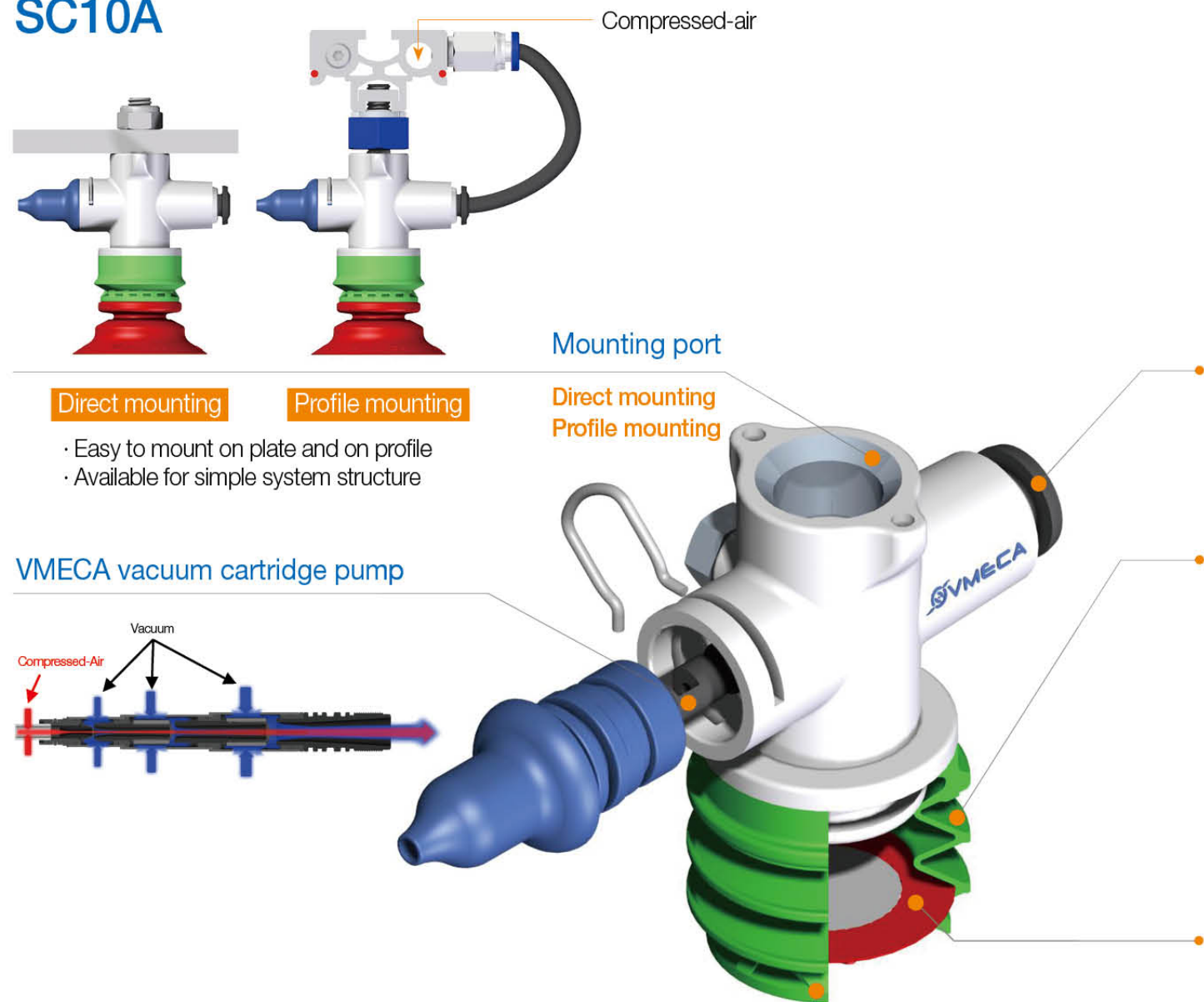


[Unit : mm]

Model	A	B	C
FIM606	6.5	25.7	M6XP1.0
FI1806	8	23.5	G1/8"
FLM606	6.5	23.5	M6XP1.0
FL1806	8	24	G1/8"



SC10A



Direct mounting

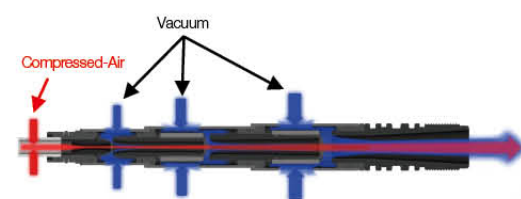
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

VMECA vacuum cartridge pump



Compressed air port

One touch fitting for O.D 4mm tube

Top bellows - 20 & 40

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure

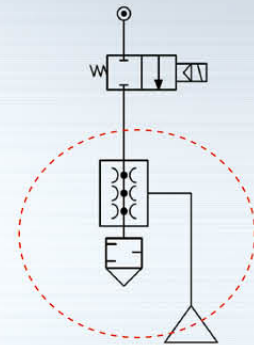
Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place





SC10A



Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Extremely compact and light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications

Specifications

Description	SC10A
Max. Vacuum level	-83 kPa
Open Vacuum flow	14.0 NI/min
Max. Feed pressure	4 Bar
Temperature	-20 ~ 80 °C
Noise level	44 ~ 53 dBA
Weight	17.4 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

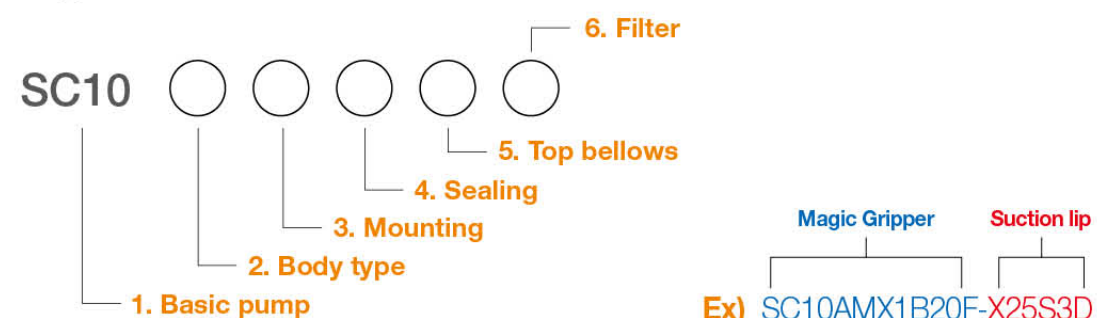
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
SC10A	48	1.1	5.9	9.2	5.7	2.1	1.4	0.6	-	-	-	-	-	
	83	1.8	8.7	12.3	7.5	3.2	2.5	2.0	1.5	0.8	0.3	-	-	
	81	2.2	9.9	14.0	9.4	5.0	2.5	2.0	1.3	0.6	0.2	-	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
SC10AXX1B20X	48	1.1	0.12	0.15	0.18	0.22	0.31	-	-	-	-	
	83	1.8	0.09	0.11	0.13	0.16	0.20	0.27	0.42	0.86	-	
	81	2.2	0.08	0.10	0.13	0.16	0.20	0.28	0.45	1.04	-	
SC10AXX2B20X	48	1.1	0.13	0.16	0.20	0.26	0.33	-	-	-	-	
	83	1.8	0.10	0.12	0.15	0.18	0.23	0.29	0.44	0.89	-	
	81	2.2	0.09	0.11	0.14	0.17	0.22	0.30	0.47	1.10	-	
SC10AXX1B40X	48	1.1	0.15	0.22	0.28	0.37	0.47	-	-	-	-	
	83	1.8	0.12	0.16	0.21	0.28	0.33	0.41	0.59	1.13	-	
	81	2.2	0.10	0.14	0.19	0.26	0.32	0.42	0.62	1.30	-	
SC10AXX2B40X	48	1.1	0.16	0.23	0.32	0.45	0.60	-	-	-	-	
	83	1.8	0.13	0.17	0.25	0.33	0.41	0.53	0.80	1.55	-	
	81	2.2	0.11	0.16	0.22	0.32	0.40	0.54	0.85	1.70	-	



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Micro cartridge 2-Stage	SC10

2. Body type

Description	Ordering No.
Single vacuum cartridge	A

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 20mm	1B20
Top bellows 1.5 folds, 40mm	1B40
Top bellows 2.5 folds, 20mm	2B20
Top bellows 2.5 folds, 40mm	2B40

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

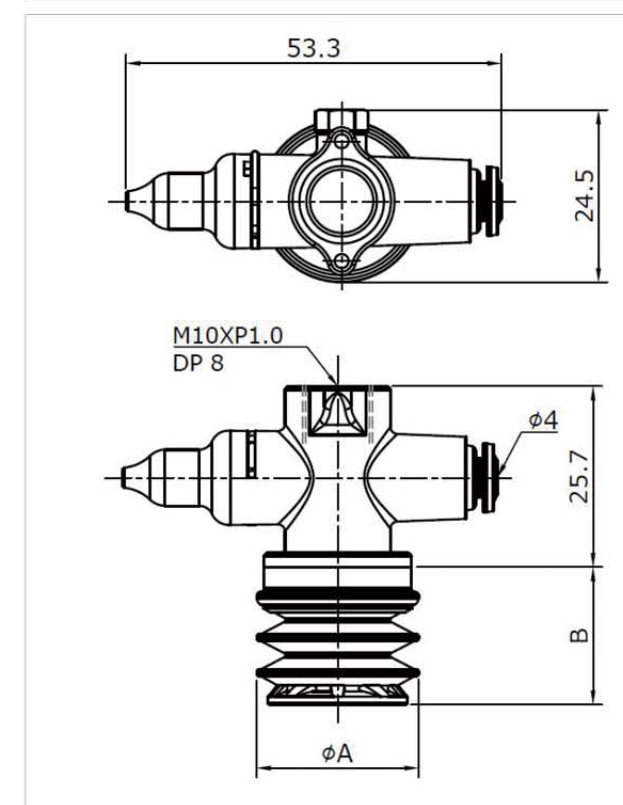
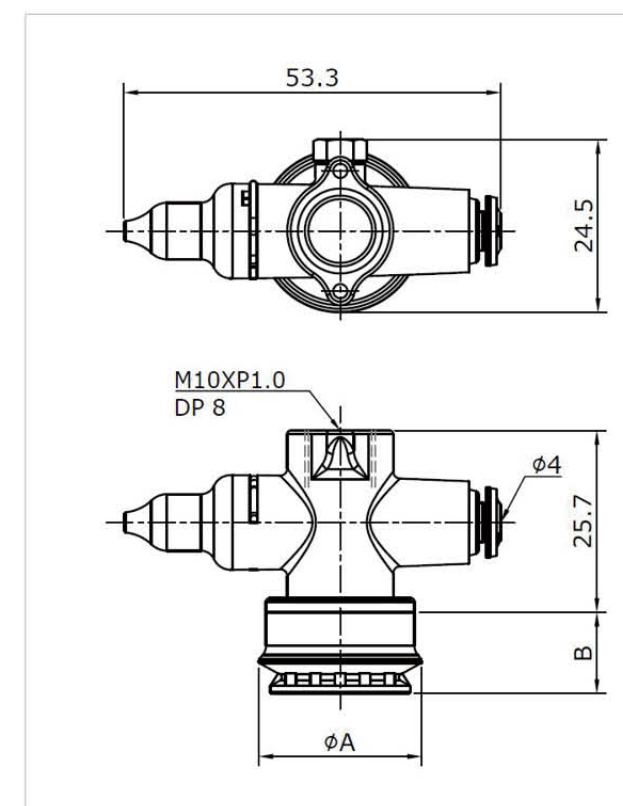
7. Suction lip

Description	Ordering No.
* Suction lip is required on page 110 ~ 149.	

Dimensional Data

SC10A (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
SC10AXX1B20F	23	11.5
SC10AXX1B40F	41	21.4

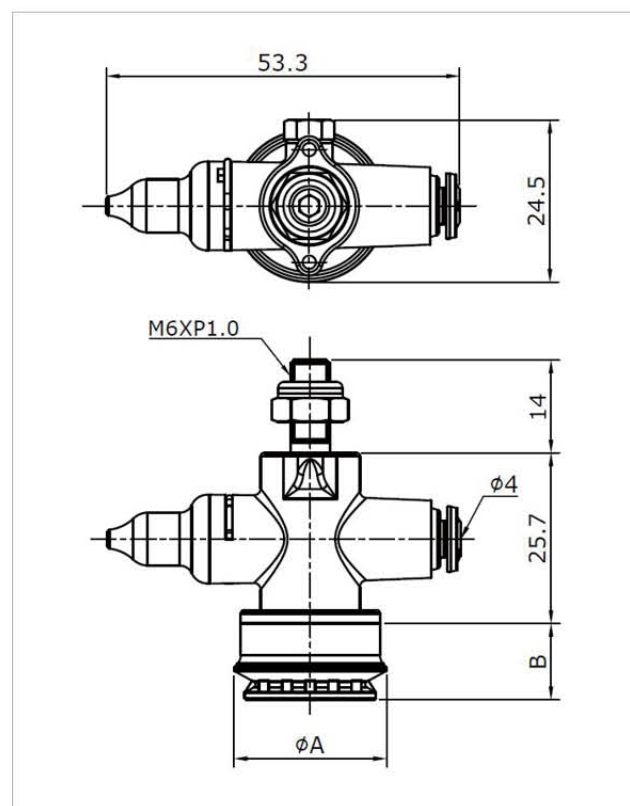
[Unit : mm]

Model	ØA	B
SC10AXX2B20F	23	19.5
SC10AXX2B40F	41	31.4



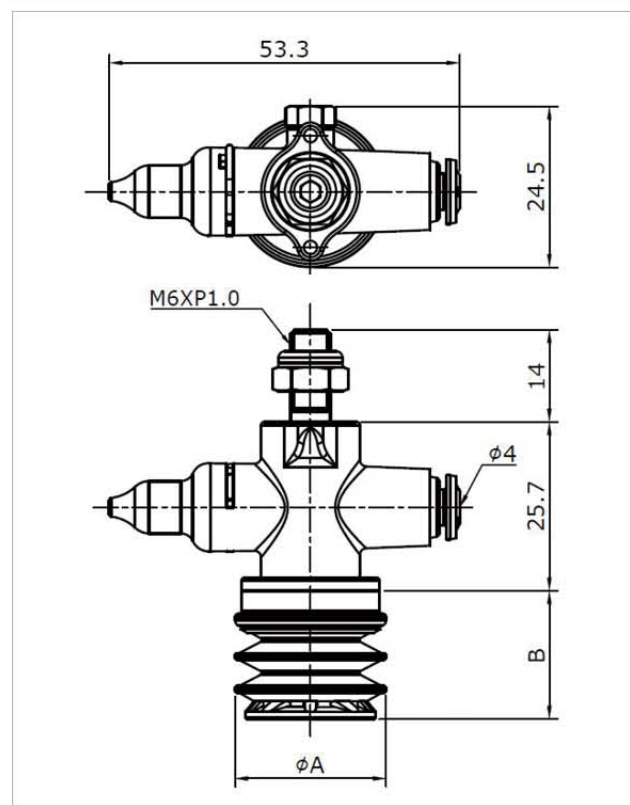
Dimensional Data

SC10A (With Mounting)



[Unit : mm]

Model	ØA	B
SC10AMX1B20F	23	11.5
SC10AMX1B40F	41	21.4

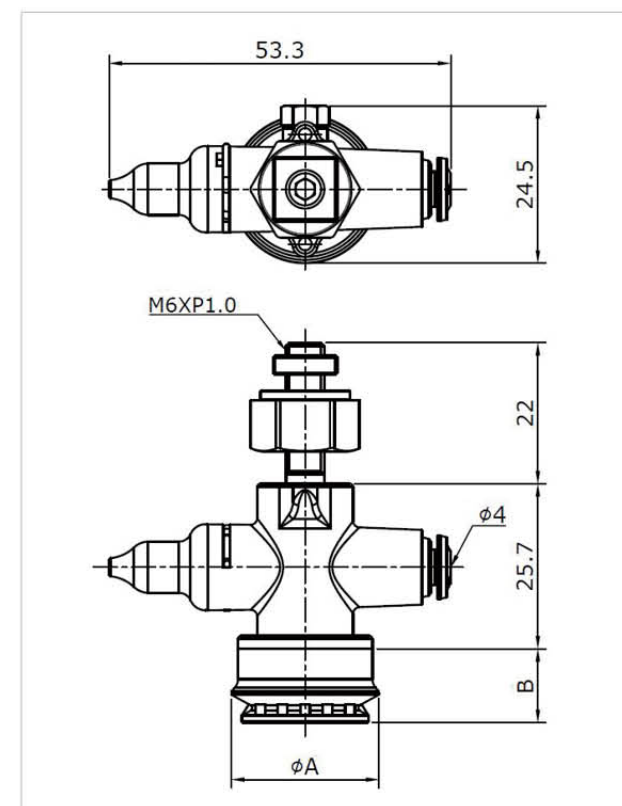


[Unit : mm]

Model	ØA	B
SC10AMX2B20F	23	19.5
SC10AMX2B40F	41	31.4

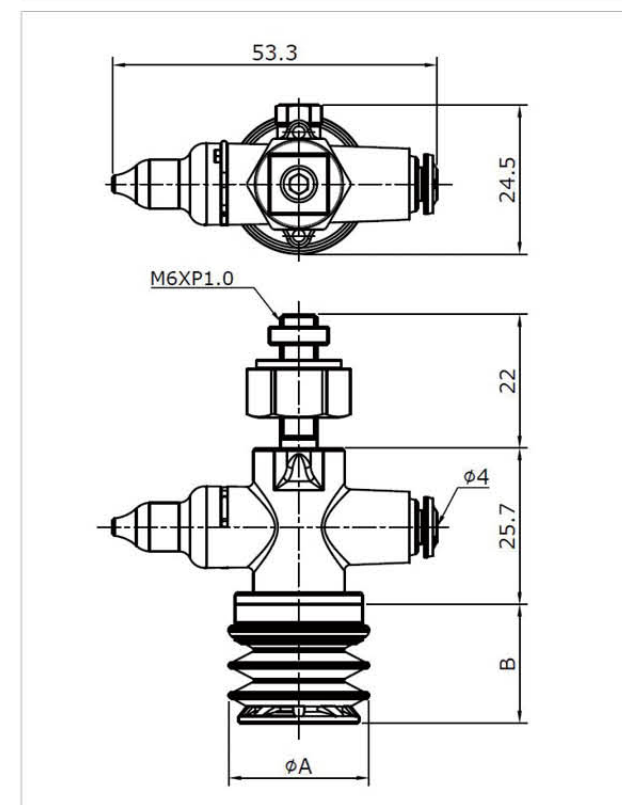
Dimensional Data

SC10A (With Profile)



[Unit : mm]

Model	ØA	B
SC10APX1B20F	23	11.5
SC10APX1B40F	41	21.4

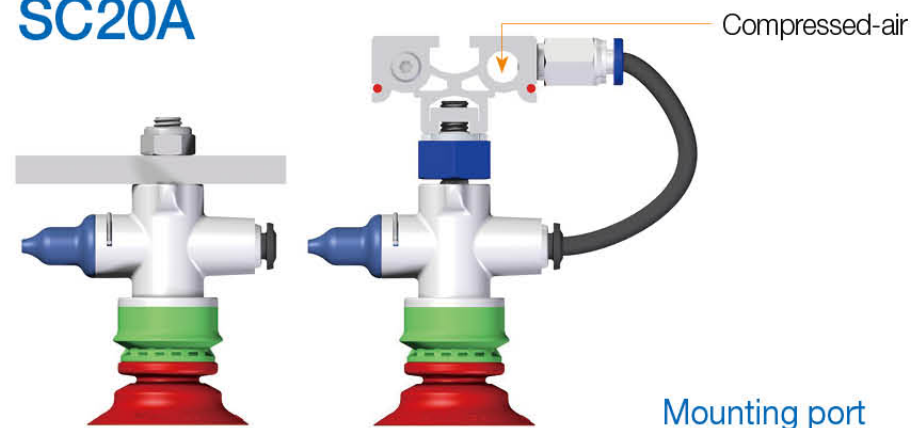


[Unit : mm]

Model	ØA	B
SC10APX2B20F	23	19.5
SC10APX2B40F	41	31.4



SC20A



Direct mounting

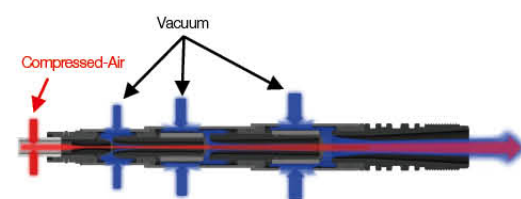
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

VMECA vacuum cartridge pump



Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 40 & 60

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure

Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place

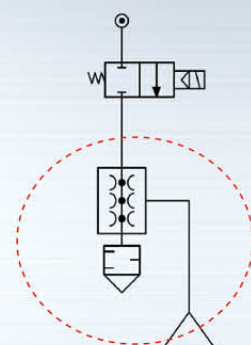




SC20A

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	SC20A
Max. Vacuum level	-92 kPa
Open Vacuum flow	42.2 NI/min
Max. Feed pressure	4 Bar
Temperature	-20 ~ 80 °C
Noise level	44 ~ 53 dBA
Weight	25.5 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

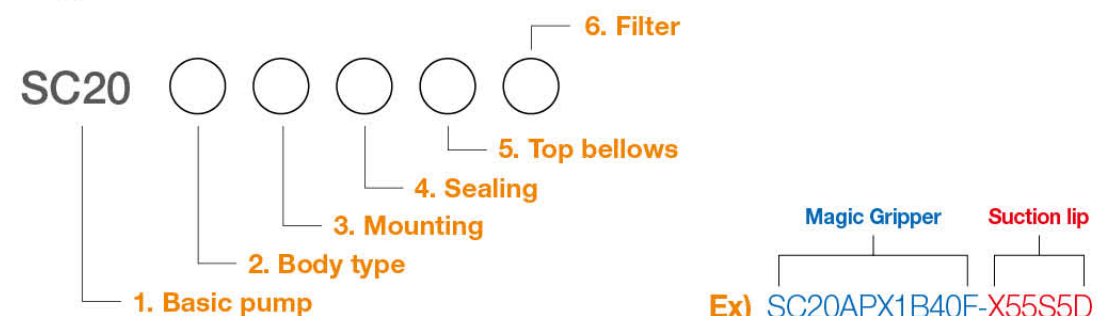
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
SC20A	63	2.2	21	36.8	27.0	17.8	16.8	12.7	7.6	2.0	-	-	-
	92	3.3	27	40.5	33.6	23.7	16.5	13.8	11.9	7.8	3.8	2.3	-
	91	4.0	32	42.2	40.2	26.5	19.3	14.3	11.6	8.8	5.8	2.6	-

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
SC20AXX1B40X	63	2.2	0.07	0.09	0.11	0.13	0.15	0.20				-
	92	3.3	0.07	0.09	0.10	0.12	0.14	0.16	0.20	0.26		-
	91	4.0	0.07	0.08	0.10	0.11	0.13	0.15	0.19	0.25		-
SC20AXX2B40X	63	2.2	0.08	0.10	0.13	0.15	0.18	0.23				-
	92	3.3	0.07	0.09	0.12	0.13	0.15	0.18	0.24	0.33		-
	91	4.0	0.07	0.09	0.11	0.12	0.15	0.18	0.22	0.29		-
SC20AXX1B60X	63	2.2	0.10	0.16	0.18	0.20	0.23	0.28				
	92	3.3	0.09	0.12	0.15	0.17	0.20	0.24	0.29	0.42		
	91	4.0	0.09	0.12	0.14	0.16	0.19	0.22	0.28	0.38		
SC20AXX2B60X	63	2.2	0.12	0.17	0.20	0.23	0.27	0.36				
	92	3.3	0.11	0.15	0.17	0.19	0.23	0.27	0.33	0.46		
	91	4.0	0.10	0.13	0.16	0.18	0.22	0.26	0.31	0.43		



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini cartridge 2-Stage	SC20

2. Body type

Description	Ordering No.
Single vacuum cartridge	A

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

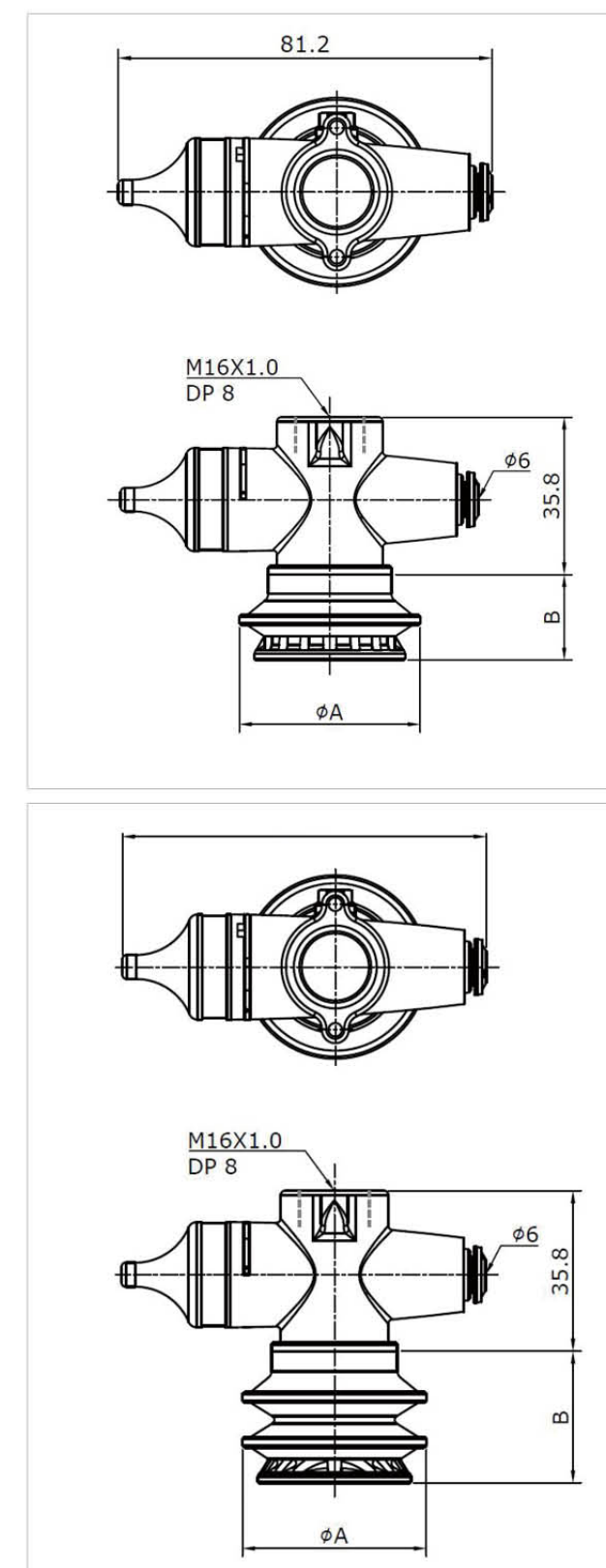
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

SC20A (Without Mounting)

Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
SC20AXX1B40F	41	21.4
SC20AXX1B60F	56	30.4

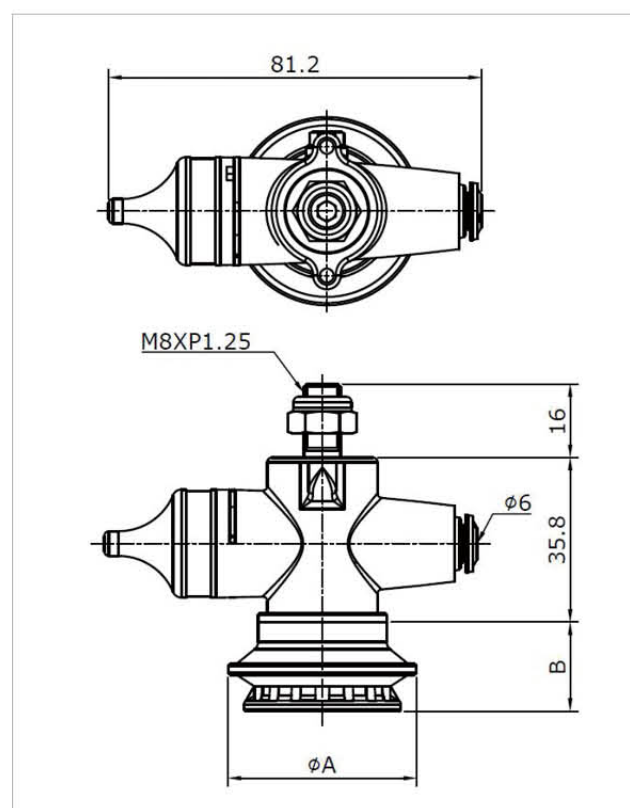
[Unit : mm]

Model	ØA	B
SC20AXX2B40F	41	31.4
SC20AXX2B60F	56	44.8



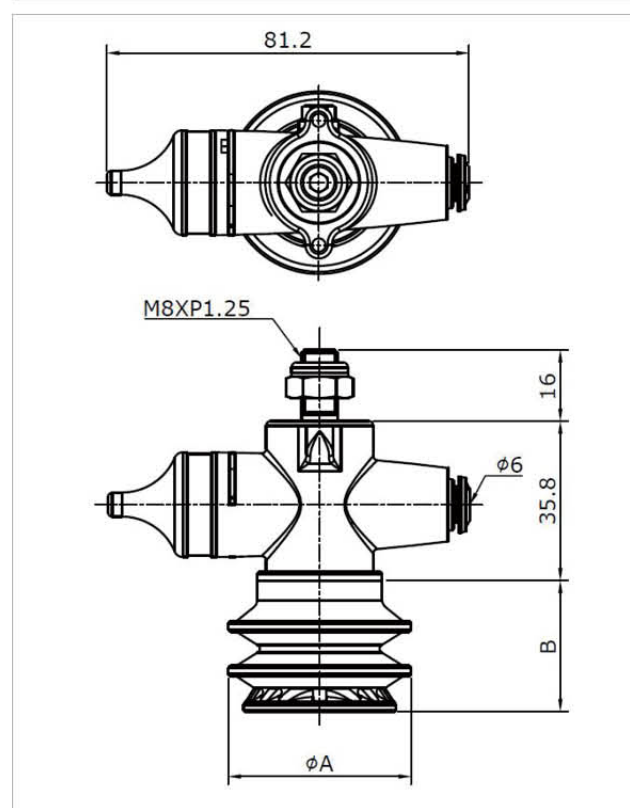
Dimensional Data

SC20A (With Mounting)



[Unit : mm]

Model	ØA	B
SC20AMX1B40F	41	21.4
SC20AMX1B60F	56	30.4

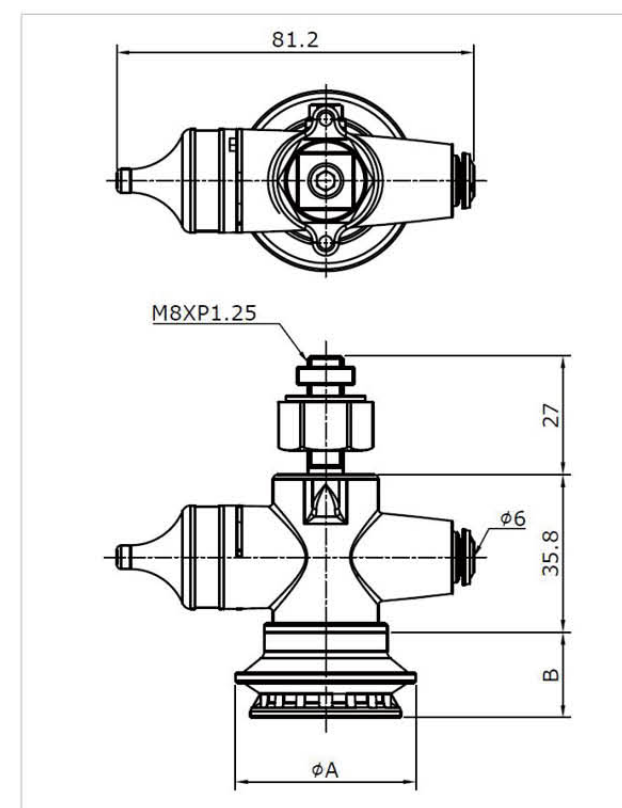


[Unit : mm]

Model	ØA	B
SC20AMX2B40F	41	31.4
SC20AMX2B60F	56	44.8

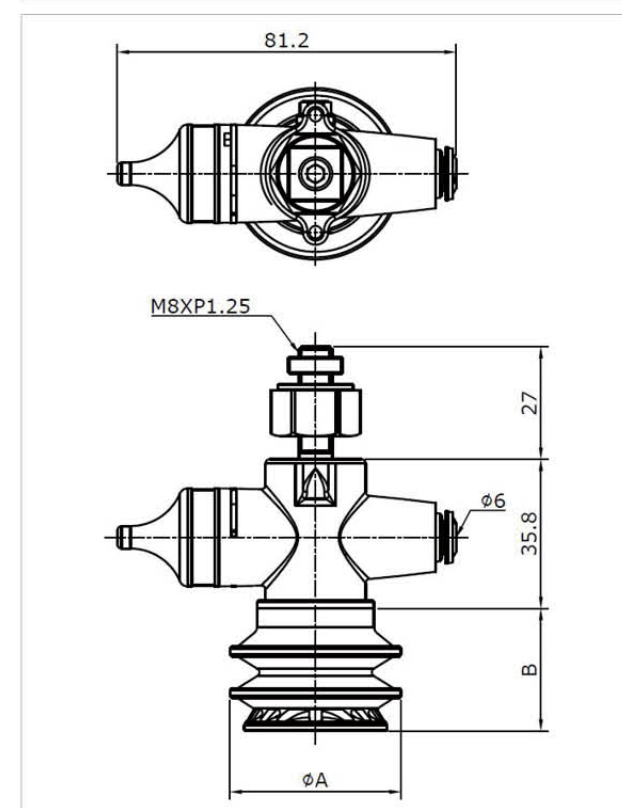
Dimensional Data

SC20A (With Profile)



[Unit : mm]

Model	ØA	B
SC20APX1B40F	41	21.4
SC20APX1B60F	56	30.4

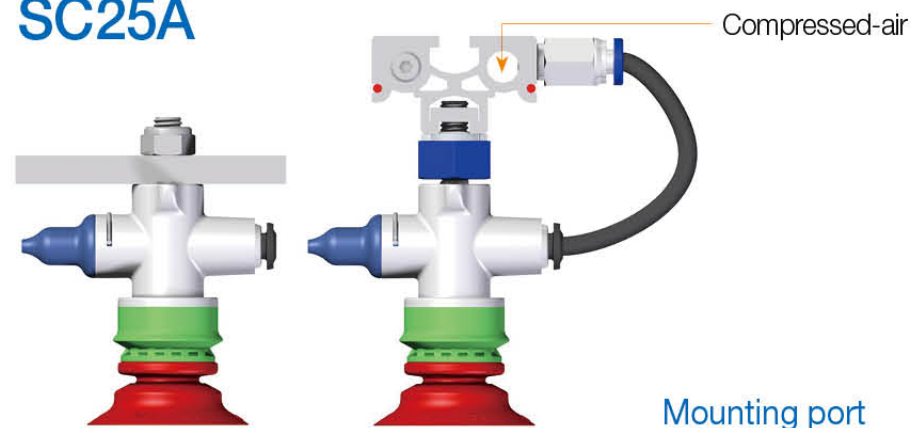


[Unit : mm]

Model	ØA	B
SC20APX2B40F	41	31.4
SC20APX2B60F	56	44.8



SC25A



Direct mounting

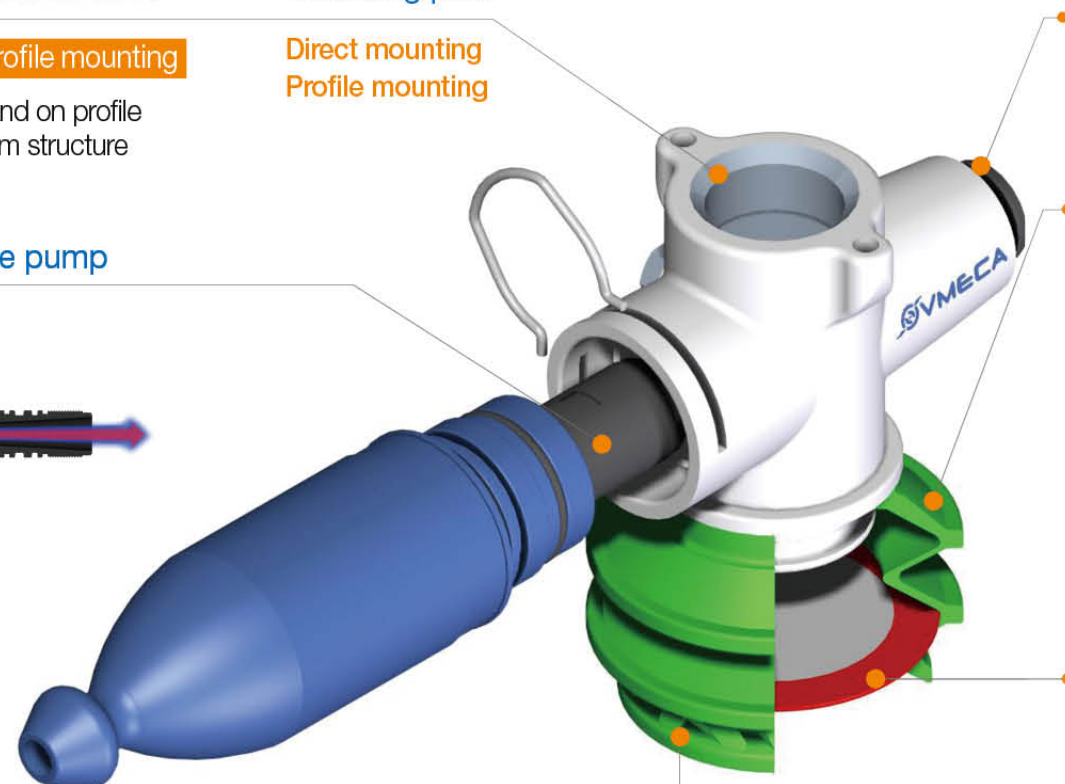
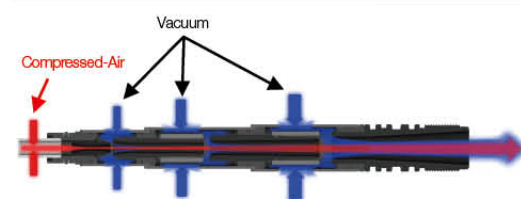
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

VMECA vacuum cartridge pump



Compressed air port

One touch fitting for O.D 6mm tube

Top bellows – 40 & 60

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure

Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place





SC25A

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	SC25A
Max. Vacuum level	-95.2 kPa
Open Vacuum flow	77.8.Nl/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	67 ~ 71 dBA
Weight	81.5 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

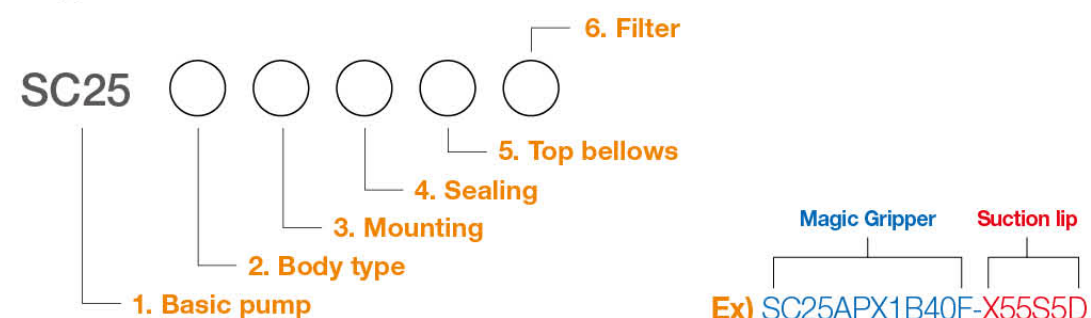
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (Nl/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
SC25A	88.2	4.5	75	71.3	58.5	41.7	37	30.7	26.1	20.5	16.2	9.6	-
	95.2	5.2	85	73.8	64	46.6	37.3	31.1	26.6	20.6	16.6	14.2	3
	94.6	6	96	77.8	66.3	51.2	39.6	29.1	23.5	18.6	16	11.7	2.5

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
SC25AXX1B40X	88.2	4.5	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.17	-	
	95.2	5.2	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.23	
	94.6	6.0	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.26	
SC25AXX2B40X	88.2	4.5	0.07	0.08	0.09	0.10	0.11	0.13	0.14	0.18	-	
	95.2	5.2	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.16	0.25	
	94.6	6.0	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.16	0.27	
SC25AXX1B60X	88.2	4.5	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.21	-	
	95.2	5.2	0.08	0.09	0.10	0.11	0.14	0.15	0.16	0.19	0.30	
	94.6	6.0	0.08	0.09	0.10	0.11	0.13	0.14	0.16	0.18	0.35	
SC25AXX2B60X	88.2	4.5	0.09	0.11	0.13	0.14	0.15	0.16	0.19	0.23	-	
	95.2	5.2	0.09	0.11	0.12	0.13	0.14	0.16	0.18	0.21	0.33	
	94.6	6.0	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.20	0.38	



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini premium cartridge 2-Stage	SC25

2. Body type

Description	Ordering No.
Single vacuum cartridge	A

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

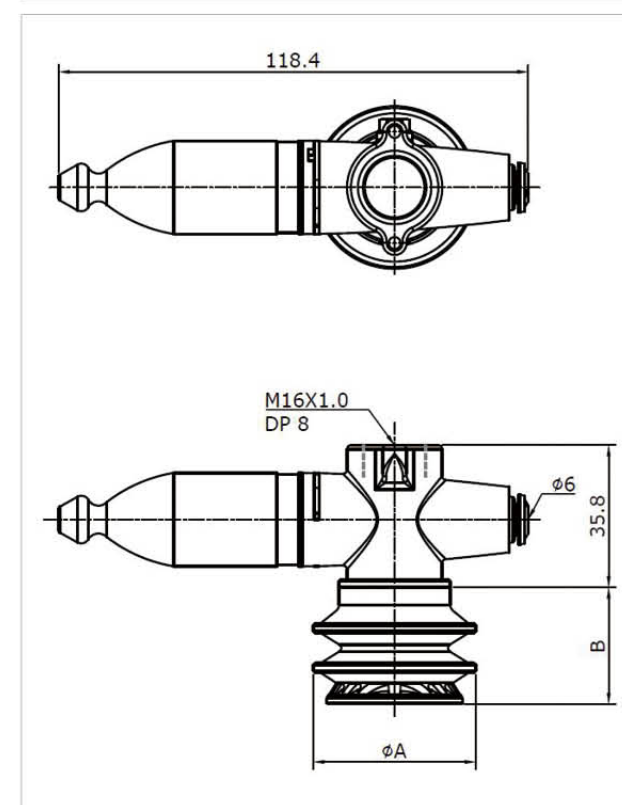
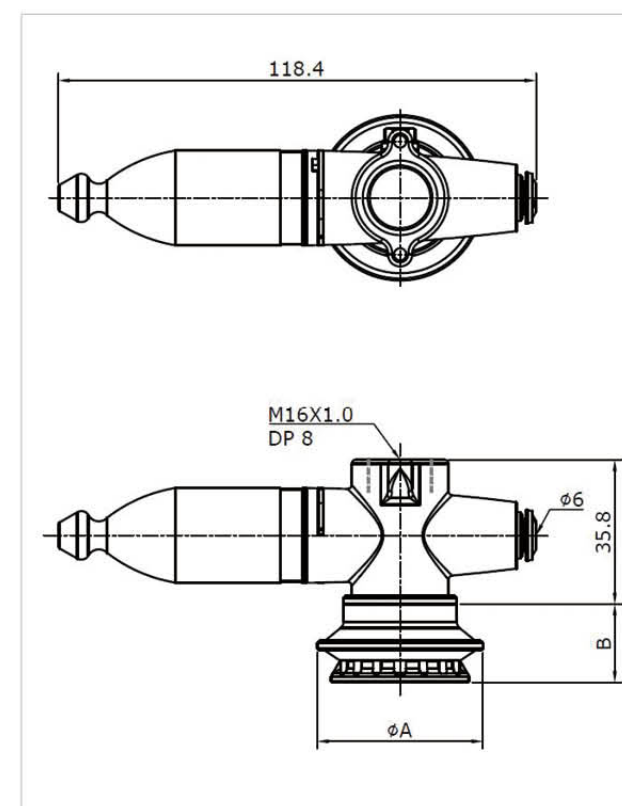
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

SC25A (Without Mounting)

※ Bolt length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
SC25AXX1B40F	41	21.4
SC25AXX1B60F	56	30.4

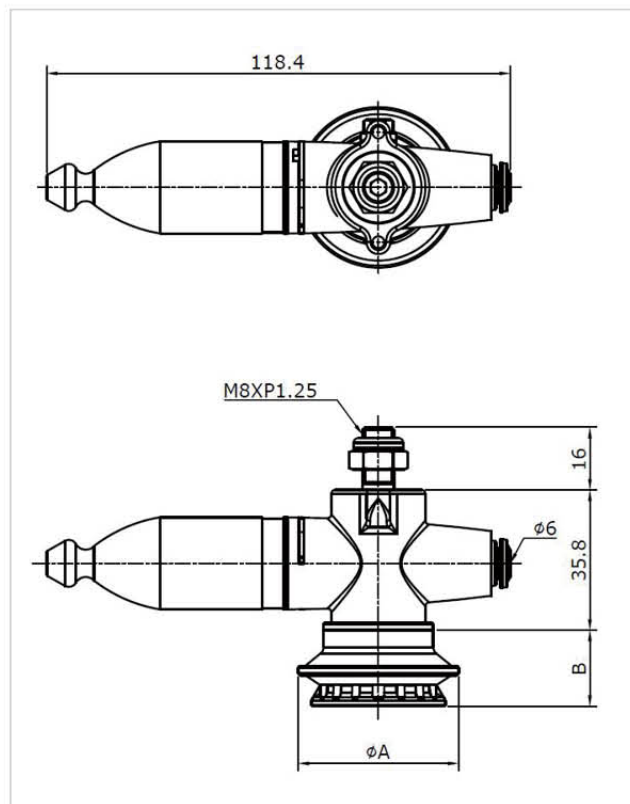
[Unit : mm]

Model	ØA	B
SC25AXX2B40F	41	31.4
SC25AXX2B60F	56	44.8



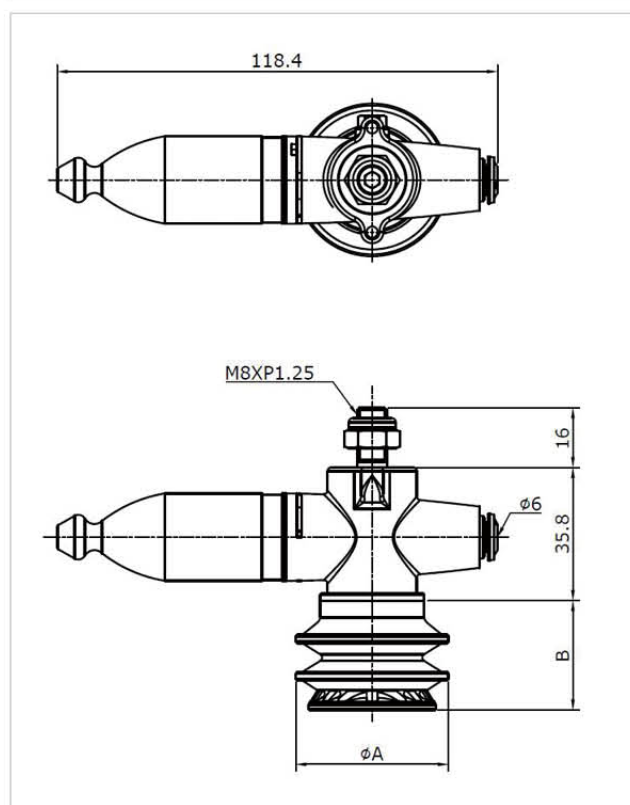
Dimensional Data

SC25A (Without Mounting)



[Unit : mm]

Model	ØA	B
SC25AMX1B40F	41	21.4
SC25AMX1B60F	56	30.4

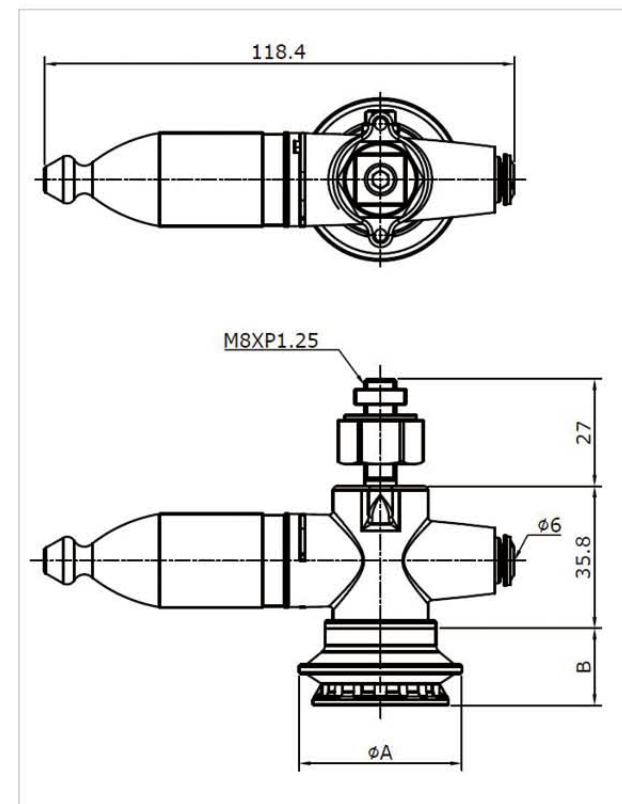


[Unit : mm]

Model	ØA	B
SC25AMX2B40F	41	31.4
SC25AMX2B60F	56	44.8

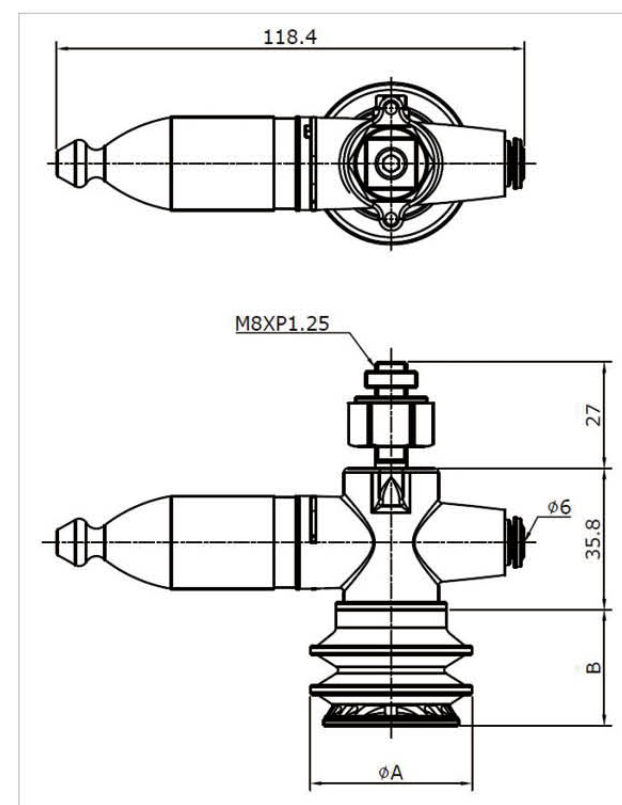
Dimensional Data

SC25A (Without Mounting)



[Unit : mm]

Model	ØA	B
SC25APX1B40F	41	21.4
SC25APX1B60F	56	30.4

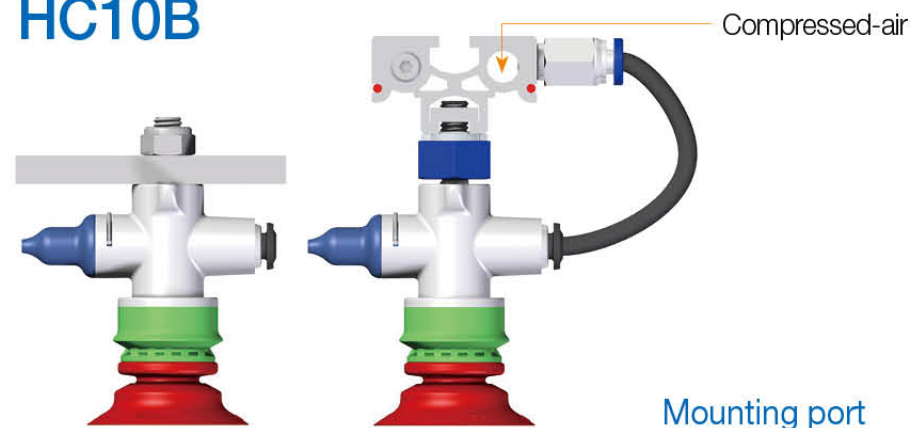


[Unit : mm]

Model	ØA	B
SC25APX2B40F	41	31.4
SC25APX2B60F	56	44.8



HC10B



Direct mounting

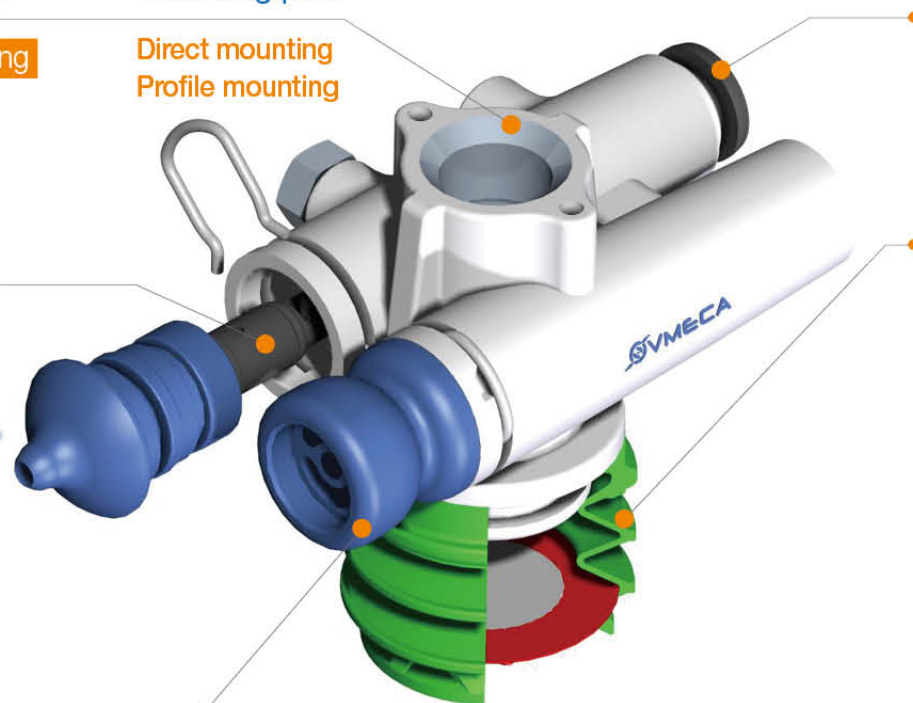
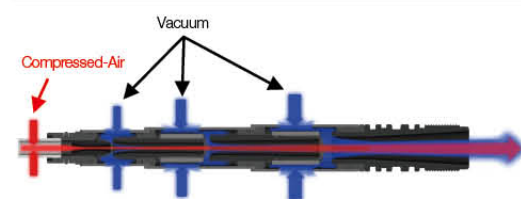
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

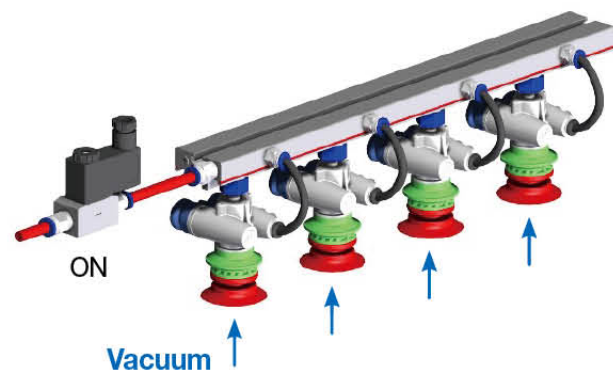
VMECA vacuum cartridge pump



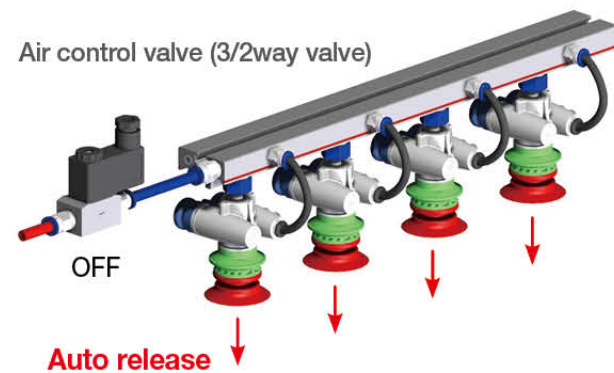
Automation vacuum release

Quick release system without release control valve

In **VACUUM** operation



In **RELEASE** operation



Air control valve (3/2way valve)

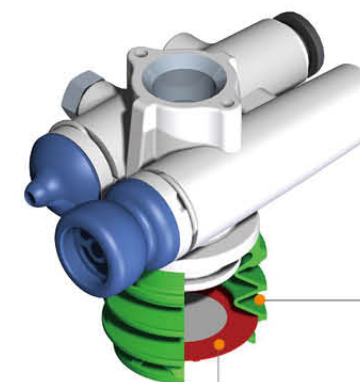
Compressed air port

One touch fitting for O.D 4mm tube

Top bellows - 20 & 40

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



Vacuum Filter

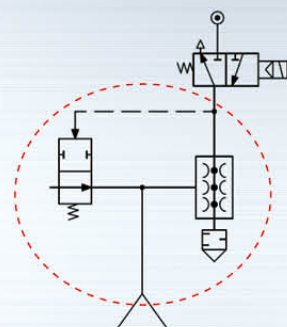




HC10B

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low compressed-air pressure
- ✓ Quick release without release control valve
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC10B
Max. Vacuum level	-83 kPa
Open Vacuum flow	14.0 NI/min
Max. Feed pressure	4 Bar
Temperature	-20 ~ 80 °C
Noise level	44 ~ 53 dBA
Weight	25.5 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

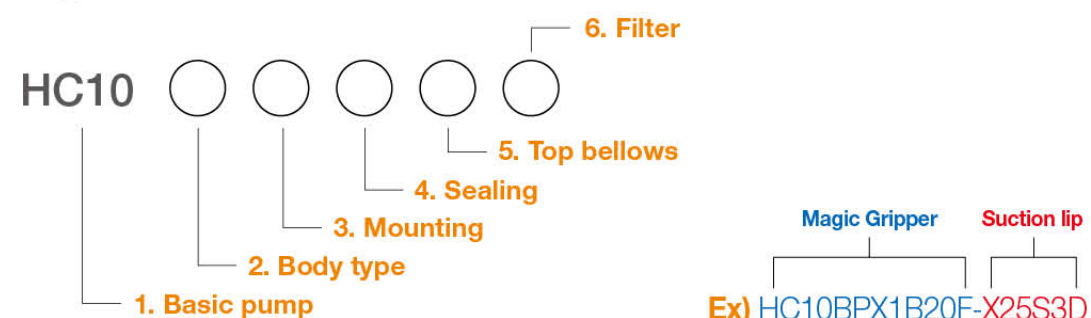
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
HC10B	48	1.1	5.9	9.2	5.7	2.1	1.4	0.6	-	-	-	-	-
	83	1.8	8.7	12.3	7.5	3.2	2.5	2	1.5	0.8	0.3	-	-
	81	2.2	9.9	14	9.4	5	2.5	2	1.3	0.6	0.2	-	-

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC10BXX1B20X	48	1.1	0.12	0.15	0.18	0.22	0.31	-	-	-	-	-
	83	1.8	0.09	0.11	0.13	0.16	0.20	0.27	0.42	0.86	-	-
	81	2.2	0.08	0.10	0.13	0.16	0.20	0.28	0.45	1.04	-	-
HC10BXX2B20X	48	1.1	0.13	0.16	0.20	0.26	0.33	-	-	-	-	-
	83	1.8	0.10	0.12	0.15	0.18	0.23	0.29	0.44	0.89	-	-
	81	2.2	0.09	0.11	0.14	0.17	0.22	0.3	0.47	1.10	-	-
HC10BXX1B40X	48	1.1	0.15	0.22	0.28	0.37	0.47	-	-	-	-	-
	83	1.8	0.12	0.16	0.21	0.28	0.33	0.41	0.59	1.13	-	-
	81	2.2	0.10	0.14	0.19	0.26	0.32	0.42	0.62	1.30	-	-
HC10BXX2B40X	48	1.1	0.16	0.23	0.32	0.45	0.60	-	-	-	-	-
	83	1.8	0.13	0.17	0.25	0.33	0.41	0.53	0.8	1.55	-	-
	81	2.2	0.11	0.16	0.22	0.32	0.40	0.54	0.85	1.70	-	-



I Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Micro cartridge 2-Stage	HC10

2. Body type

Description	Ordering No.
Single vacuum cartridge, Automatic vacuum release	B

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 20mm	1B20
Top bellows 1.5 folds, 40mm	1B40
Top bellows 2.5 folds, 20mm	2B20
Top bellows 2.5 folds, 40mm	2B40

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

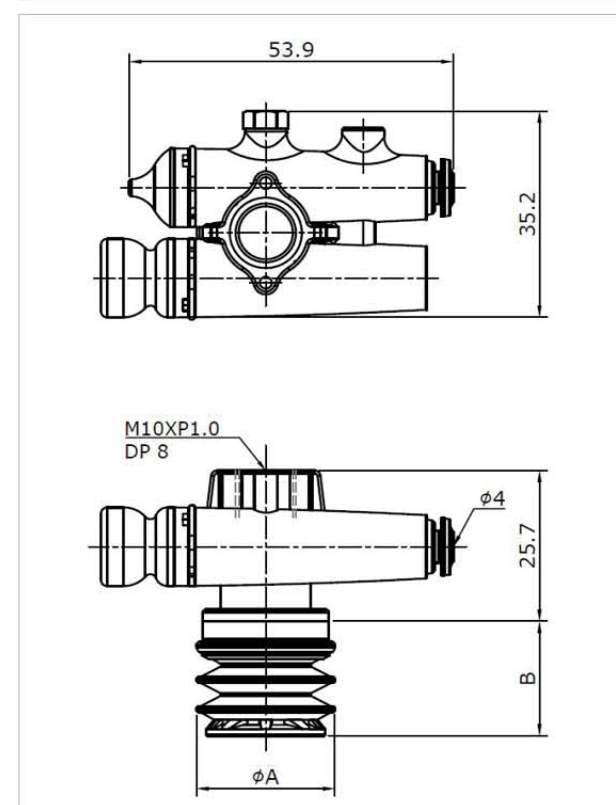
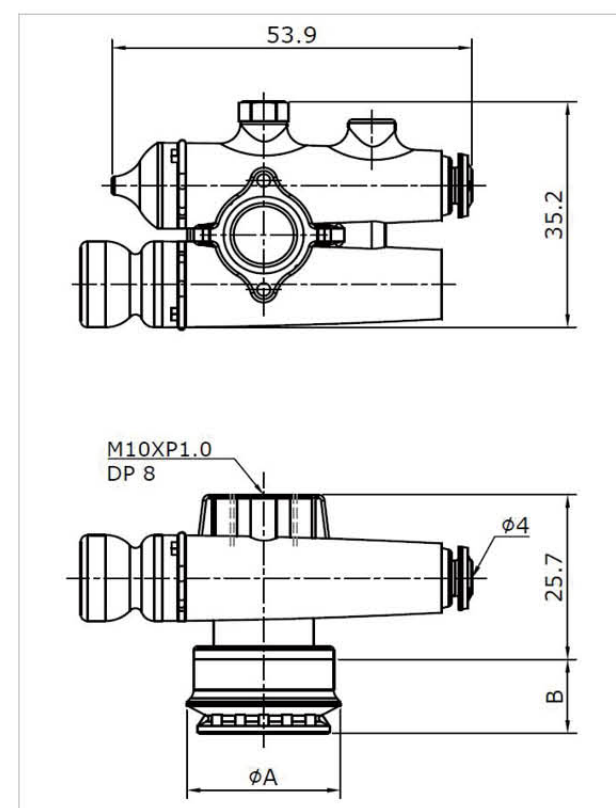
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

I Dimensional Data

HC10B (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC10BXX1B20F	23	11.5
HC10BXX1B40F	41	21.4

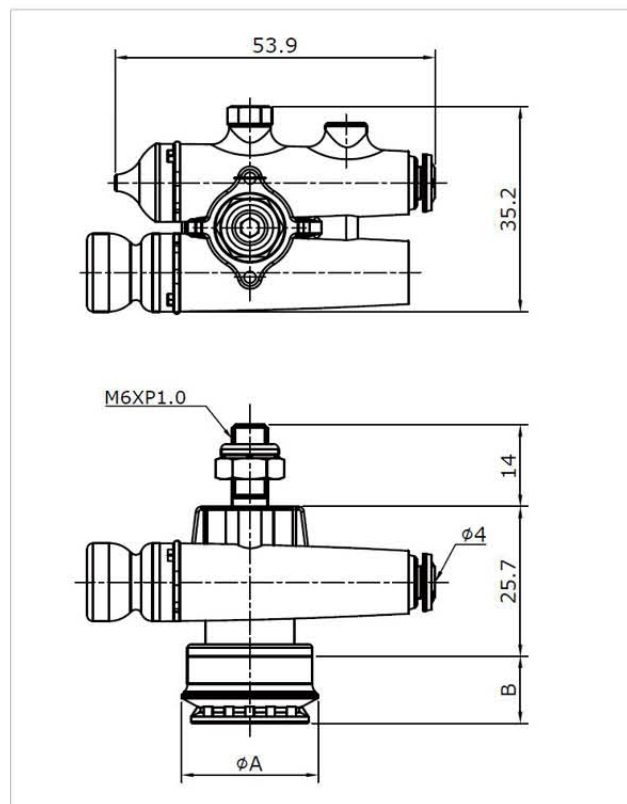
[Unit : mm]

Model	ØA	B
HC10BXX2B20F	23	19.5
HC10BXX2B40F	41	31.4



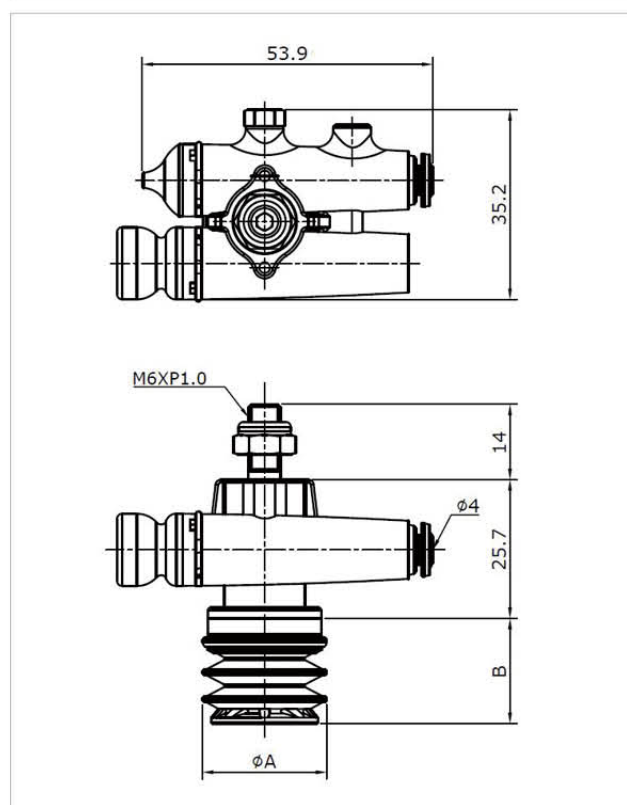
Dimensional Data

HC10B (With Mounting)



[Unit : mm]

Model	ØA	B
HC10BMX1B20F	23	11.5
HC10BMX1B40F	41	21.4

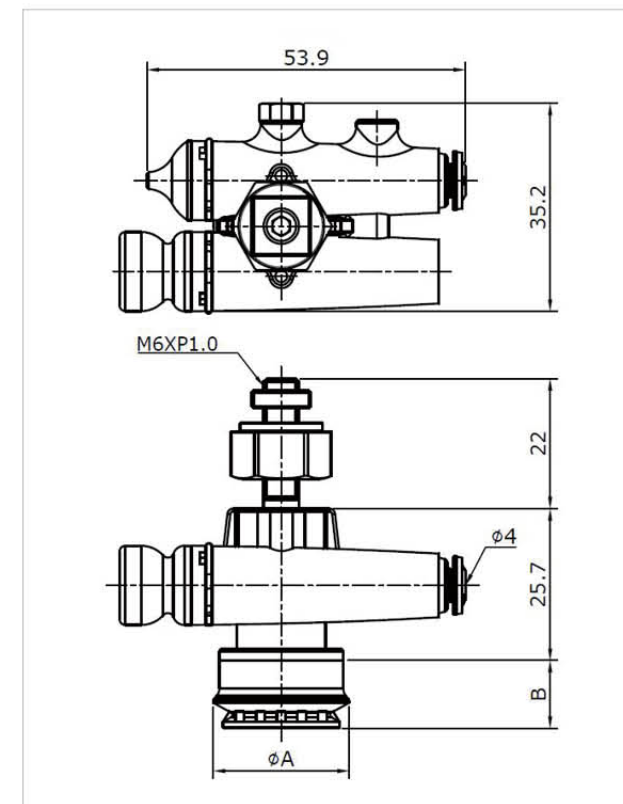


[Unit : mm]

Model	ØA	B
HC10BMX2B20F	23	19.5
HC10BMX2B40F	41	31.4

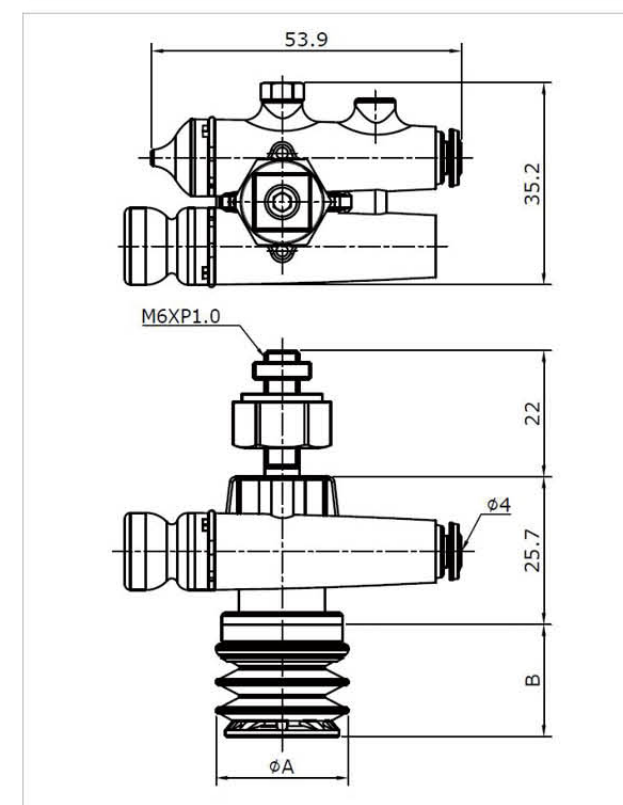
Dimensional Data

HC10B (With Profile)



[Unit : mm]

Model	ØA	B
HC10BPX1B20F	23	11.5
HC10BPX1B40F	41	21.4

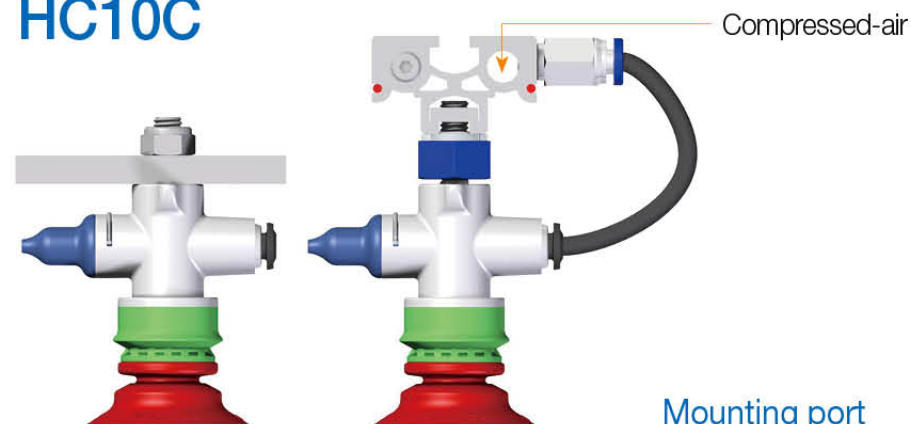


[Unit : mm]

Model	ØA	B
HC10BPX2B20F	23	19.5
HC10BPX2B40F	41	31.4



HC10C



Direct mounting

Profile mounting

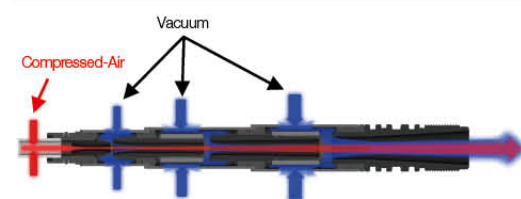
- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting Profile mounting



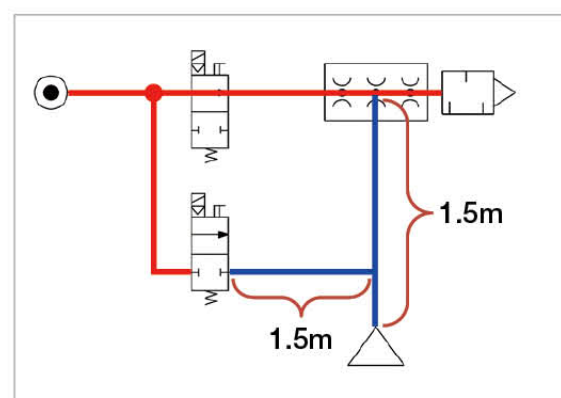
VMECA vacuum cartridge pump



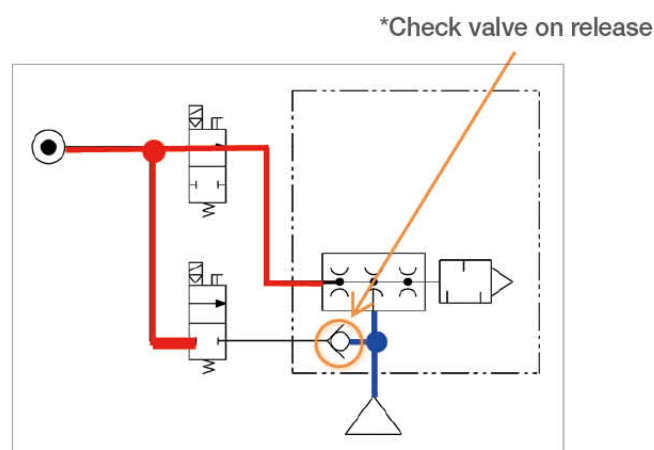
Check valve

“2times Faster” evacuation time!!

- No need to make the line for release vacuum (less volume)
- Installation at the nearest from suction point



Conventional



Magic Grippers

Compressed air port

One touch fitting for O.D 4mm tube

Top bellows - 20 & 40

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



Vacuum Filter

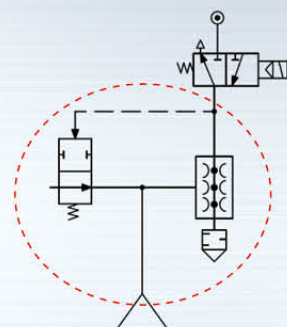




HC10C

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Check valve on release port for fast evacuation time
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC10C
Max. Vacuum level	-83 kPa
Open Vacuum flow	14.0 NI/min
Max. Feed pressure	4 Bar
Temperature	-20 ~ 80 °C
Noise level	44 ~ 53 dBA
Weight	27.2 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

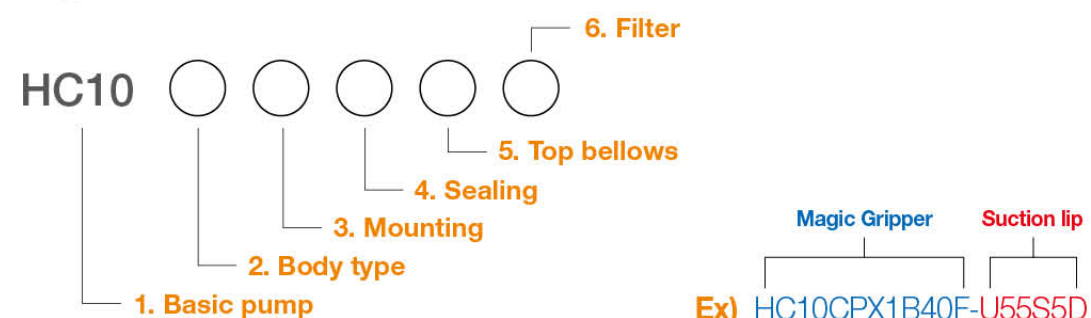
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC10C	48	1.1	5.9	9.2	5.7	2.1	1.4	0.6	-	-	-	-	-	
	83	1.8	8.7	12.3	7.5	3.2	2.5	2	1.5	0.8	0.3	-	-	
	81	2.2	9.9	14	9.4	5	2.5	2	1.3	0.6	0.2	-	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC10CXX1B20X	48	1.1	0.12	0.15	0.18	0.22	0.31	-	-	-	-	
	83	1.8	0.09	0.11	0.13	0.16	0.20	0.27	0.42	0.86	-	
	81	2.2	0.08	0.10	0.13	0.16	0.20	0.28	0.45	1.04	-	
HC10CXX2B20X	48	1.1	0.13	0.16	0.20	0.26	0.33	-	-	-	-	
	83	1.8	0.10	0.12	0.15	0.18	0.23	0.29	0.44	0.89	-	
	81	2.2	0.09	0.11	0.14	0.17	0.22	0.30	0.47	1.10	-	
HC10CXX1B40X	48	1.1	0.15	0.22	0.28	0.37	0.47					
	83	1.8	0.12	0.16	0.21	0.28	0.33	0.41	0.59	1.13		
	81	2.2	0.10	0.14	0.19	0.26	0.32	0.42	0.62	1.30		
HC10CXX2B40X	48	1.1	0.16	0.23	0.32	0.45	0.60					
	83	1.8	0.13	0.17	0.25	0.33	0.41	0.53	0.80	1.55		
	81	2.2	0.11	0.16	0.22	0.32	0.40	0.54	0.85	1.70		



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Micro cartridge 2-Stage	HC10

2. Body type

Description	Ordering No.
Single vacuum cartridge, Check valve type	C

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 20mm	1B20
Top bellows 1.5 folds, 40mm	1B40
Top bellows 2.5 folds, 20mm	2B20
Top bellows 2.5 folds, 40mm	2B40

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

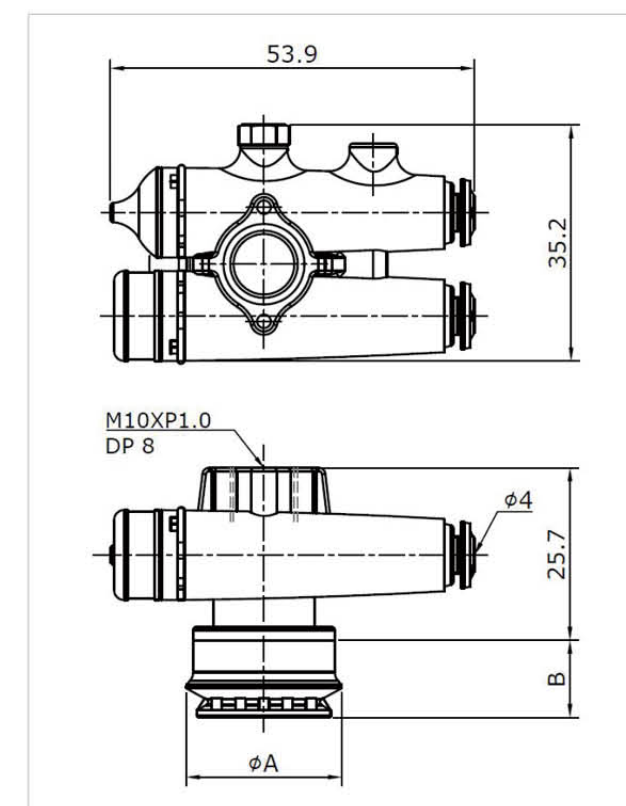
7. Suction lip

Description	Ordering No.
* Suction lip is required on page 110 ~ 149.	

Dimensional Data

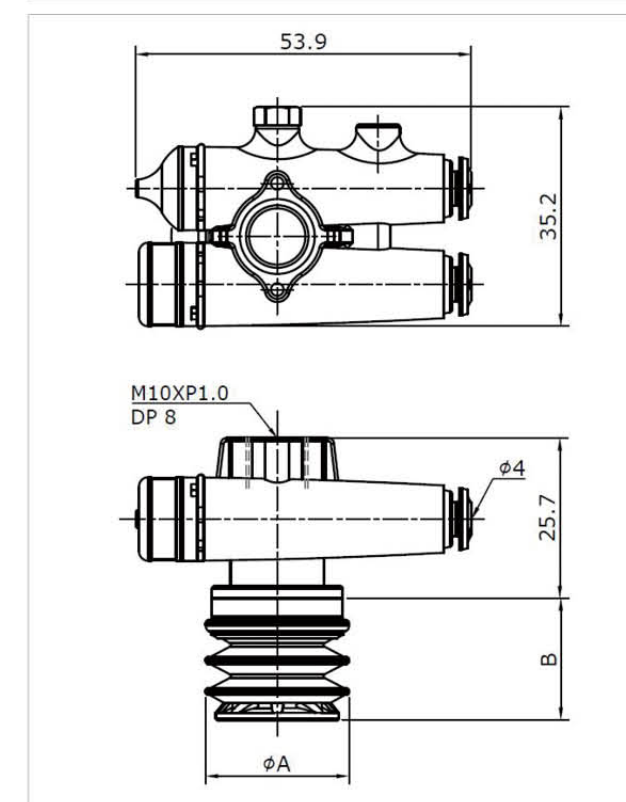
HC10C (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC10CXX1B20F	23	11.5
HC10CXX1B40F	41	21.4



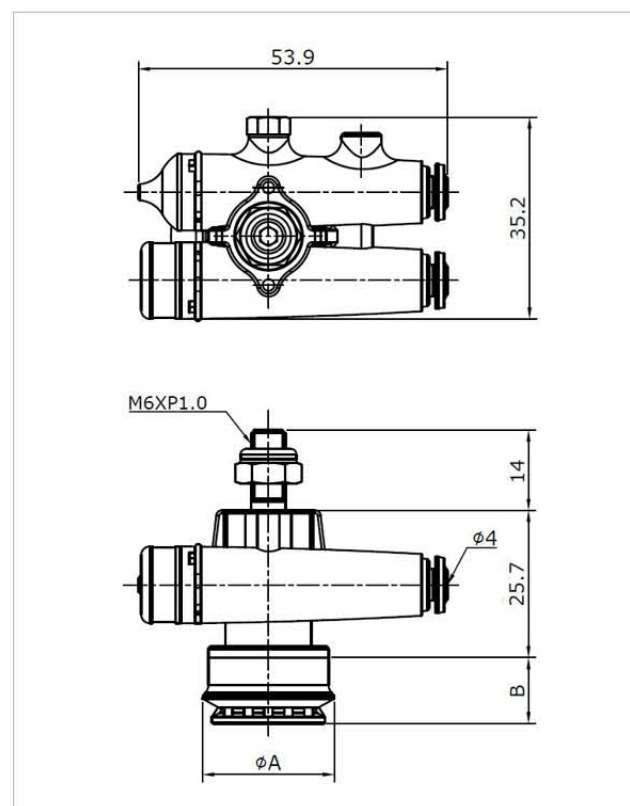
[Unit : mm]

Model	ØA	B
HC10CXX2B20F	23	19.5
HC10CXX2B40F	41	31.4



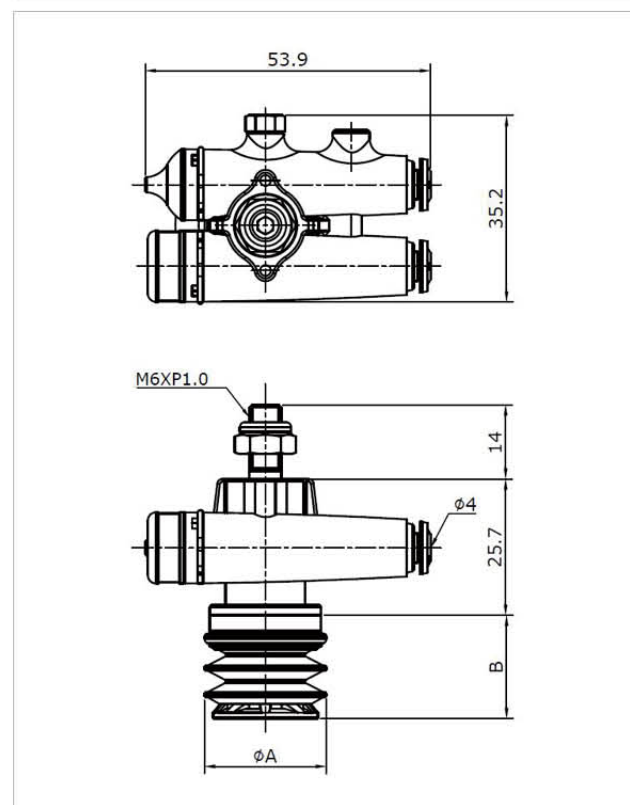
Dimensional Data

HC10C (With Mounting)



[Unit : mm]

Model	ØA	B
HC10CMX1B20F	23	11.5
HC10CMX1B40F	41	21.4

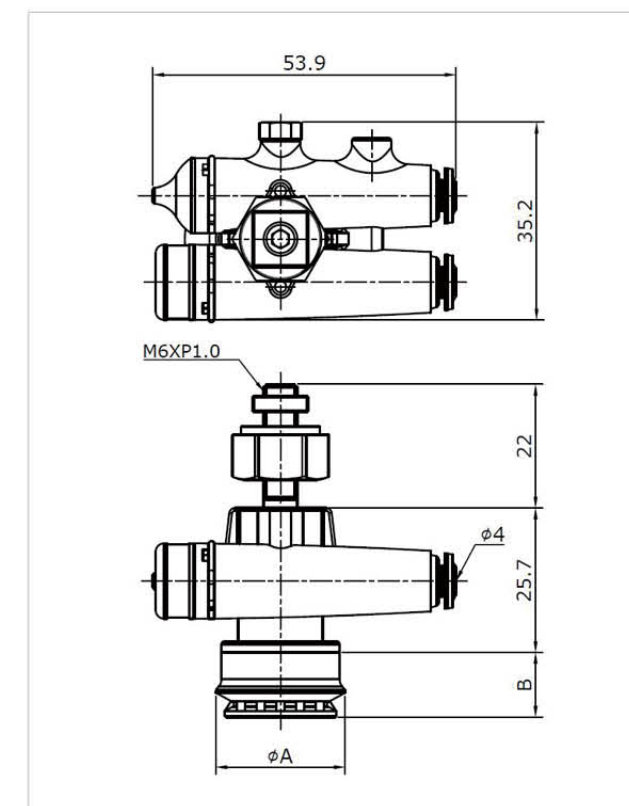


[Unit : mm]

Model	ØA	B
HC10CMX2B20F	23	19.5
HC10CMX2B40F	41	31.4

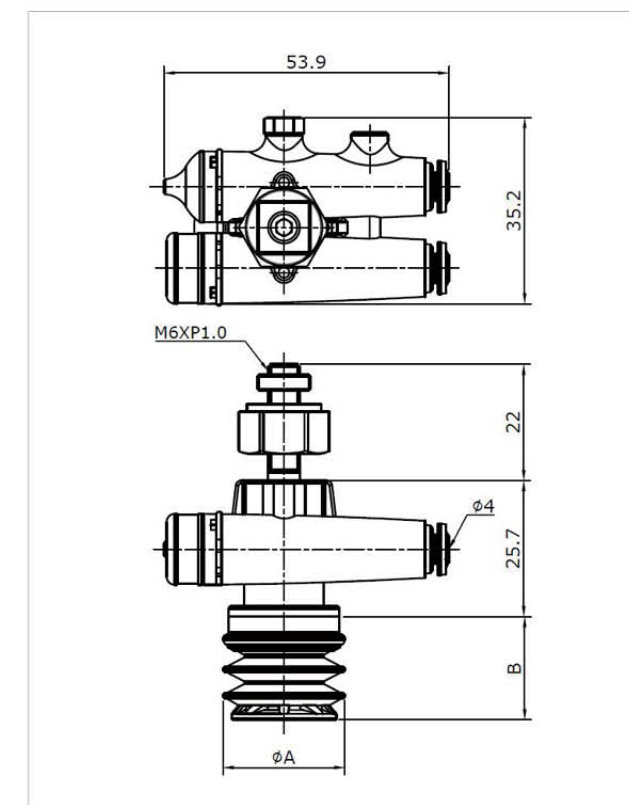
Dimensional Data

HC10C (With Profile)



[Unit : mm]

Model	ØA	B
HC10CPX1B20F	23	11.5
HC10CPX1B40F	41	21.4

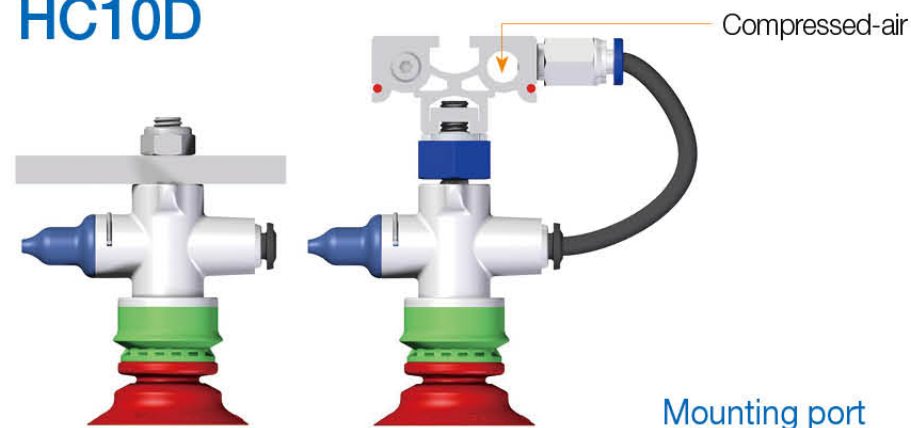


[Unit : mm]

Model	ØA	B
HC10CPX2B20F	23	19.5
HC10CPX2B40F	41	31.4



HC10D



Direct mounting

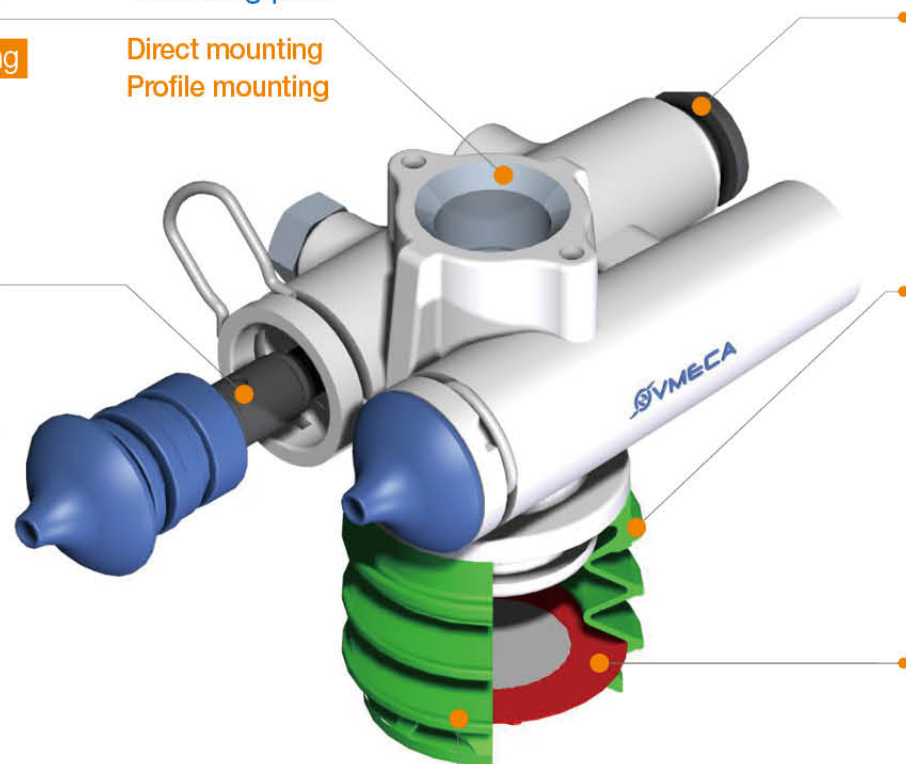
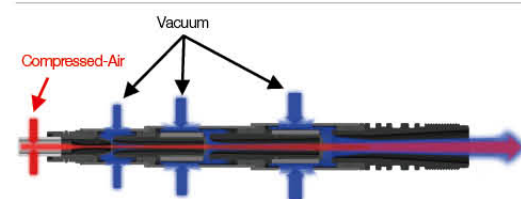
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

- Direct mounting
- Profile mounting

VMECA vacuum cartridge pump



Compressed air port

- One touch fitting for O.D 4mm tube

Top bellows - 20 & 40

- Various type of top bellows
- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure

Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place

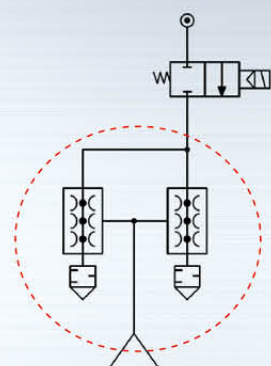




HC10D

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Dual cartridge - Double capacity (High flow)
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC10D
Max. Vacuum level	-83 kPa
Open Vacuum flow	23.0 NI/min
Max. Feed pressure	4 Bar
Temperature	-20 ~ 80 °C
Noise level	51 ~ 53 dBA
Weight	24.6 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

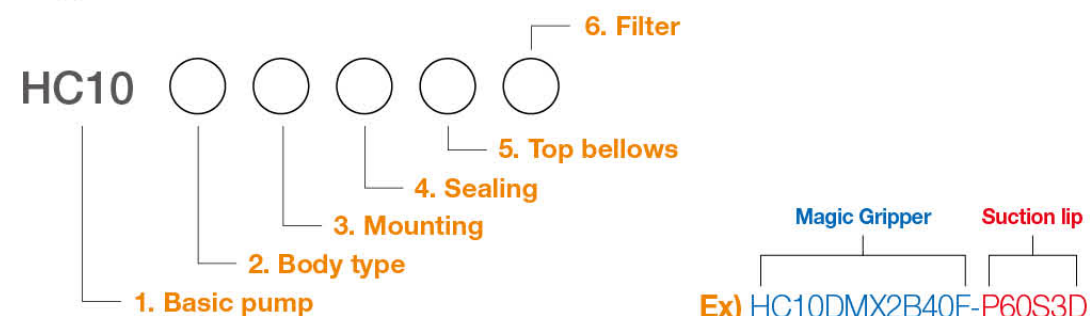
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC10D	48	1.1	11.3	16.4	8.3	3.8	2.2	1	-	-	-	-	-	
	83	1.8	16.4	20.2	12.6	5.2	4.7	3.9	2.9	1.6	0.5	-	-	
	81	2.2	20.3	23	16.6	6.87	5.1	4.3	3.2	1.8	0.8	-	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC10DXX1B20X	48	1.1	0.09	0.11	0.13	0.18	0.27					
	83	1.8	0.07	0.09	0.10	0.12	0.15	0.19	0.29	0.40		
	81	2.2	0.07	0.08	0.10	0.12	0.14	0.18	0.30	0.56		
HC10DXX2B20X	48	1.1	0.09	0.12	0.14	0.21	0.30					
	83	1.8	0.07	0.09	0.11	0.13	0.16	0.20	0.30	0.44		
	81	2.2	0.07	0.09	0.11	0.13	0.15	0.20	0.31	0.57		
HC10DXX1B40X	48	1.1	0.12	0.17	0.23	0.30	0.41					
	83	1.8	0.10	0.14	0.18	0.23	0.26	0.31	0.40	0.66		
	81	2.2	0.09	0.13	0.17	0.22	0.25	0.30	0.41	0.72		
HC10DXX2B40X	48	1.1	0.14	0.20	0.28	0.36	0.48					
	83	1.8	0.11	0.16	0.21	0.26	0.31	0.37	0.50	0.80		
	81	2.2	0.10	0.15	0.20	0.24	0.28	0.35	0.52	0.86		



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Micro cartridge 2-Stage	HC10

2. Body type

Description	Ordering No.
Dual vacuum cartridge type	D

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 20mm	1B20
Top bellows 1.5 folds, 40mm	1B40
Top bellows 2.5 folds, 20mm	2B20
Top bellows 2.5 folds, 40mm	2B40

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

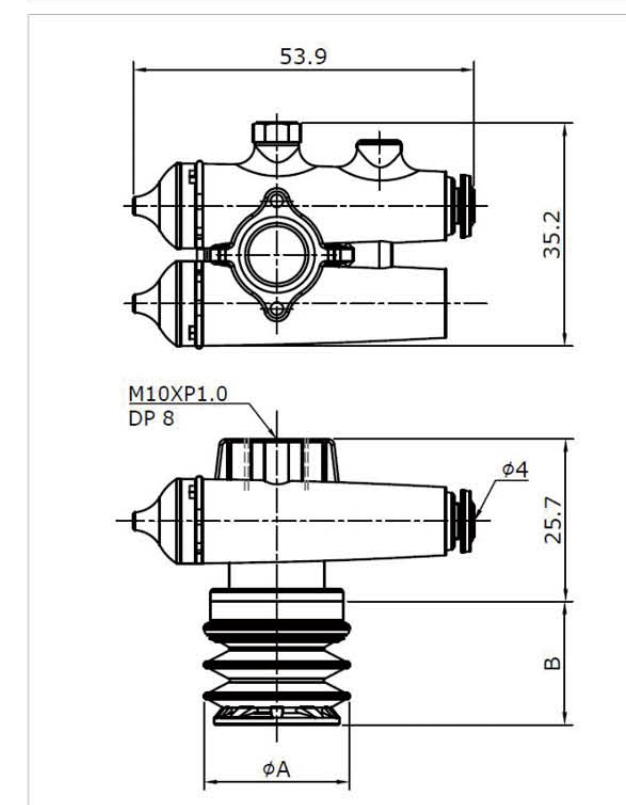
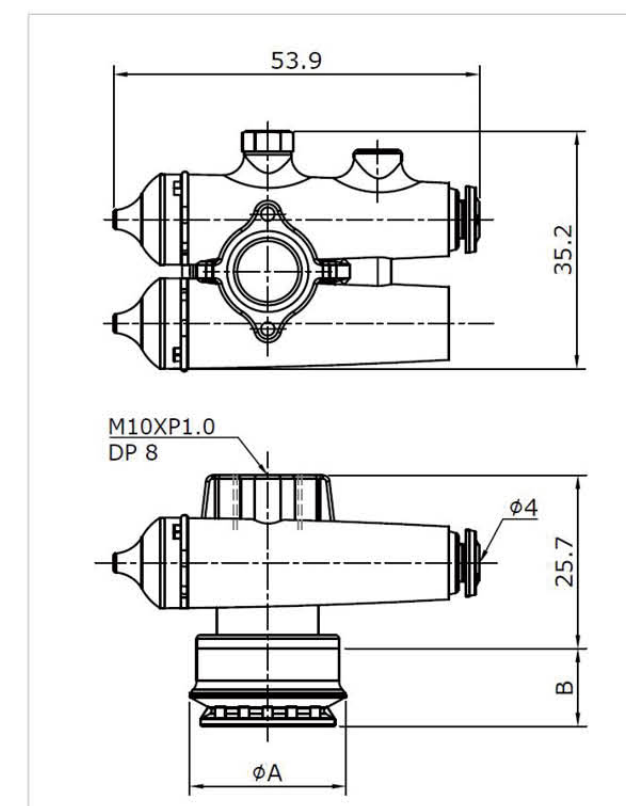
7. Suction lip

Description	Ordering No.
* Suction lip is required on page 110 ~ 149.	

Dimensional Data

HC10D (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC10DXX1B20F	23	11.5
HC10DXX1B40F	41	21.4

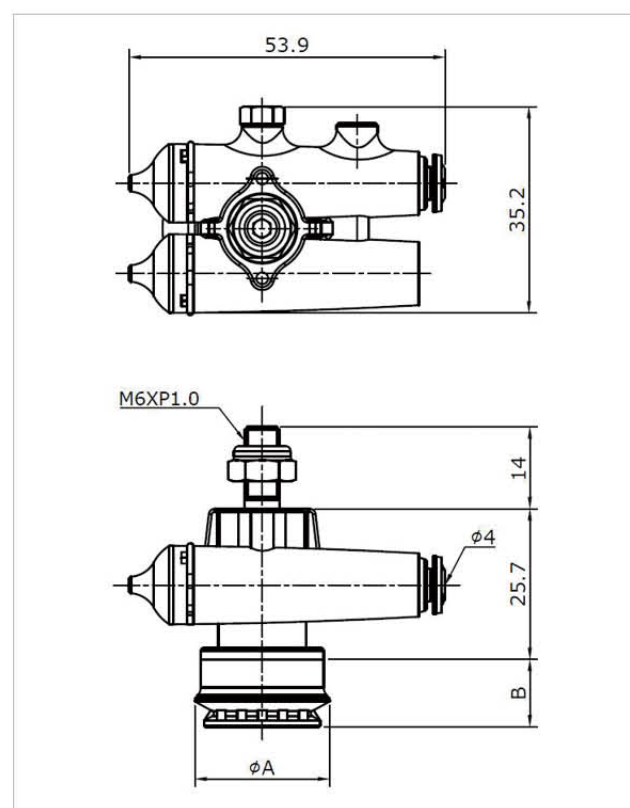
[Unit : mm]

Model	ØA	B
HC10DXX2B20F	23	19.5
HC10DXX2B40F	41	31.4



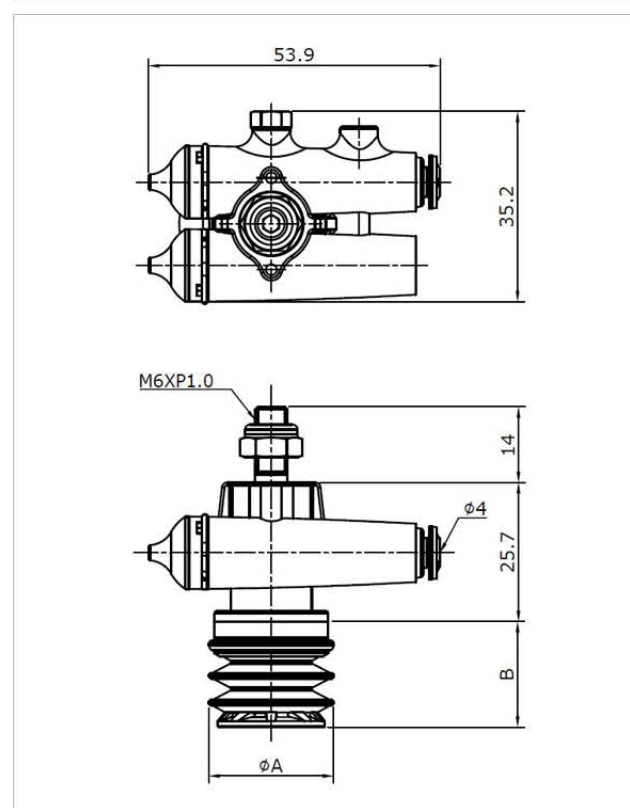
Dimensional Data

HC10D (With Mounting)



[Unit : mm]

Model	ØA	B
HC10DMX1B20F	23	11.5
HC10DMX1B40F	41	21.4

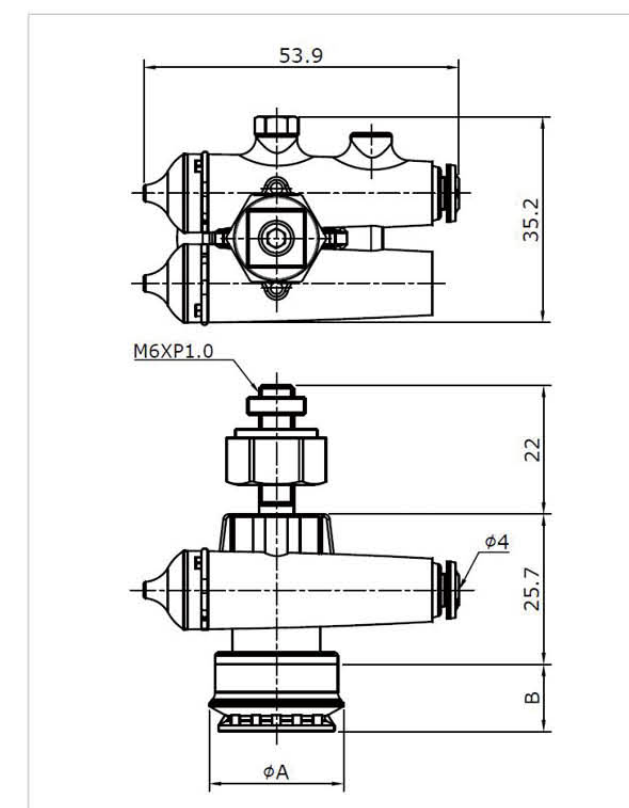


[Unit : mm]

Model	ØA	B
HC10DMX2B20F	23	19.5
HC10DMX2B40F	41	31.4

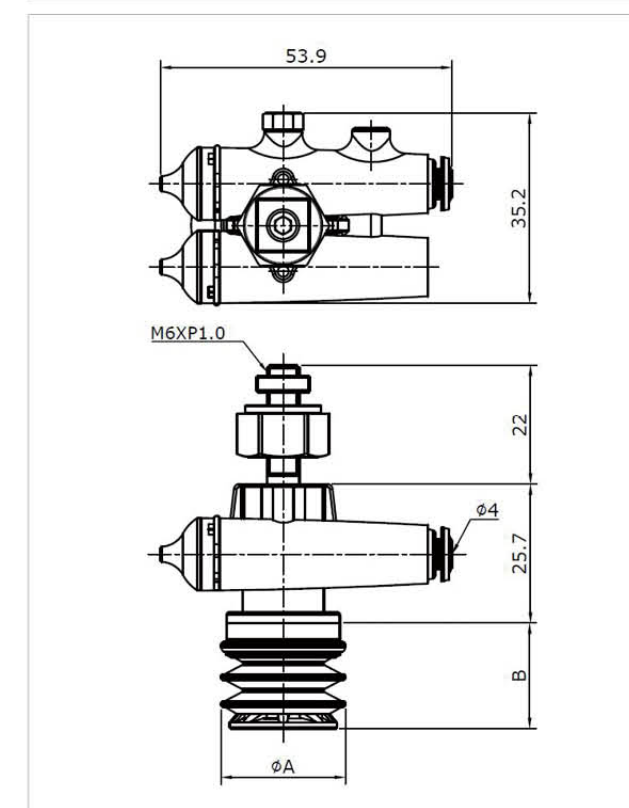
Dimensional Data

HC10D (With Profile)



[Unit : mm]

Model	ØA	B
HC10DPX1B20F	23	11.5
HC10DPX1B40F	41	21.4

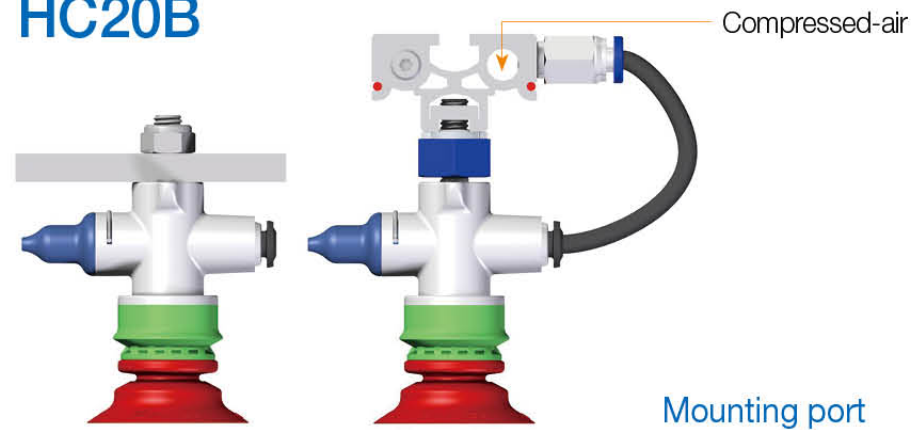


[Unit : mm]

Model	ØA	B
HC10DPX2B20F	23	19.5
HC10DPX2B40F	41	31.4



HC20B



Direct mounting

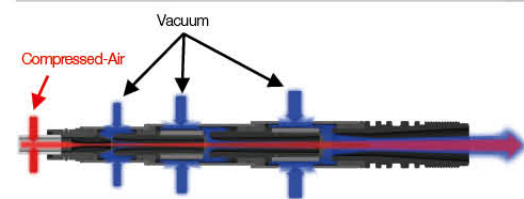
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

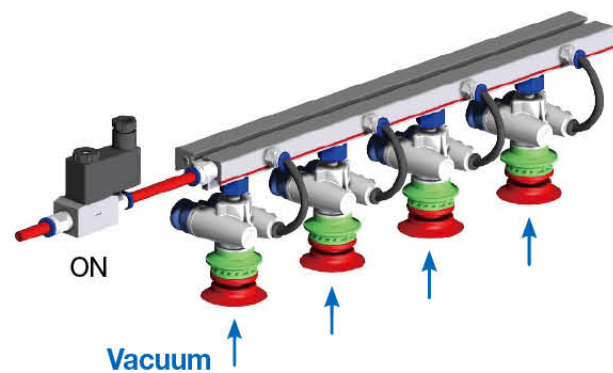
VMECA vacuum cartridge pump



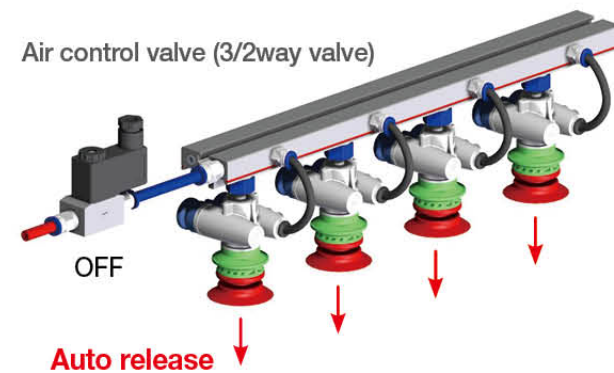
Automation vacuum release

Quick release system without release control valve

In **VACUUM** operation



In **RELEASE** operation



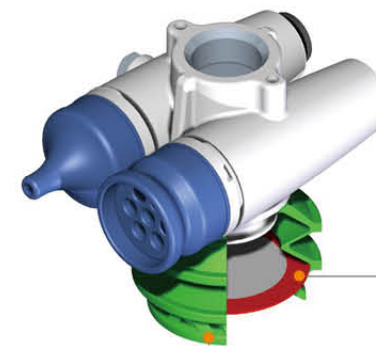
Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 40 & 60

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



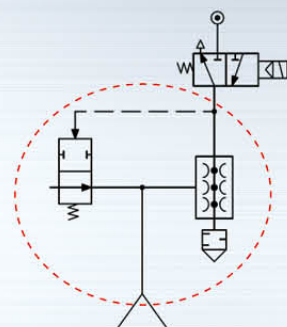
Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place





HC20B



Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low compressed-air pressure
- ✓ Quick release without release control valve
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications

Specifications

Description	HC20B
Max. Vacuum level	-92 kPa
Open Vacuum flow	42.2 NI/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	51 ~ 60 dBA
Weight	96.3 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

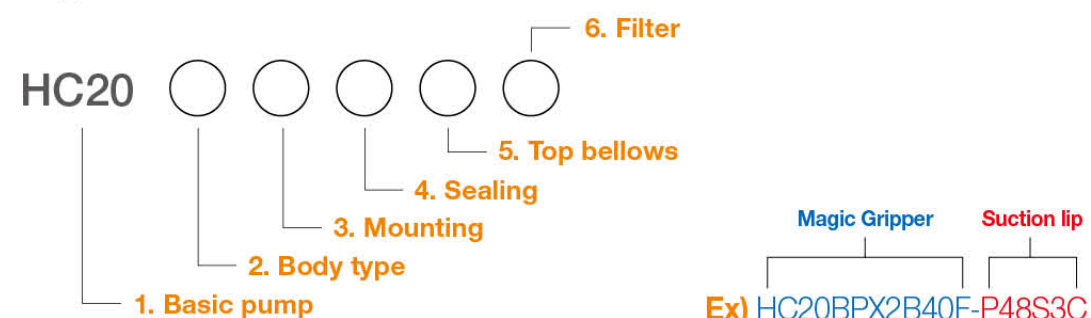
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC20B	63	2.2	21	36.8	27	17.8	16.8	12.7	7.6	2	-	-	-	
	92	3.3	27	40.5	33.6	23.7	16.5	13.8	11.9	7.8	3.8	2.3	-	
	91	4.0	32	42.2	40.2	26.5	19.3	14.3	11.6	8.8	5.8	2.6	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC20BXX1B40X	63	2.2	0.07	0.09	0.11	0.13	0.15	0.20			-	
	92	3.3	0.07	0.09	0.10	0.12	0.14	0.16	0.20	0.26	-	
	91	4.0	0.07	0.08	0.10	0.11	0.13	0.15	0.19	0.25	-	
HC20BXX2B40X	63	2.2	0.08	0.10	0.13	0.15	0.18	0.23			-	
	92	3.3	0.07	0.09	0.12	0.13	0.15	0.18	0.24	0.33	-	
	91	4.0	0.07	0.09	0.11	0.12	0.15	0.18	0.22	0.29	-	
HC20BXX1B60X	63	2.2	0.10	0.16	0.18	0.20	0.23	0.28				
	92	3.3	0.09	0.12	0.15	0.17	0.20	0.24	0.29	0.42		
	91	4.0	0.09	0.12	0.14	0.16	0.19	0.22	0.28	0.38		
HC20BXX2B60X	63	2.2	0.12	0.17	0.20	0.23	0.27	0.36				
	92	3.3	0.11	0.15	0.17	0.19	0.23	0.27	0.33	0.46		
	91	4.0	0.10	0.13	0.16	0.18	0.22	0.26	0.31	0.43		



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini cartridge 2-Stage	HC20

2. Body type

Description	Ordering No.
Single vacuum cartridge, Automatic vacuum release	B

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

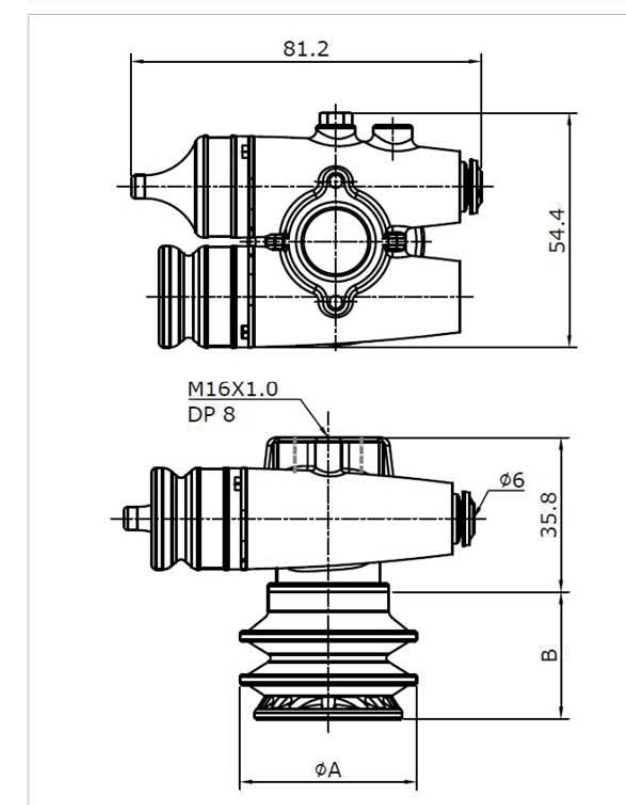
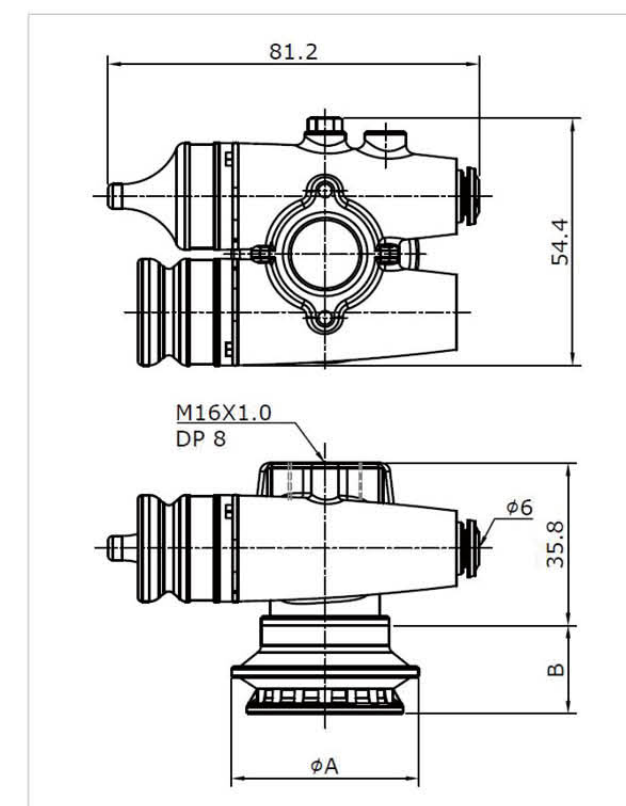
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

HC20B (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC20BXX1B40F	23	11.5
HC20BXX1B60F	41	21.4

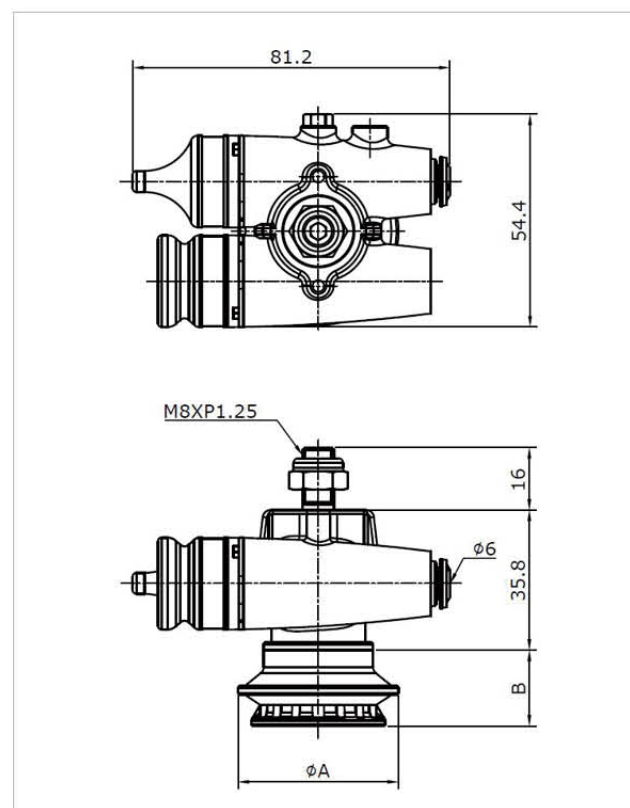
[Unit : mm]

Model	ØA	B
HC20BXX2B40F	23	19.5
HC20BXX2B60F	41	31.4



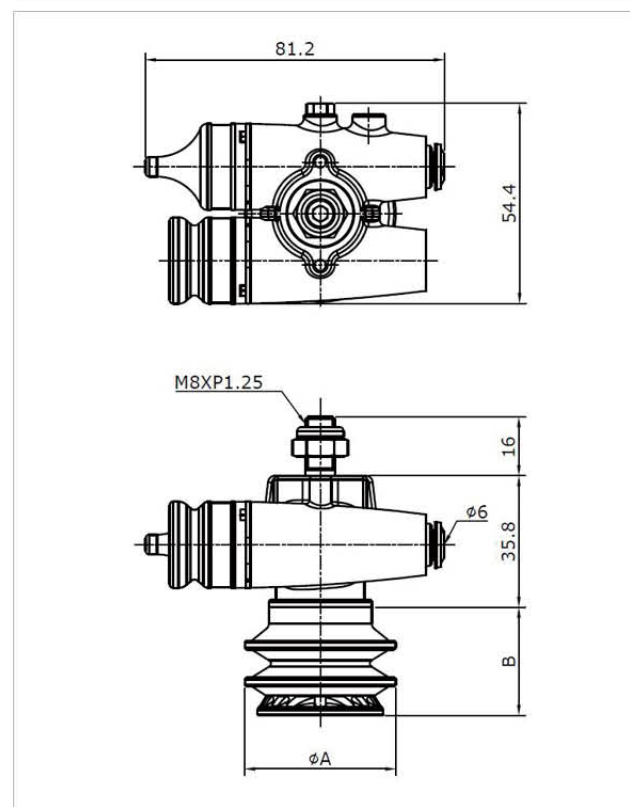
Dimensional Data

HC20B (With Mounting)



[Unit : mm]

Model	ØA	B
HC20BMX1B40F	23	11.5
HC20BMX1B60F	41	21.4

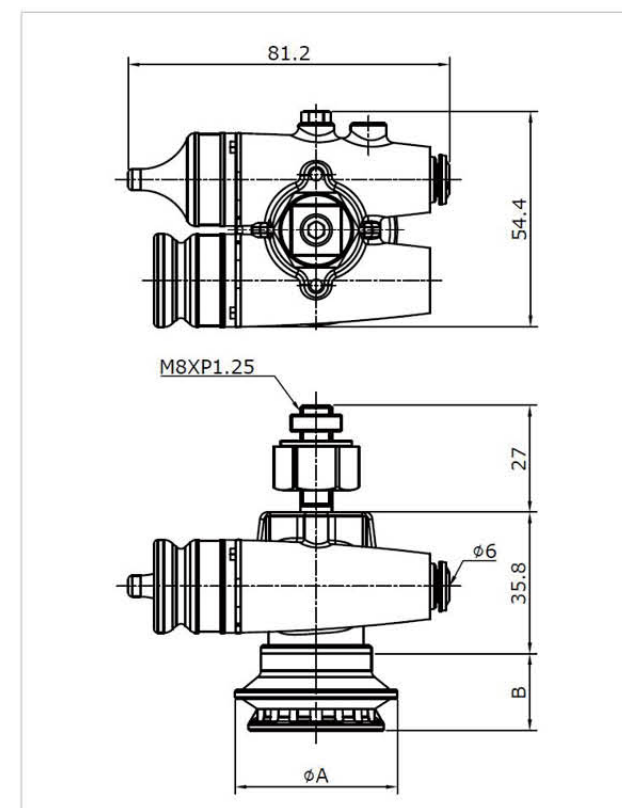


[Unit : mm]

Model	ØA	B
HC20BMX2B40F	23	19.5
HC20BMX2B60F	41	31.4

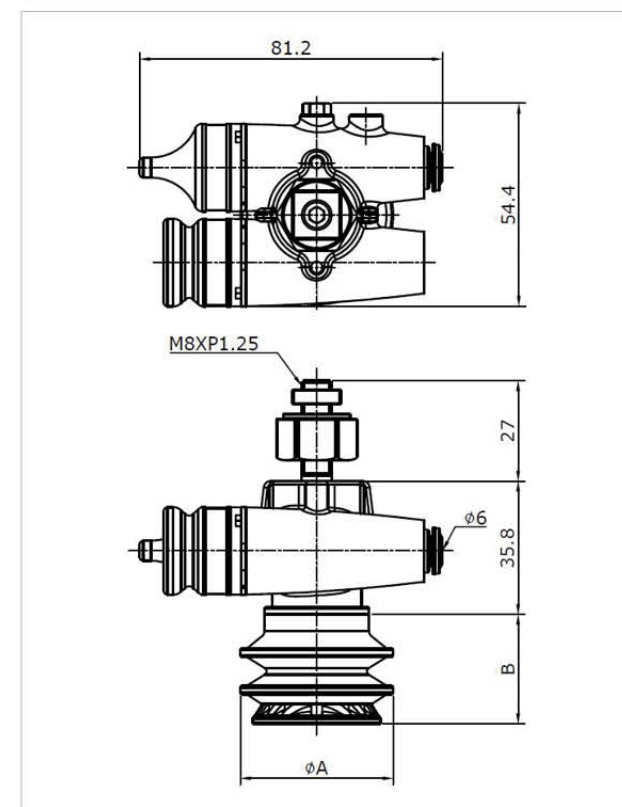
Dimensional Data

HC20B (With Profile)



[Unit : mm]

Model	ØA	B
HC20BPX1B40F	23	11.5
HC20BPX1B60F	41	21.4

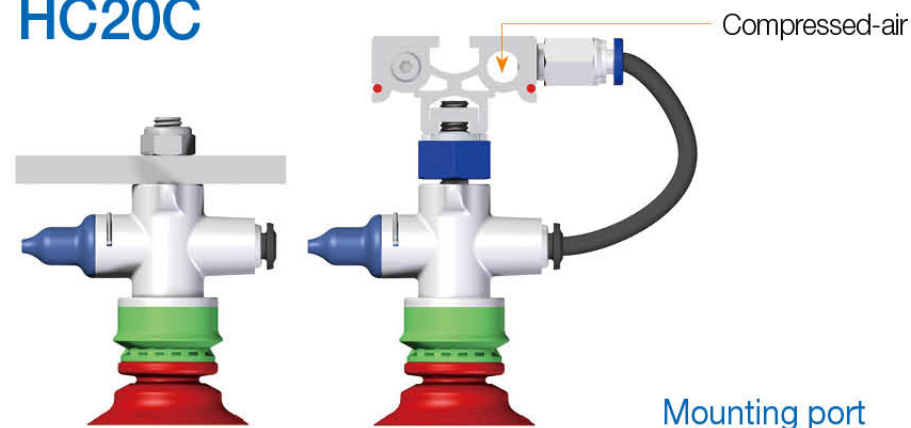


[Unit : mm]

Model	ØA	B
HC20BPX2B40F	23	19.5
HC20BPX2B60F	41	31.4



HC20C



Direct mounting

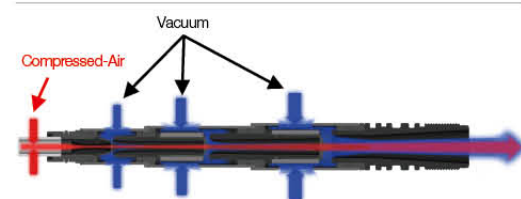
Profile mounting

Mounting port

Direct mounting Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

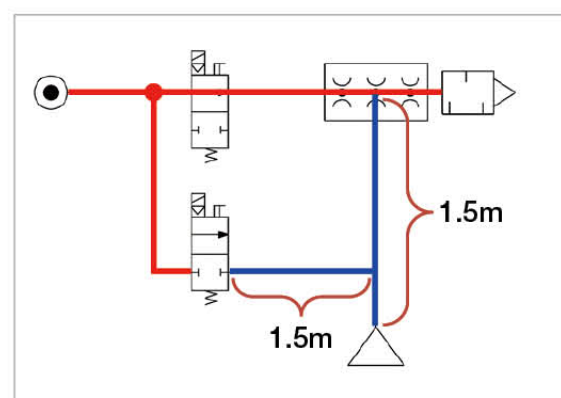
VMECA vacuum cartridge pump



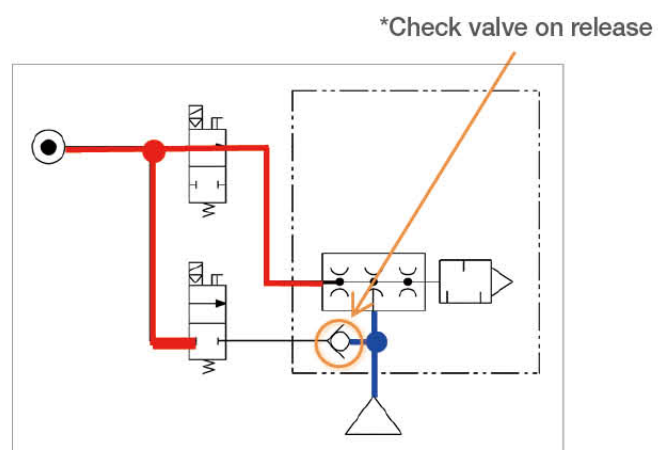
Check valve

"2times Faster" evacuation time!!

- No need to make the line for release vacuum (less volume)
- Installation at the nearest from suction point



Conventional



Magic Grippers

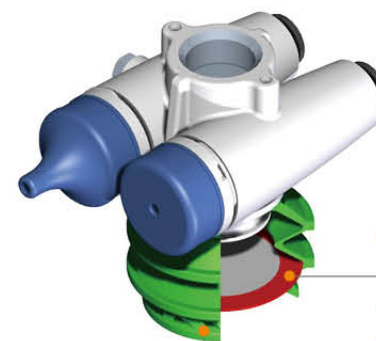
Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 40 & 60

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



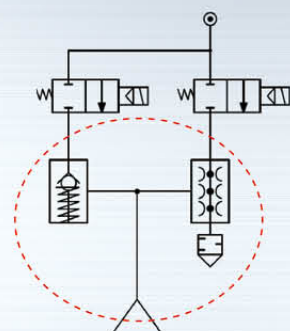
Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place





HC20C



Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Check valve on release port for fast evacuation time
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications

Specifications

Description	HC20C
Max. Vacuum level	-92 kPa
Open Vacuum flow	42.2 NI/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	51 ~ 60 dBA
Weight	88.8 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

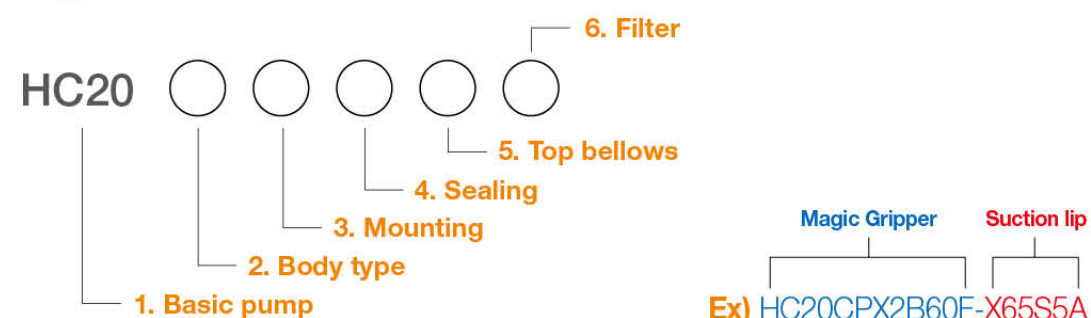
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC20C	63	2.2	21	36.8	27	17.8	16.8	12.7	7.6	2	-	-	-	
	92	3.3	27	40.5	33.6	23.7	16.5	13.8	11.9	7.8	3.8	2.3	-	
	91	4.0	32	42.2	40.2	26.5	19.3	14.3	11.6	8.8	5.8	2.6	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC20CXX1B40X	63	2.2	0.07	0.09	0.11	0.13	0.15	0.2				-
	92	3.3	0.07	0.09	0.1	0.12	0.14	0.16	0.2	0.26		-
	91	4	0.07	0.08	0.1	0.11	0.13	0.15	0.19	0.25		-
HC20CXX2B40X	63	2.2	0.08	0.1	0.13	0.15	0.18	0.23				-
	92	3.3	0.07	0.09	0.12	0.13	0.15	0.18	0.24	0.33		-
	91	4	0.07	0.09	0.11	0.12	0.15	0.18	0.22	0.29		-
HC20CXX1B60X	63	2.2	0.1	0.16	0.18	0.2	0.23	0.28				
	92	3.3	0.09	0.12	0.15	0.17	0.2	0.24	0.29	0.42		
	91	4	0.09	0.12	0.14	0.16	0.19	0.22	0.28	0.38		
HC20CXX2B60X	63	2.2	0.12	0.17	0.2	0.23	0.27	0.36				
	92	3.3	0.11	0.15	0.17	0.19	0.23	0.27	0.33	0.46		
	91	4	0.1	0.13	0.16	0.18	0.22	0.26	0.31	0.43		



Build an Ordering No.

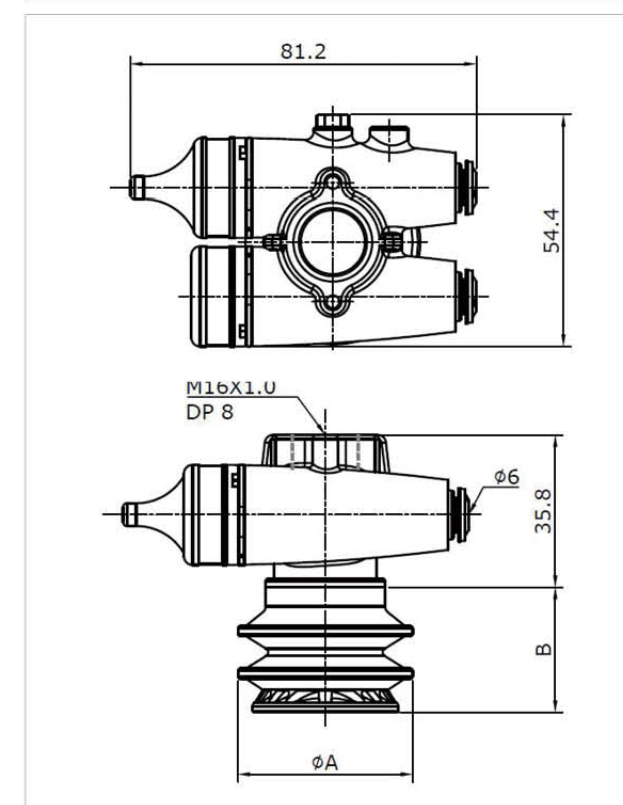
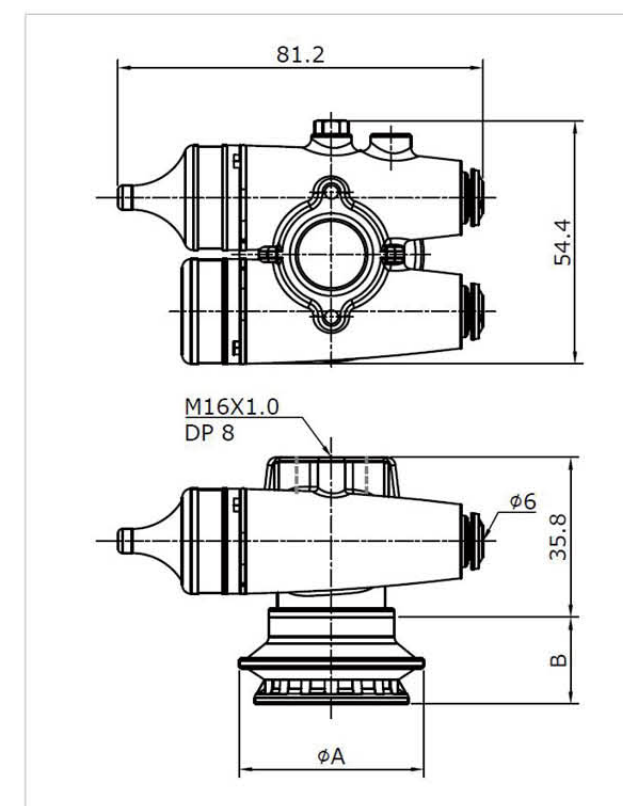


	Description	Ordering No.
1. Basic pump	Magic Gripper, Mini cartridge 2-Stage	HC20
2. Body type	Single vacuum cartridge, Check valve type	C
3. Mounting	No mount	X
	Direct mount	M
	Profile mount	P
4. Sealing	NBR	X
	EPDM	E
	Viton	V
5. Top bellows	Top bellows 1.5 folds, 40mm	1B40
	Top bellows 1.5 folds, 60mm	1B60
	Top bellows 2.5 folds, 40mm	2B40
	Top bellows 2.5 folds, 60mm	2B60
6. Filter	No filter	X
	Filter (200mesh)	F
7. Suction lip	* Suction lip is required on page 110 ~ 149.	

Dimensional Data

HC20C (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC20CXX1B40F	23	11.5
HC20CXX1B60F	41	21.4

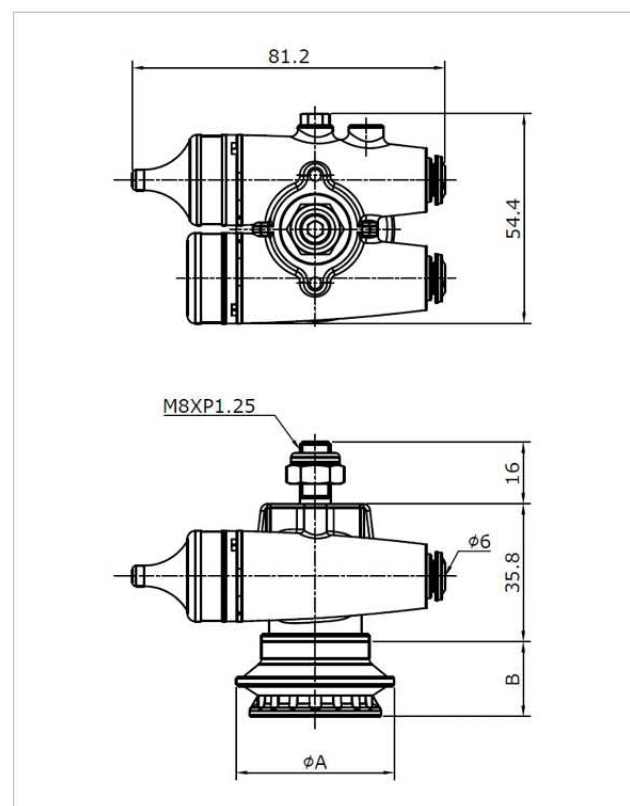
[Unit : mm]

Model	ØA	B
HC20CXX2B40F	23	19.5
HC20CXX2B60F	41	31.4



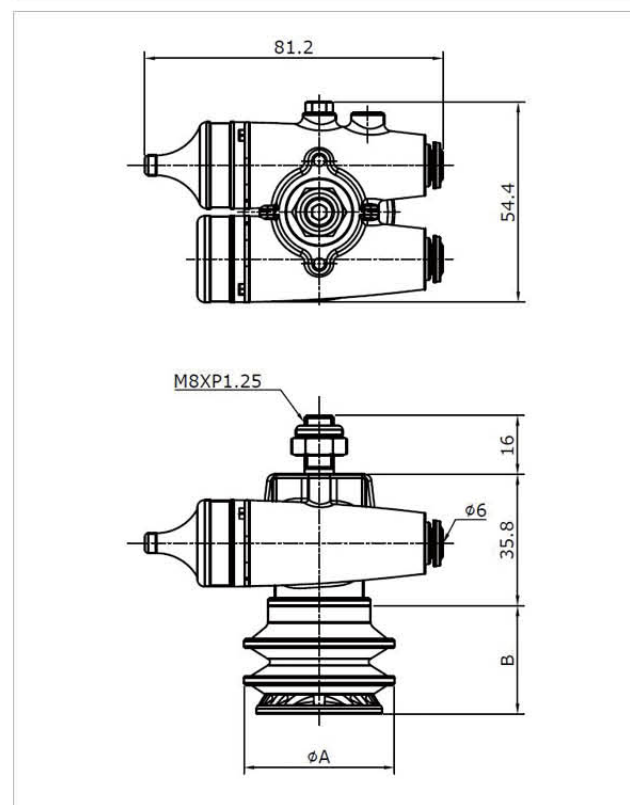
Dimensional Data

HC20C (With Mounting)



[Unit : mm]

Model	ØA	B
HC20CMX1B40F	23	11.5
HC20CMX1B60F	41	21.4

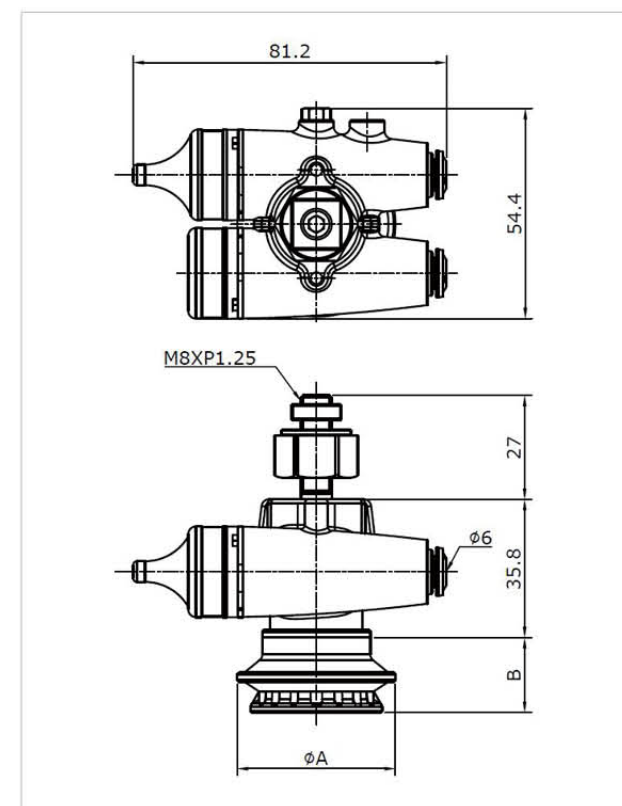


[Unit : mm]

Model	ØA	B
HC20CMX2B40F	23	19.5
HC20CMX2B60F	41	31.4

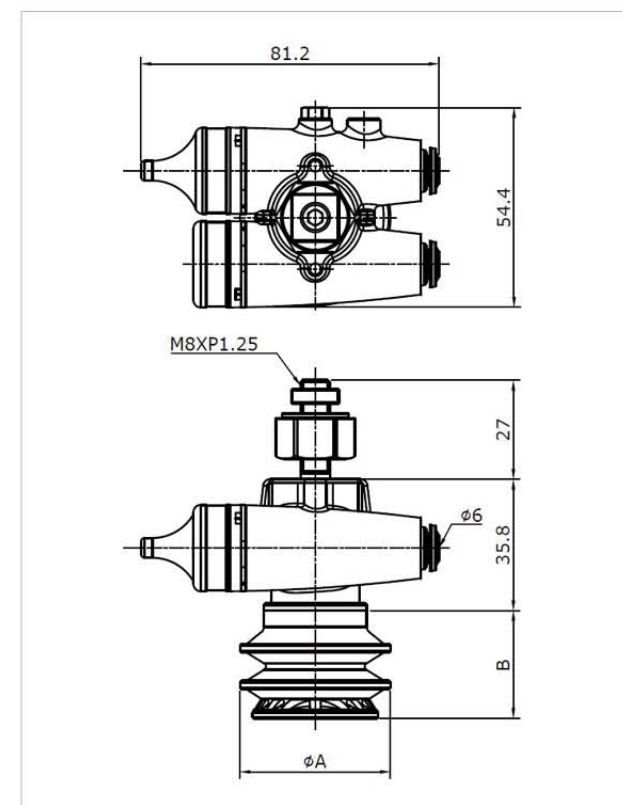
Dimensional Data

HC20C (With Profile)



[Unit : mm]

Model	ØA	B
HC20CPX1B40F	23	11.5
HC20CPX1B60F	41	21.4

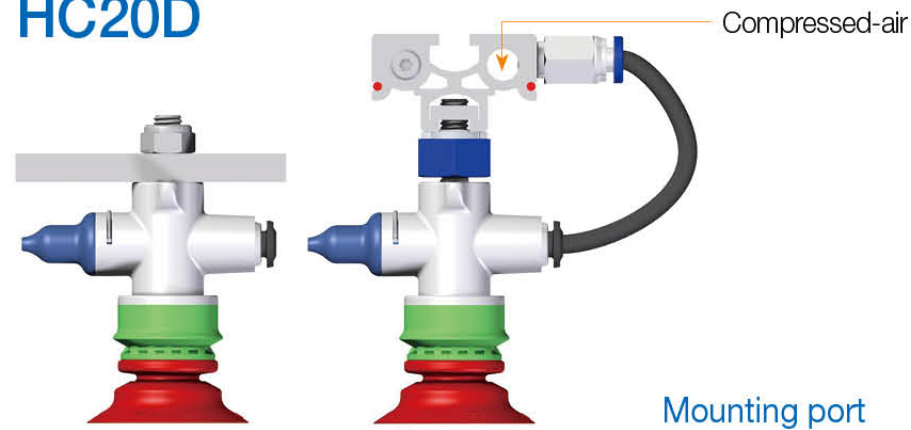


[Unit : mm]

Model	ØA	B
HC20CPX2B40F	23	19.5
HC20CPX2B60F	41	31.4



HC20D



Direct mounting

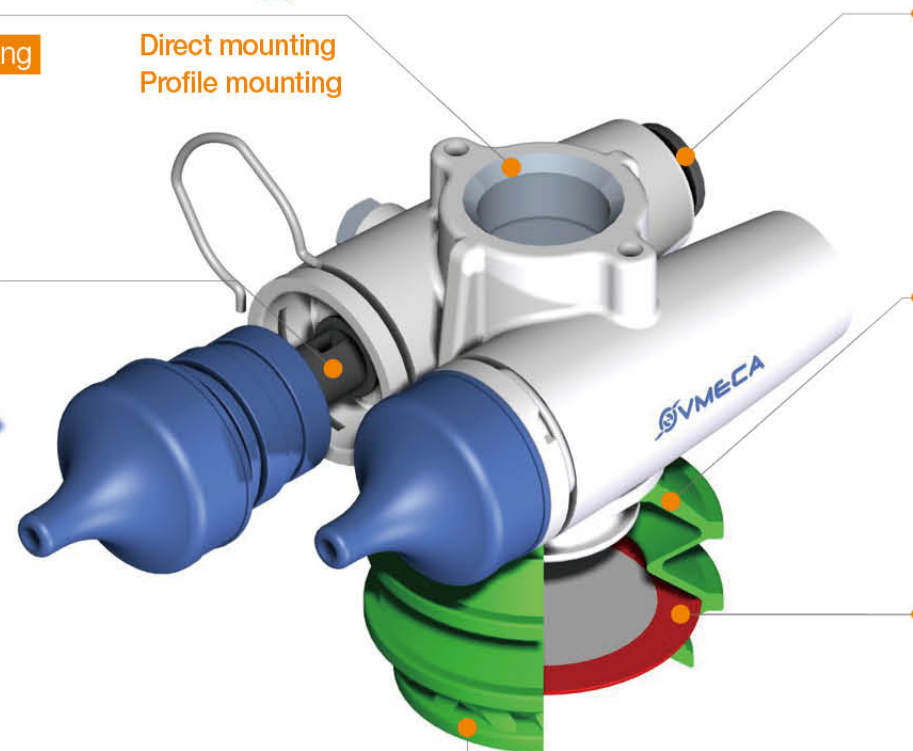
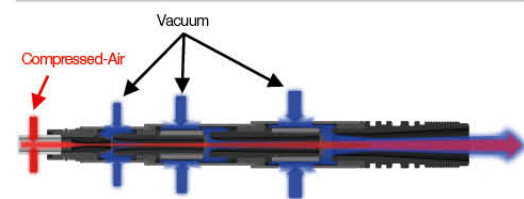
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

VMECA vacuum cartridge pump



Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 40 & 60

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure

Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place

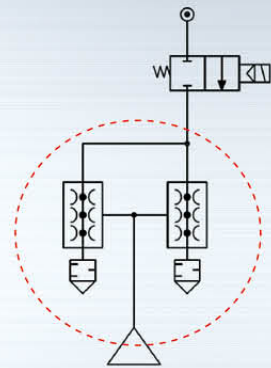




HC20D

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Dual cartridge - Double capacity (High flow)
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC20D
Max. Vacuum level	-92 kPa
Open Vacuum flow	75.7 NI/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	55 ~ 65 dBA
Weight	87.5 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

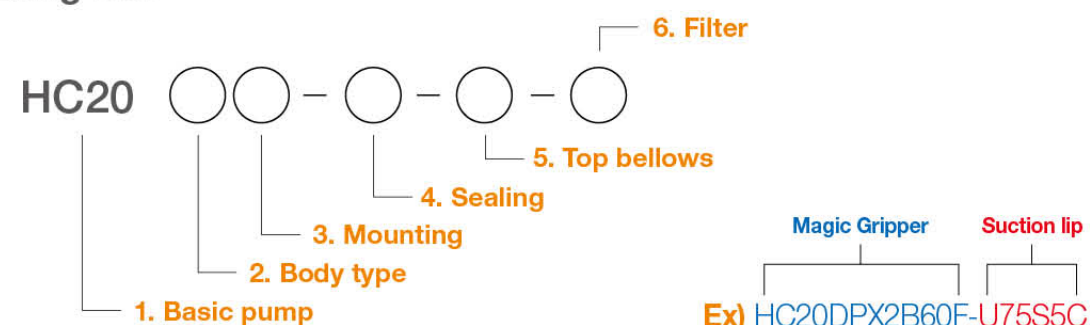
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC20D	63	2.2	40	66.2	49.2	32.2	28	18	13	3.1	-	-	-	
	92	3.3	55	74	57.5	41.5	28	22.5	18.5	16.4	10.3	5.8	-	
	91	4.0	56	75.7	73.6	44.5	34	22	18.2	17.2	11.7	5.2	-	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC20DXX1B40X	63	2.2	0.07	0.09	0.1	0.11	0.13	0.19	-	-	-	
	92	3.3	0.07	0.08	0.09	0.1	0.12	0.13	0.15	0.19	-	
	91	4	0.06	0.08	0.09	0.1	0.11	0.13	0.15	0.2	-	
HC20DXX2B40X	63	2.2	0.08	0.09	0.11	0.12	0.14	0.2				
	92	3.3	0.07	0.09	0.1	0.11	0.13	0.15	0.17	0.21		
	91	4	0.07	0.08	0.09	0.11	0.12	0.14	0.17	0.22		
HC20DXX1B60X	63	2.2	0.08	0.11	0.13	0.15	0.17	0.24				
	92	3.3	0.08	0.1	0.12	0.13	0.15	0.18	0.19	0.26		
	91	4	0.08	0.1	11	0.12	0.14	0.16	0.19	0.26		
HC20DXX2B60X	63	2.2	0.09	0.13	0.15	0.17	0.2	0.28				
	92	3.3	0.09	0.11	0.13	0.15	0.18	0.19	0.23	0.28		
	91	4	0.09	0.11	0.12	0.14	0.16	0.18	0.23	0.29		



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini cartridge 2-Stage	HC20

2. Body type

Description	Ordering No.
Dual vacuum cartridge type	D

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

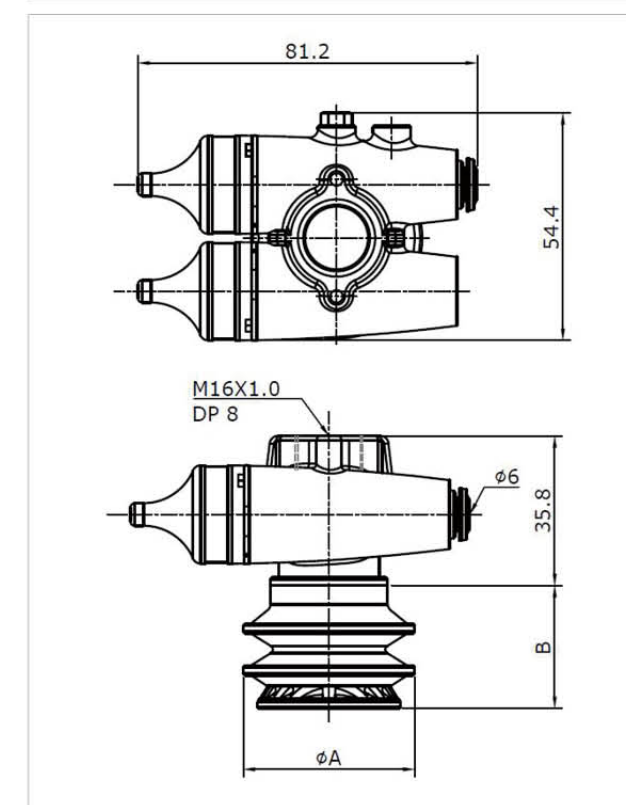
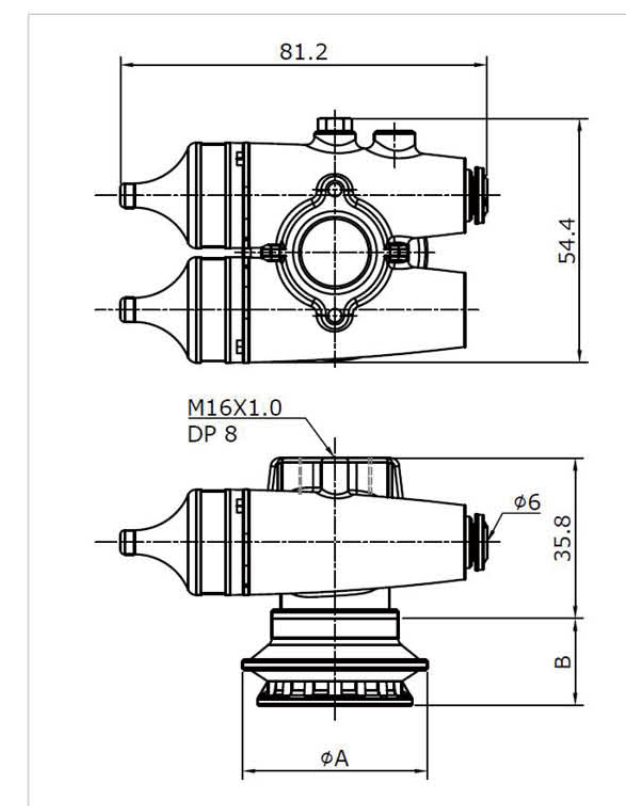
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

HC20D (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC20DXX1B40F	23	11.5
HC20DXX1B60F	41	21.4

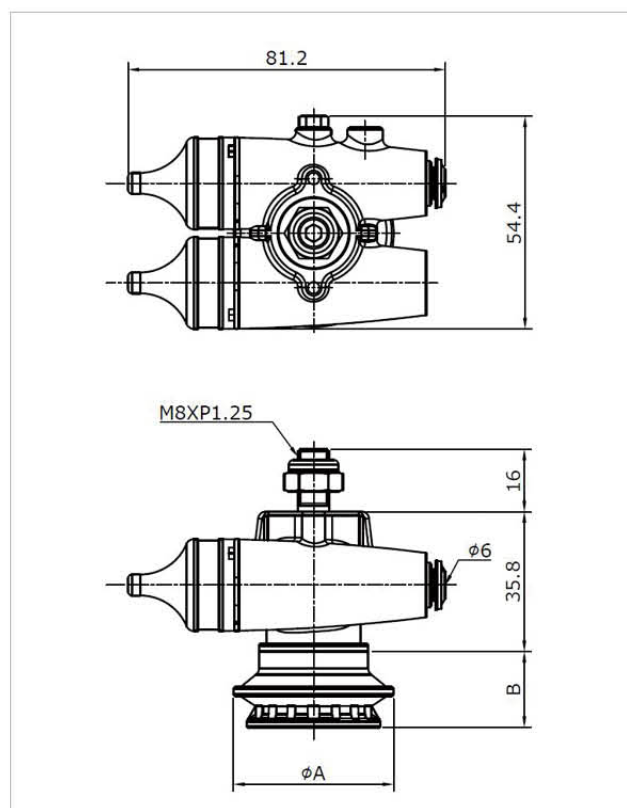
[Unit : mm]

Model	ØA	B
HC20DXX2B40F	23	19.5
HC20DXX2B60F	41	31.4



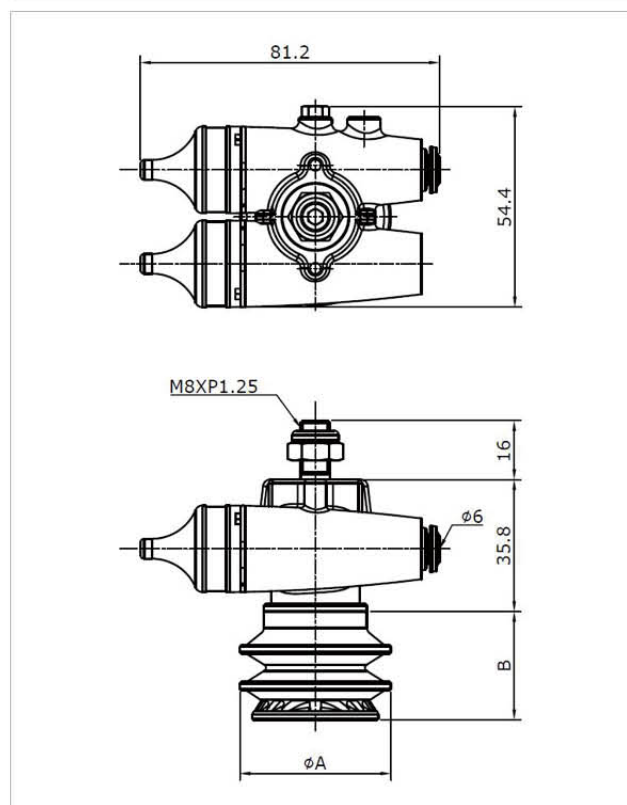
Dimensional Data

HC20D (With Mounting)



[Unit : mm]

Model	ØA	B
HC20DMX1B40F	23	11.5
HC20DMX1B60F	41	21.4

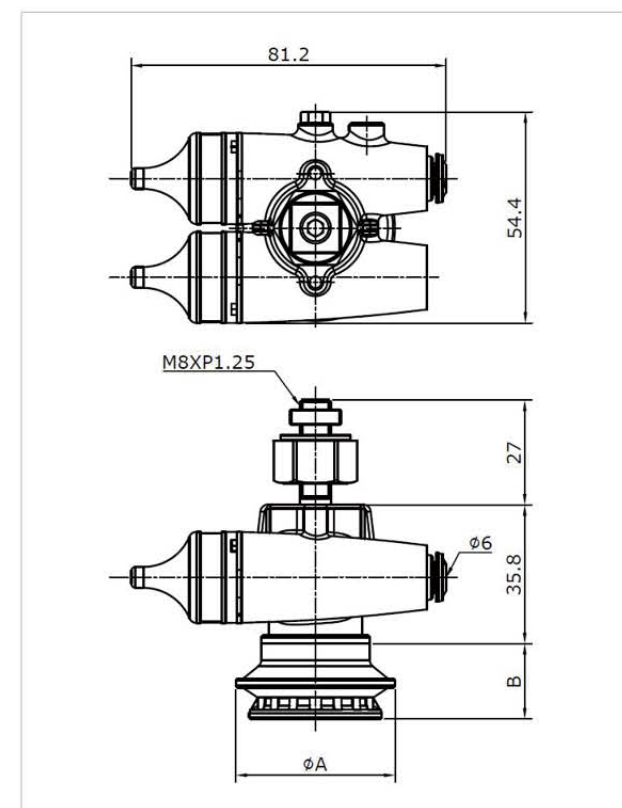


[Unit : mm]

Model	ØA	B
HC20DMX2B40F	23	19.5
HC20DMX2B60F	41	31.4

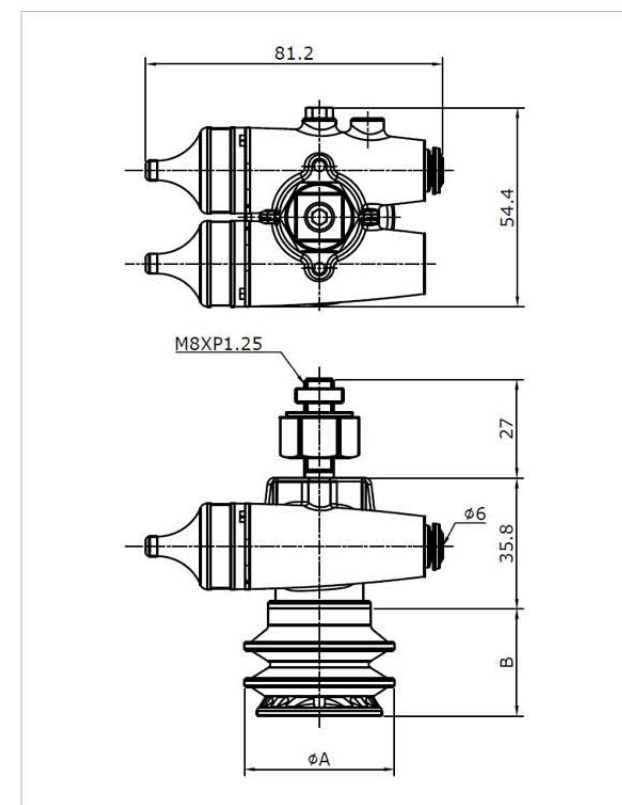
Dimensional Data

HC20D (With Profile)



[Unit : mm]

Model	ØA	B
HC20DPX1B40F	23	11.5
HC20DPX1B60F	41	21.4

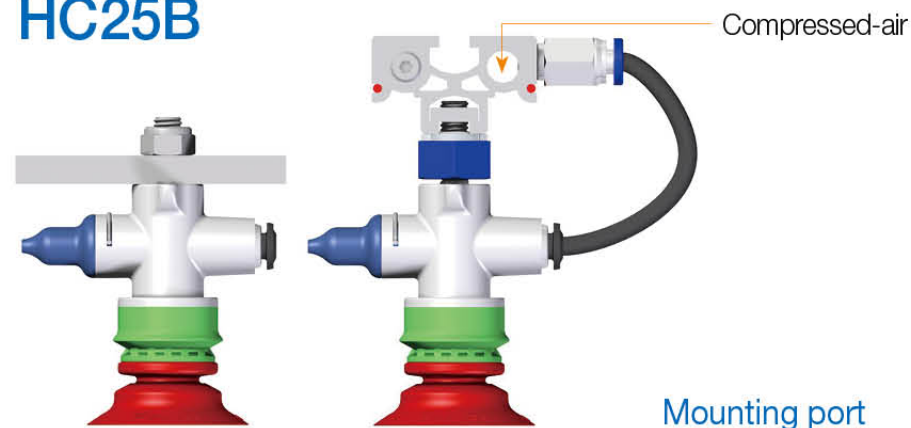


[Unit : mm]

Model	ØA	B
HC20DPX2B40F	23	19.5
HC20DPX2B60F	41	31.4



HC25B



Direct mounting

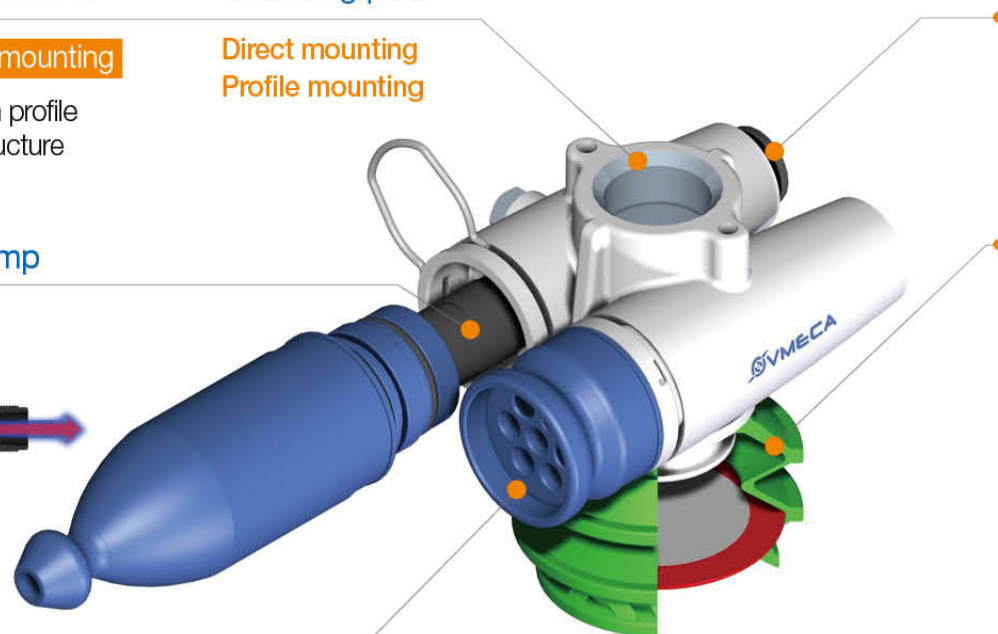
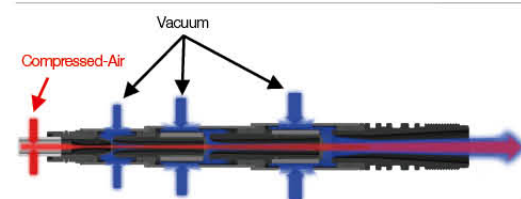
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

Mounting port

Direct mounting
Profile mounting

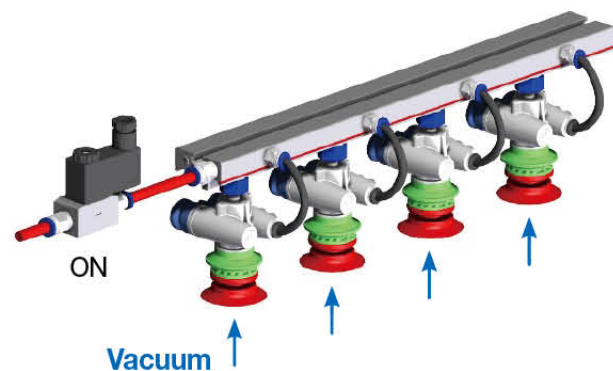
VMECA vacuum cartridge pump



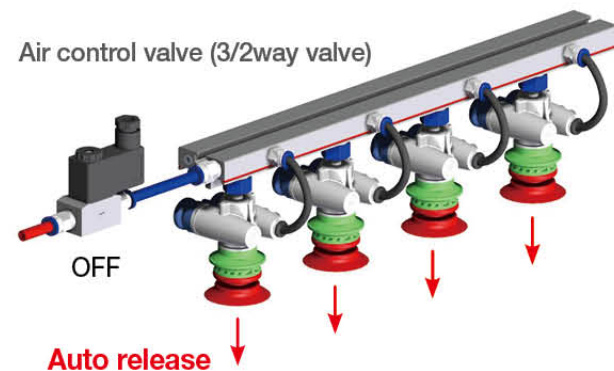
Automation vacuum release

Quick release system without release control valve

In **VACUUM** operation



In **RELEASE** operation



Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 20 & 40

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place

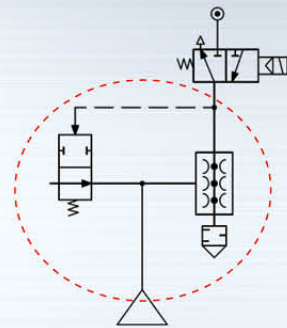




HC25B

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low comperssed-air pressure
- ✓ Quick release without release control valve
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC25B
Max. Vacuum level	-95.2 kPa
Open Vacuum flow	77.8 NI/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	67 ~ 71 dBA
Weight	124.2 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

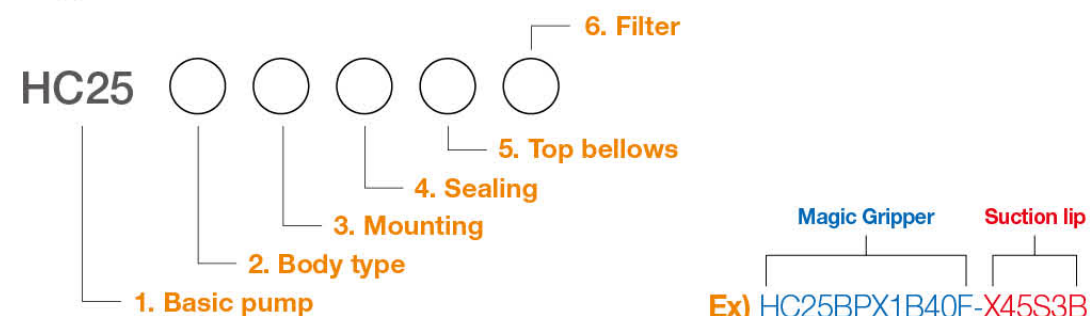
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC25B	88.2	4.5	75	71.3	58.5	41.7	37	30.7	26.1	20.5	16.2	9.6	-	
	95.2	5.2	85	73.8	64	46.6	37.3	31.1	26.6	20.6	16.6	14.2	3	
	94.6	6.0	96	77.8	66.3	51.2	39.6	29.1	23.5	18.6	16	11.7	2.5	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC25BXX1B40X	88.2	0.45	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.17		
	95.2	0.52	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.23	
	94.6	0.60	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.26	
HC25BXX2B40X	88.2	0.45	0.07	0.08	0.09	0.10	0.11	0.13	0.14	0.18		
	95.2	0.52	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.16	0.25	
	94.6	0.60	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.16	0.27	
HC25BXX1B60X	88.2	0.45	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.21		
	95.2	0.52	0.08	0.09	0.10	0.11	0.14	0.15	0.16	0.19	0.30	
	94.6	0.60	0.08	0.09	0.10	0.11	0.13	0.14	0.16	0.18	0.35	
HC25BXX2B60X	88.2	0.45	0.09	0.11	0.13	0.14	0.15	0.16	0.19	0.23		
	95.2	0.52	0.09	0.11	0.12	0.13	0.14	0.16	0.18	0.21	0.33	
	94.6	0.60	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.20	0.38	



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini premium cartridge 2-Stage	HC25

2. Body type

Description	Ordering No.
Single vacuum cartridge, Automatic vacuum release	B

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

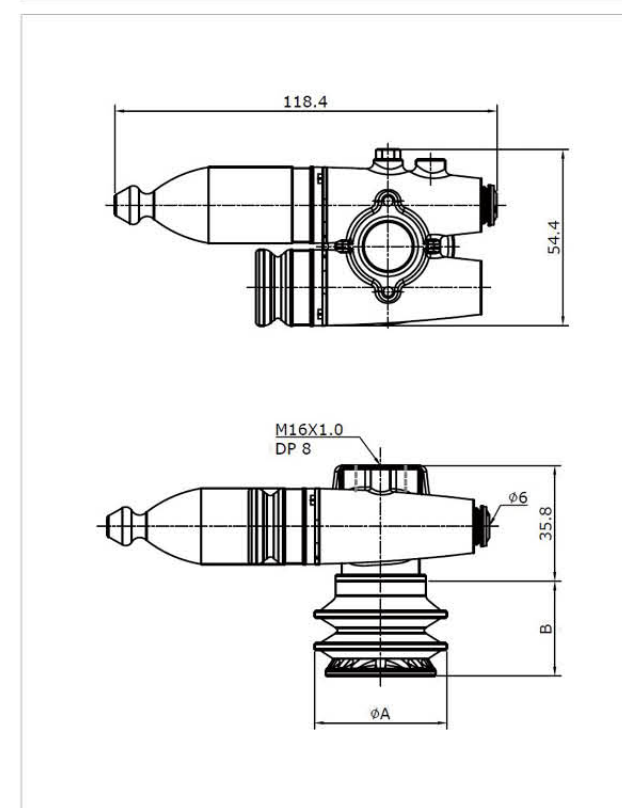
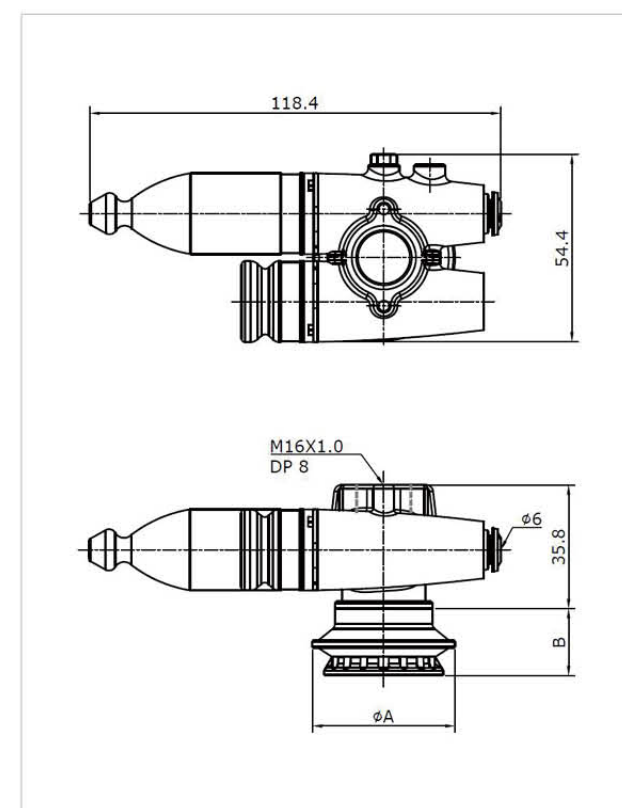
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

HC25B (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC25BXX1B40F	41	21.4
HC25BXX1B60F	56	30.4

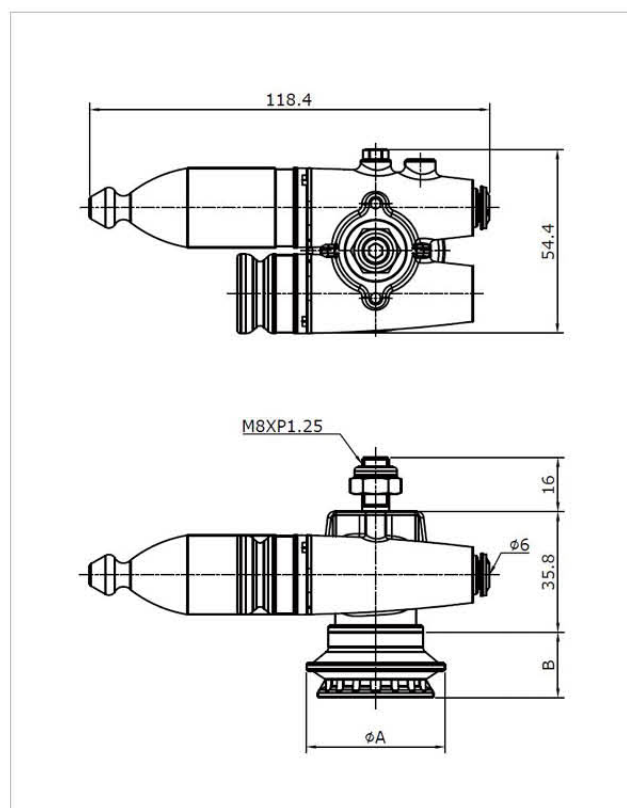
[Unit : mm]

Model	ØA	B
HC25BXX2B40F	41	31.4
HC25BXX2B60F	56	44.8



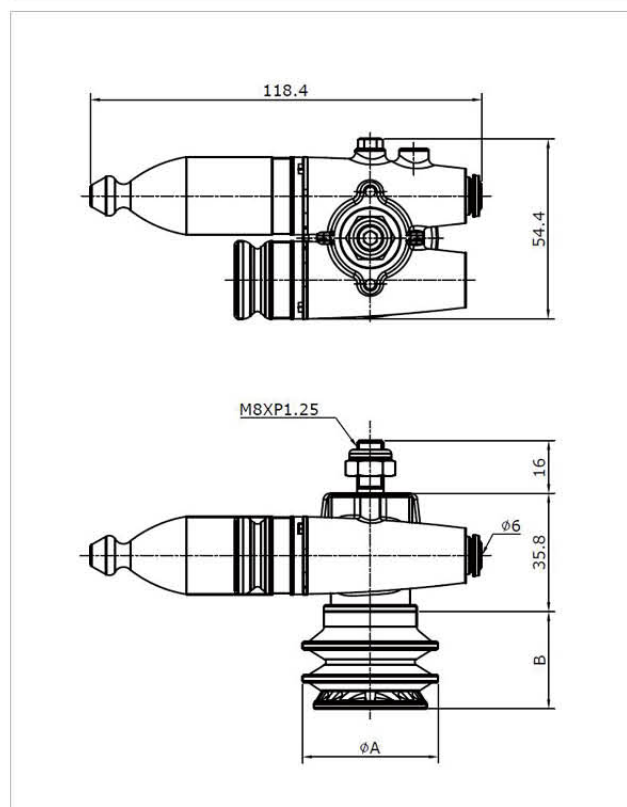
Dimensional Data

HC25B (With Mounting)



[Unit : mm]

Model	ØA	B
HC25BMX1B40F	41	21.4
HC25BMX1B60F	56	30.4

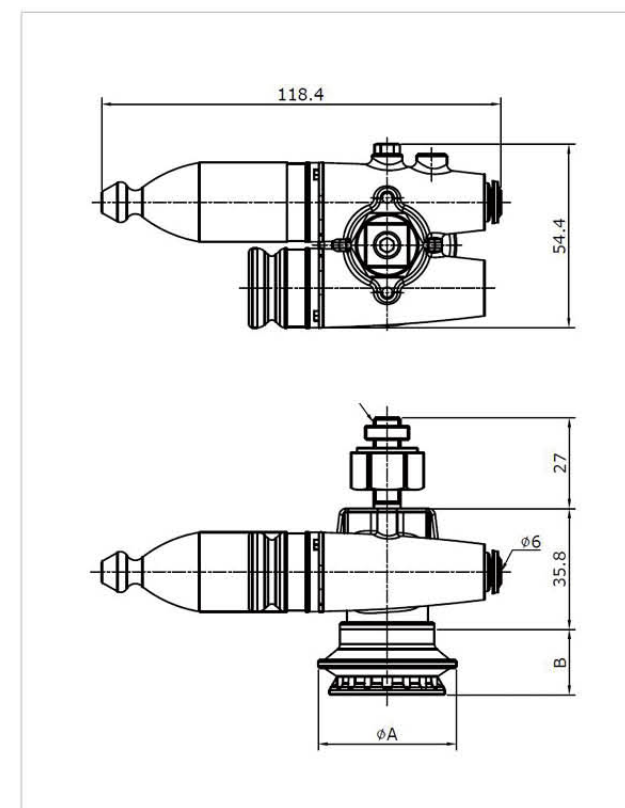


[Unit : mm]

Model	ØA	B
HC25BMX2B40F	41	21.4
HC25BMX2B60F	56	44.8

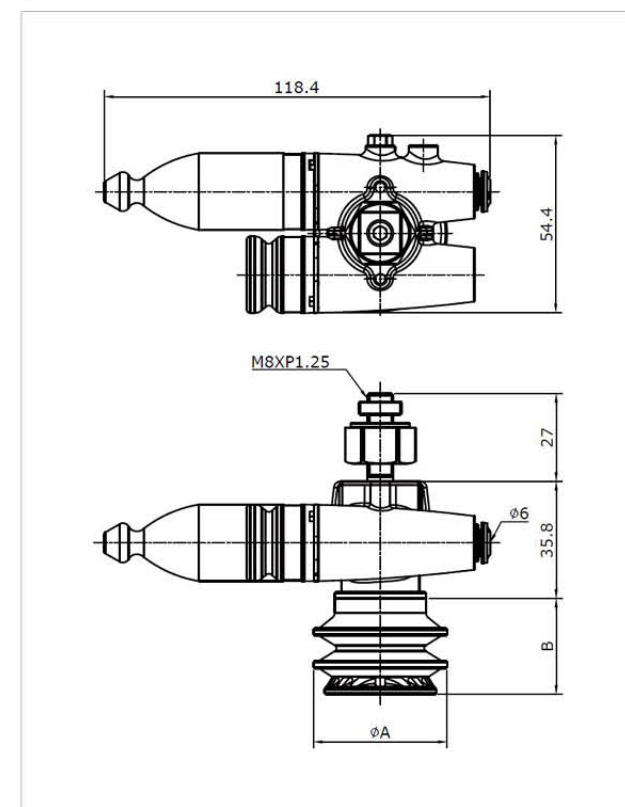
Dimensional Data

HC25B (With Profile)



[Unit : mm]

Model	ØA	B
HC25BPX1B40F	41	21.4
HC25BPX1B60F	56	30.4

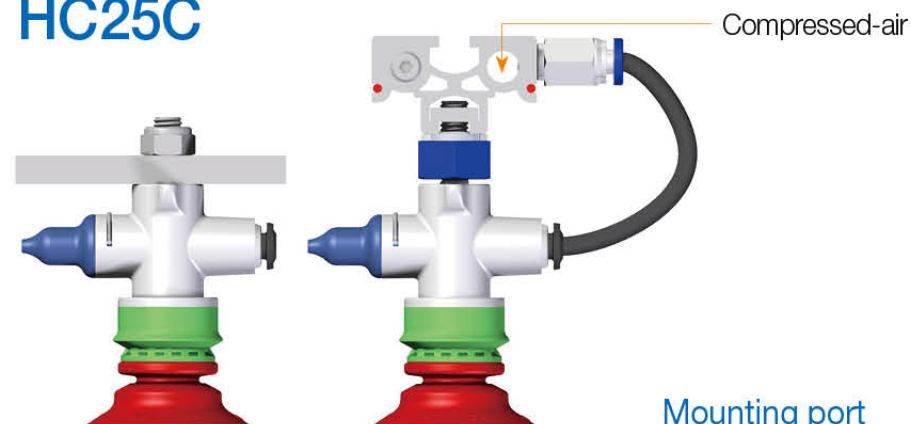


[Unit : mm]

Model	ØA	B
HC25BPX2B40F	41	21.4
HC25BPX2B60F	56	44.8



HC25C



Compressed-air

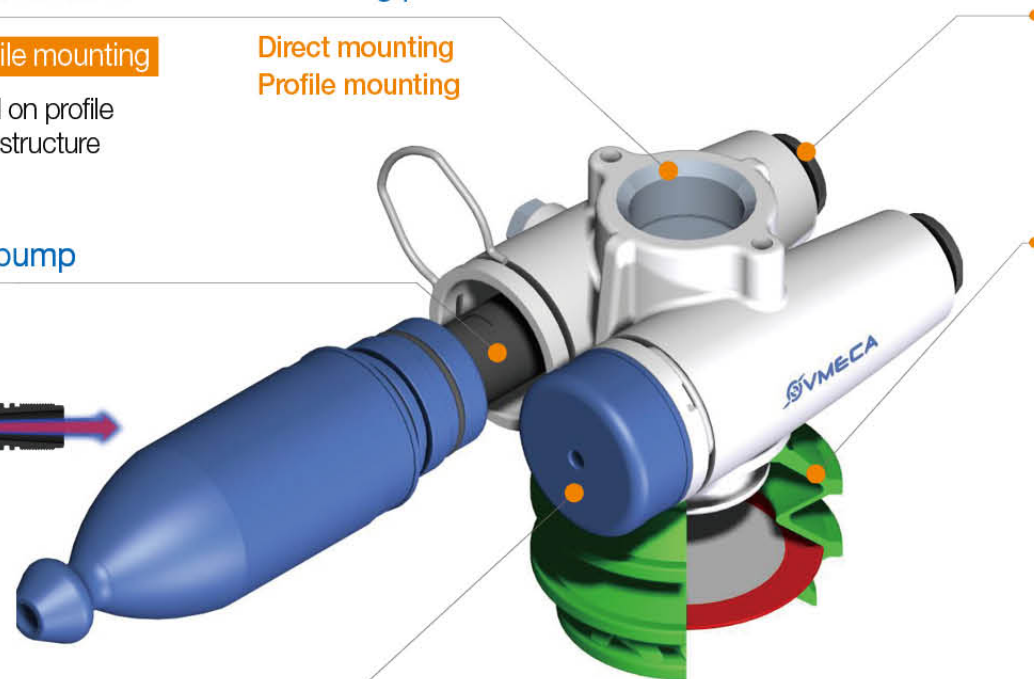
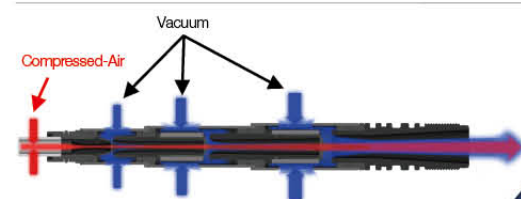
Direct mounting

Profile mounting

Direct mounting
Profile mounting

- Easy to mount on plate and on profile
- Available for simple system structure

VMECA vacuum cartridge pump

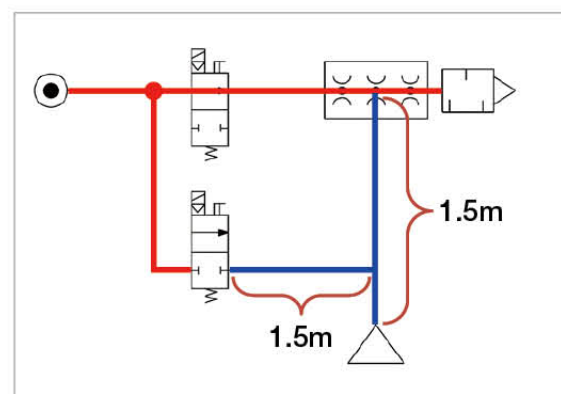


Check valve

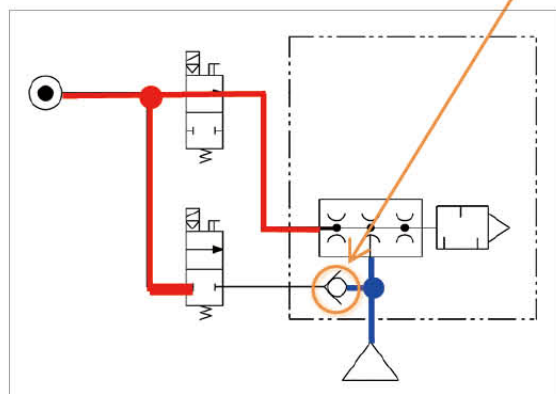
“2times Faster” evacuation time!!

- No need to make the line for release vacuum (less volume)
- Installation at the nearest from suction point

*Check valve on release



Conventional



Magic Grippers

Compressed air port

One touch fitting for O.D 6mm tube

Top bellows - 20 & 40

Various type of top bellows

- Excellent performance in all application covered in automation industry
- Flexibility by configurable structure



Vacuum Filter

- Excellent filtering capacity
- Safe from dust in work place

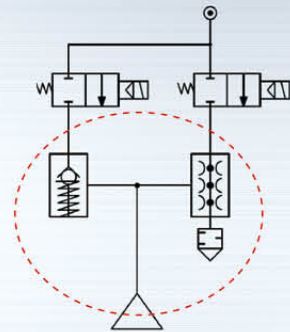




HC25C

Features

- ✓ VMECA cartridge intergated
 - Highly operational reliability despite fluctuating or low compressed-air pressure
- ✓ Check valve on release port for fast evacuation time
- ✓ Compact & Light weight
- ✓ Low air consumption
- ✓ Various mounting options
- ✓ Excellent gripping
- ✓ Various suction lips for different applications



Specifications

Description	HC25C
Max. Vacuum level	-95.2 kPa
Open Vacuum flow	77.8 NI/min
Max. Feed pressure	7 Bar
Temperature	-20 ~ 80 °C
Noise level	67 ~ 71 dBA
Weight	117.8 g

* The weight is calculated without top bellow and suction lip.

Vacuum Flow

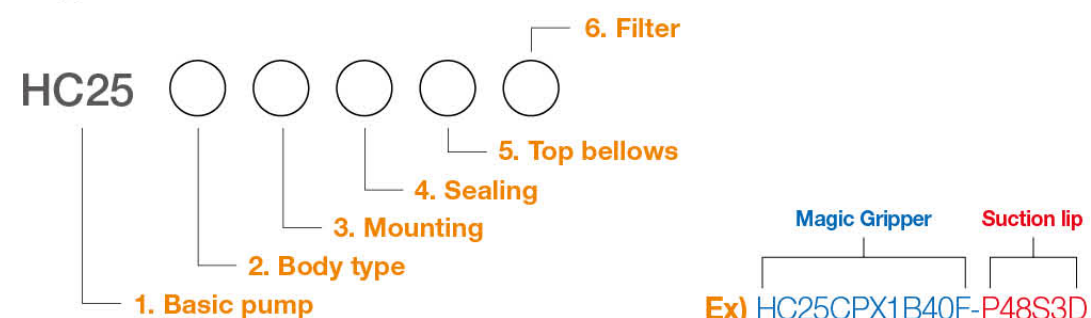
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (N/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)										
				0	10	20	30	40	50	60	70	80	90	
HC25C	88.2	4.5	75	71.3	58.5	41.7	37	30.7	26.1	20.5	16.2	9.6	-	
	95.2	5.2	85	73.8	64	46.6	37.3	31.1	26.6	20.6	16.6	14.2	3	
	94.6	6.0	96	77.8	66.3	51.2	39.6	29.1	23.5	18.6	16	11.7	2.5	

Evacuation time

Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Evacuation time (sec) at different vacuum levels (-kPa)									
			10	20	30	40	50	60	70	80	90	
HC25CXX1B40X	88.2	0.45	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.17		
	95.2	0.52	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.23	
	94.6	0.60	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.26	
HC25CXX2B40X	88.2	0.45	0.07	0.08	0.09	0.10	0.11	0.13	0.14	0.18		
	95.2	0.52	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.16	0.25	
	94.6	0.60	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.16	0.27	
HC25CXX1B60X	88.2	0.45	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.21		
	95.2	0.52	0.08	0.09	0.10	0.11	0.14	0.15	0.16	0.19	0.30	
	94.6	0.60	0.08	0.09	0.10	0.11	0.13	0.14	0.16	0.18	0.35	
HC25CXX2B60X	88.2	0.45	0.09	0.11	0.13	0.14	0.15	0.16	0.19	0.23		
	95.2	0.52	0.09	0.11	0.12	0.13	0.14	0.16	0.18	0.21	0.33	
	94.6	0.60	0.09	0.10	0.11	0.12	0.13	0.15	0.18	0.20	0.38	



Build an Ordering No.



1. Basic pump

Description	Ordering No.
Magic Gripper, Mini premium cartridge 2-Stage	HC25

2. Body type

Description	Ordering No.
Single vacuum cartridge, Check valve type	C

3. Mounting

Description	Ordering No.
No mount	X
Direct mount	M
Profile mount	P

4. Sealing

Description	Ordering No.
NBR	X
EPDM	E
Viton	V

5. Top bellows

Description	Ordering No.
Top bellows 1.5 folds, 40mm	1B40
Top bellows 1.5 folds, 60mm	1B60
Top bellows 2.5 folds, 40mm	2B40
Top bellows 2.5 folds, 60mm	2B60

6. Filter

Description	Ordering No.
No filter	X
Filter (200mesh)	F

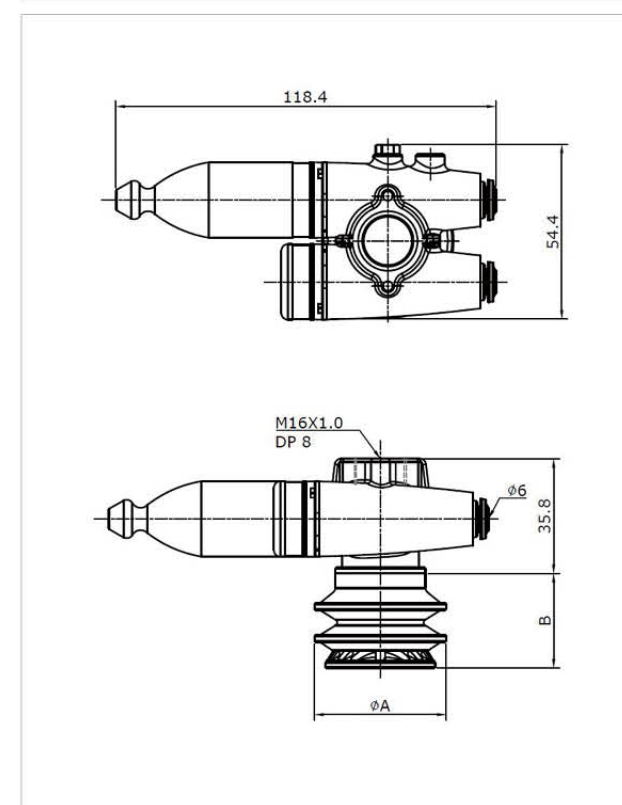
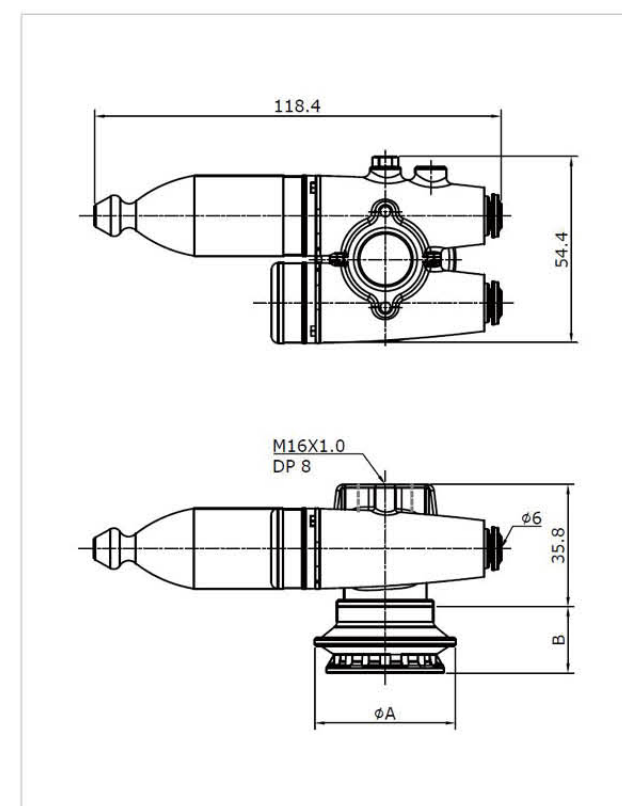
7. Suction lip

Description
* Suction lip is required on page 110 ~ 149.

Dimensional Data

HC25C (Without Mounting)

※ Length of male thread is not required longer than 7mm.



[Unit : mm]

Model	ØA	B
HC25CXX1B40F	41	21.4
HC25CXX1B60F	56	30.4

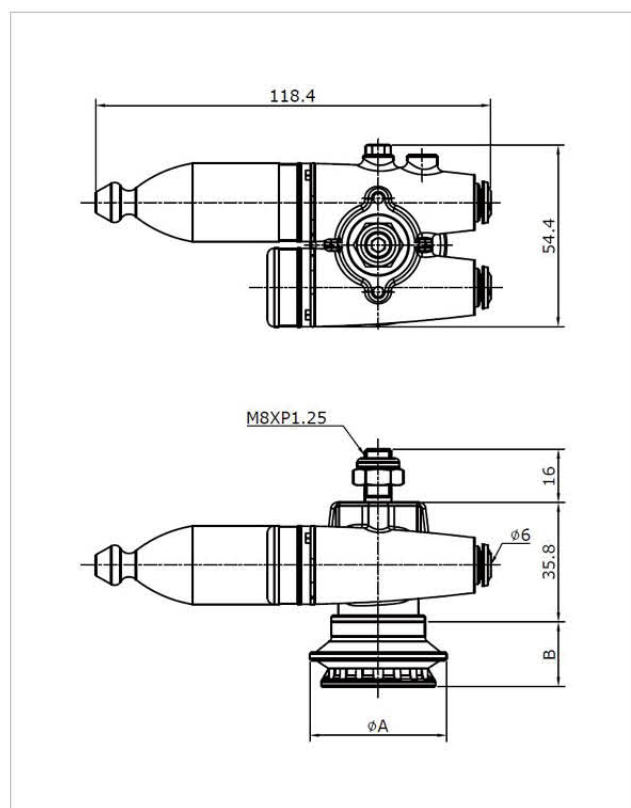
[Unit : mm]

Model	ØA	B
HC25CXX2B40F	41	31.4
HC25CXX2B60F	56	44.8



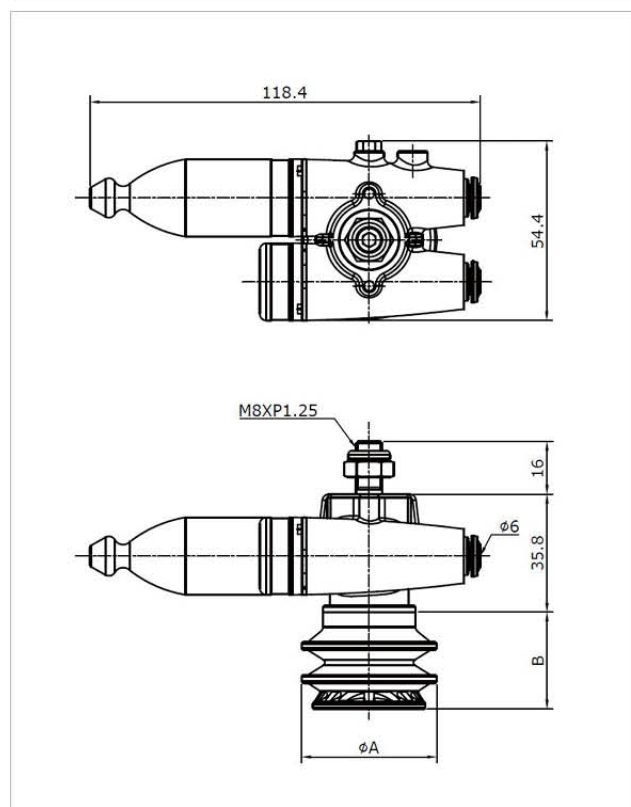
Dimensional Data

HC25C (With Mounting)



[Unit : mm]

Model	ØA	B
HC25CMX1B40F	41	21.4
HC25CMX1B60F	56	30.4

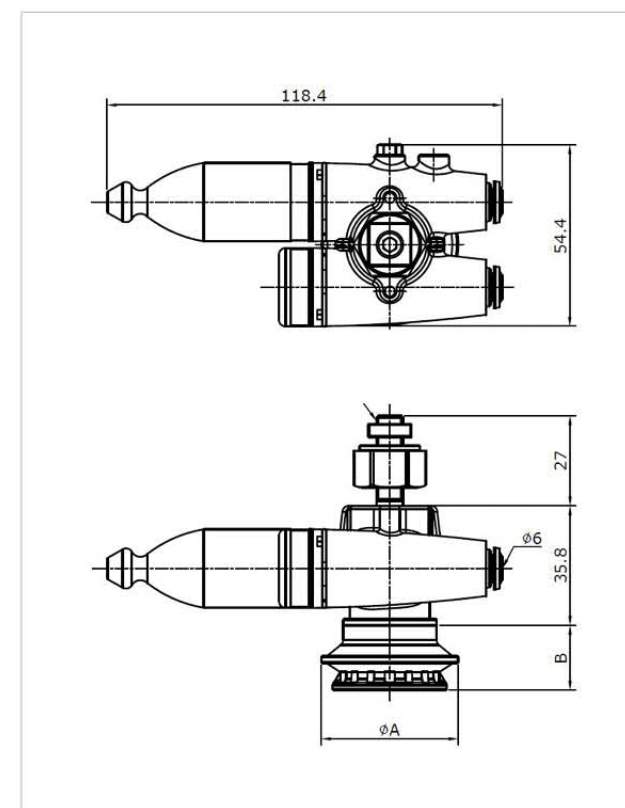


[Unit : mm]

Model	ØA	B
HC25CMX2B40F	41	21.4
HC25CMX2B60F	56	44.8

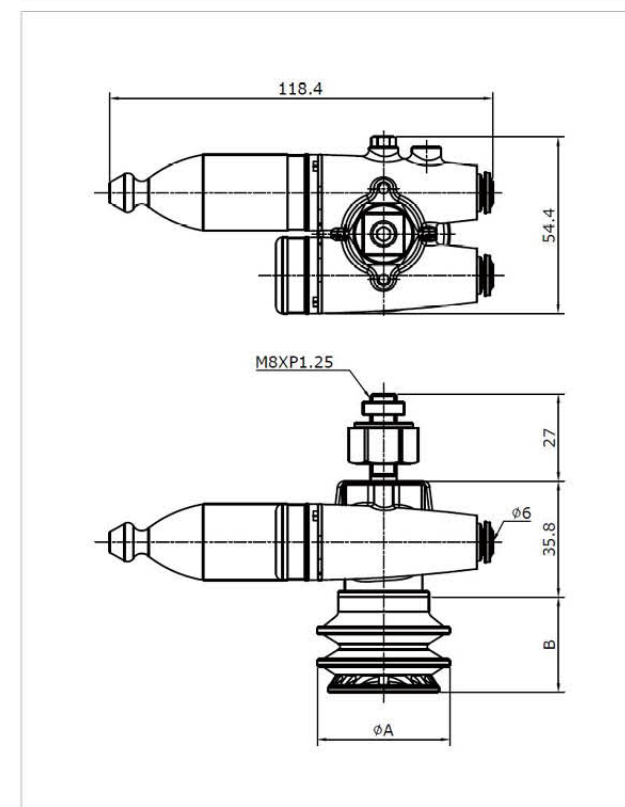
Dimensional Data

HC25C (With Profile)



[Unit : mm]

Model	ØA	B
HC25CPX1B40F	41	21.4
HC25CPX1B60F	56	30.4



[Unit : mm]

Model	ØA	B
HC25CPX2B40F	41	21.4
HC25CPX2B60F	56	44.8



X type

Examples of use

Very thin plastic bags, Pouch bags



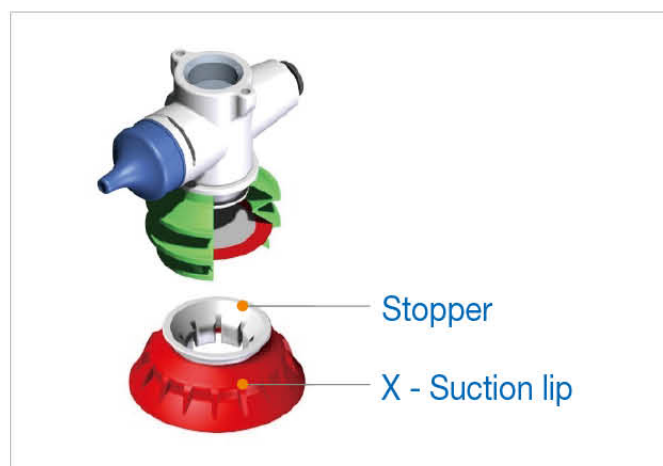
X - Suction lip

Features

- ✓ Excellent to handle a very thin and flexible plastic bag application
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

- ✓ Stopper
- ✓ X - Suction lip



Products Structure for X - Suction lip

Applications

- ✓ Thin and light weight plastic bag
- ✓ Pouch bag



X - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-X25	2.93	0.8	1.79	2.44
1B20-X30	4.53	1.08	2.13	2.62
1B40-X45	17.8	2.14	3.57	5
1B40-X55	23.05	2.6	5.27	5.92
1B60-X65	43	4.8	11.5	15.9
1B60-X75	62.5	5.6	12.3	17.9
2B20-X25	5.04	0.8	1.79	2.44
2B20-X30	6.64	1.08	2.13	2.62
2B40-X45	25.2	2.14	3.57	5
2B40-X55	32.4	2.6	5.27	5.92
2B60-X65	63.8	4.8	11.5	15.9
2B60-X75	83.3	5.6	12.3	17.9

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100
PU - Polyurethane	60	Translucent Orange	0~60

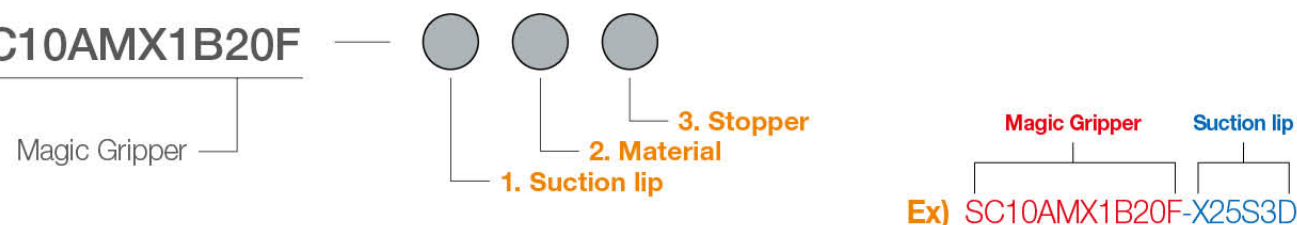
Material Resistance

Description	NBR (Nitrile)	Silicone	White Silicone	Urethane	Polyurethane
Wear Resistance	Excellent	Good	Good	Excellent	Excellent
Oil	Excellent	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair	Fair
Acid	Fair	Poor	Poor	Poor	Fair



Build an Ordering No.

SC10AMX1B20F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
X type lip, 25mm diameter	○			X25
X type lip, 30mm diameter	○			X30
X type lip, 45mm diameter		○		X45
X type lip, 55mm diameter		○		X55
X type lip, 65mm diameter			○	X65
X type lip, 75mm diameter			○	X75

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6
Polyurethane	PU

3. Stopper

Description	Ordering No.
A type	A
B type	B
B2 type: Only for 40mm bellow diameter	B2
C type	C
D type	D

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS20-A	Stopper A type for X25 & X30	MS40-C	Stopper C type for X45 & X55
MS20-B	Stopper B type for X25 & X30	MS40-D	Stopper D type for X45 & X55
MS20-C	Stopper C type for X25 & X30	MS60-A	Stopper A type for X65 & X75
MS20-D	Stopper D type for X25 & X30	MS60-B	Stopper B type for X65 & X75
MS40-A	Stopper A type for X45 & X55	MS60-C	Stopper C type for X65 & X75
MS40-B	Stopper B type for X45 & X55	MS60-D	Stopper D type for X65 & X75
MS40-B2	Stopper B2 type for X45 & X55		

Spare Parts – Filters

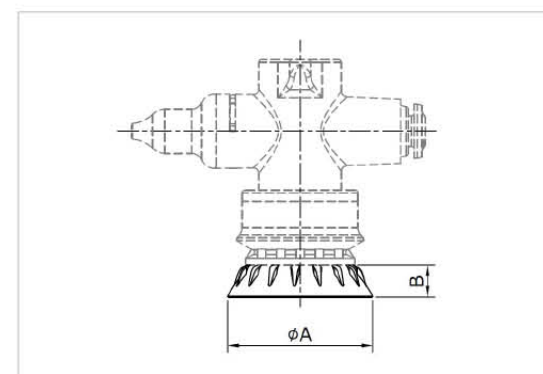
Model No.	Description	Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter
VTFE40	Filter (200mesh) for 40mm bellow diameter		

Spare Parts – Suction lip

Model No.	Description	Model No.	Description
X25-N6	X type - 25mm diameter, NBR	X25-W3	X type - 25mm diameter, White Silicone, 30° hardness (FDA)
X30-N6	X type - 30mm diameter, NBR	X30-W3	X type - 30mm diameter, White Silicone, 30° hardness (FDA)
X45-N6	X type - 45mm diameter, NBR	X45-W3	X type - 45mm diameter, White Silicone, 30° hardness (FDA)
X55-N6	X type - 55mm diameter, NBR	X55-W3	X type - 55mm diameter, White Silicone, 30° hardness (FDA)
X65-N6	X type - 65mm diameter, NBR	X65-W3	X type - 65mm diameter, White Silicone, 30° hardness (FDA)
X75-N6	X type - 75mm diameter, NBR	X75-W3	X type - 75mm diameter, White Silicone, 30° hardness (FDA)
X25-S3	X type - 25mm diameter, Silicone, 30° hardness	X25-W5	X type - 25mm diameter, White Silicone, 50° hardness (FDA)
X30-S3	X type - 30mm diameter, Silicone, 30° hardness	X30-W5	X type - 30mm diameter, White Silicone, 50° hardness (FDA)
X45-S3	X type - 45mm diameter, Silicone, 30° hardness	X45-W5	X type - 45mm diameter, White Silicone, 50° hardness (FDA)
X55-S3	X type - 55mm diameter, Silicone, 30° hardness	X55-W5	X type - 55mm diameter, White Silicone, 50° hardness (FDA)
X65-S3	X type - 65mm diameter, Silicone, 30° hardness	X65-W5	X type - 65mm diameter, White Silicone, 50° hardness (FDA)
X75-S3	X type - 75mm diameter, Silicone, 30° hardness	X75-W5	X type - 75mm diameter, White Silicone, 50° hardness (FDA)
X25-S5	X type - 25mm diameter, Silicone, 50° hardness	X25-U6	X type - 25mm diameter, Urethane
X30-S5	X type - 30mm diameter, Silicone, 50° hardness	X30-U6	X type - 30mm diameter, Urethane
X45-S5	X type - 45mm diameter, Silicone, 50° hardness	X45-U6	X type - 45mm diameter, Urethane
X55-S5	X type - 55mm diameter, Silicone, 50° hardness	X55-U6	X type - 55mm diameter, Urethane
X65-S5	X type - 65mm diameter, Silicone, 50° hardness	X65-U6	X type - 65mm diameter, Urethane
X75-S5	X type - 75mm diameter, Silicone, 50° hardness	X75-U6	X type - 75mm diameter, Urethane
X25-PU	X type - 25mm diameter, Polyurethane		
X30-PU	X type - 30mm diameter, Polyurethane		
X45-PU	X type - 45mm diameter, Polyurethane		
X55-PU	X type - 55mm diameter, Polyurethane		
X65-PU	X type - 65mm diameter, Polyurethane		
X75-PU	X type - 75mm diameter, Polyurethane		

Dimensional Data

[Unit : mm]



※ The dimension is measured when the lip is assembled

Model	φA	B
X25	26	5.8
X30	32	7.3
X45	46	11.1
X55	54.5	14.2
X65	65	14.3
X75	75	19.3



U type

Examples of use

Thin metal sheets, Carton boxes, Veneer sheets, Glasses



U - Suction lip

Features

- ✓ U type Suction lip is suitable for flat and slightly curved object application such as carton box, foil and etc.
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

- ✓ Stopper
- ✓ U - Suction lip



Products Structure for U - Suction lip

Applications

- ✓ Carton box
- ✓ Metal sheet
- ✓ Glass



U - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-U25	1.83	0.83	2.2	3.06
1B20-U30	2.63	1.22	2.45	3.06
1B40-U45	12.1	2.55	5.66	9.18
1B40-U55	17	3.78	7.09	9.56
1B60-U65	28.8	5.3	13.3	19.4
1B60-U75	40.4	6.6	15	20.5
2B20-U25	3.94	0.83	2.2	3.06
2B20-U30	4.74	1.22	2.45	3.06
2B40-U45	19.5	2.55	5.66	9.18
2B40-U55	24.4	3.78	7.09	9.56
2B60-U65	49.6	5.3	13.3	19.4
2B60-U75	61.2	6.6	15	20.5

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100
PU - Polyurethane	60	Translucent Orange	0~60

Material Resistance

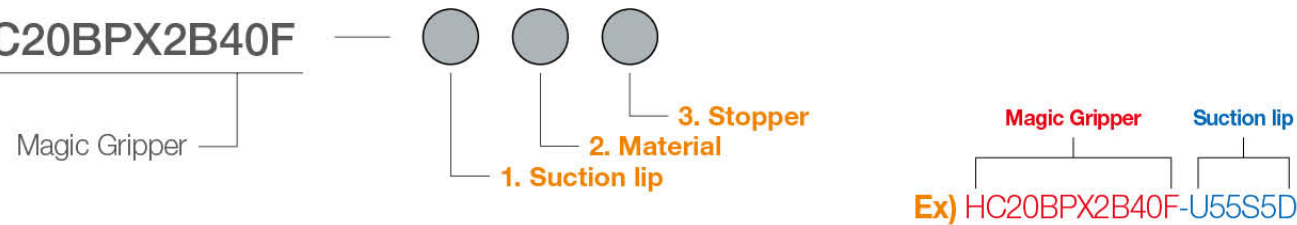
Description	NBR (Nitrile)	Silicone	White Silicone	Urethane	Polyurethane
Wear Resistance	Excellent	Good	Good	Excellent	Excellent
Oil	Excellent	Poor	Poor	Excellent	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair	Fair
Acid	Fair	Poor	Poor	Poor	Fair

SUCTION CUPS Magic suction cups



Build an Ordering No.

HC20BPX2B40F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
U type lip, 25mm diameter	○			U25
U type lip, 30mm diameter	○			U30
U type lip, 45mm diameter		○		U45
U type lip, 55mm diameter		○		U55
U type lip, 65mm diameter			○	U65
U type lip, 75mm diameter			○	U75

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6
Polyurethane	PU

3. Stopper

Description	Ordering No.
B type	B
C type	C
D type	D

Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter
VTFE40	Filter (200mesh) for 40mm bellow diameter		

Spare Parts – Suction lip

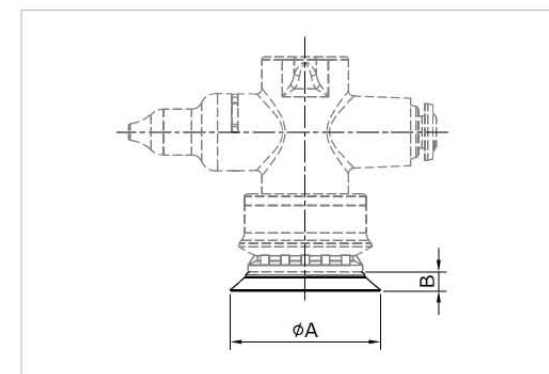
Model No.	Description	Model No.	Description
U25-N6	U type - 25mm diameter, NBR	U25-W3	U type - 25mm diameter, White Silicone, 30° hardness (FDA)
U30-N6	U type - 30mm diameter, NBR	U30-W3	U type - 30mm diameter, White Silicone, 30° hardness (FDA)
U45-N6	U type - 45mm diameter, NBR	U45-W3	U type - 45mm diameter, White Silicone, 30° hardness (FDA)
U55-N6	U type - 55mm diameter, NBR	U55-W3	U type - 55mm diameter, White Silicone, 30° hardness (FDA)
U65-N6	U type - 65mm diameter, NBR	U65-W3	U type - 65mm diameter, White Silicone, 30° hardness (FDA)
U75-N6	U type - 75mm diameter, NBR	U75-W3	U type - 75mm diameter, White Silicone, 30° hardness (FDA)
U25-S3	U type - 25mm diameter, Silicone, 30° hardness	U25-W5	U type - 25mm diameter, White Silicone, 50° hardness (FDA)
U30-S3	U type - 30mm diameter, Silicone, 30° hardness	U30-W5	U type - 30mm diameter, White Silicone, 50° hardness (FDA)
U45-S3	U type - 45mm diameter, Silicone, 30° hardness	U45-W5	U type - 45mm diameter, White Silicone, 50° hardness (FDA)
U55-S3	U type - 55mm diameter, Silicone, 30° hardness	U55-W5	U type - 55mm diameter, White Silicone, 50° hardness (FDA)
U65-S3	U type - 65mm diameter, Silicone, 30° hardness	U65-W5	U type - 65mm diameter, White Silicone, 50° hardness (FDA)
U75-S3	U type - 75mm diameter, Silicone, 30° hardness	U75-W5	U type - 75mm diameter, White Silicone, 50° hardness (FDA)
U25-S5	U type - 25mm diameter, Silicone, 50° hardness	U25-U6	U type - 25mm diameter, Urethane
U30-S5	U type - 30mm diameter, Silicone, 50° hardness	U30-U6	U type - 30mm diameter, Urethane
U45-S5	U type - 45mm diameter, Silicone, 50° hardness	U45-U6	U type - 45mm diameter, Urethane
U55-S5	U type - 55mm diameter, Silicone, 50° hardness	U55-U6	U type - 55mm diameter, Urethane
U65-S5	U type - 65mm diameter, Silicone, 50° hardness	U65-U6	U type - 65mm diameter, Urethane
U75-S5	U type - 75mm diameter, Silicone, 50° hardness	U75-U6	U type - 75mm diameter, Urethane
U25-PU	U type - 25mm diameter, Polyurethane		
U30-PU	U type - 30mm diameter, Polyurethane		
U45-PU	U type - 45mm diameter, Polyurethane		
U55-PU	U type - 55mm diameter, Polyurethane		
U65-PU	U type - 65mm diameter, Polyurethane		
U75-PU	U type - 75mm diameter, Polyurethane		

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS20-B	Stopper B type for U25 & U30	MS60-B	Stopper B type for U65 & U75
MS20-C	Stopper C type for U25 & U30	MS60-C	Stopper C type for U65 & U75
MS20-D	Stopper D type for U25 & U30	MS60-D	Stopper D type for U65 & U75
MS40-B	Stopper B type for U45 & U55		
MS40-C	Stopper C type for U45 & U55		
MS40-D	Stopper D type for U45 & U55		
MS40-B2	Stopper B2 type for X45 & X55		

Dimensional Data

[Unit : mm]



※ The dimension is measured when the lip is assembled.

Model	φA	B
U25	26	9.5
U30	33	6.7
U45	47	4.3
U55	55	3.3
U65	65	9
U75	75	12.7



P type

Examples of use

Thin plastic bags



P - Suction lip

Features

- ✓ P type Suction lip is very good to handle a thin and flexible plastic bag handling
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

- ✓ Stopper
- ✓ P - Suction lip



Products Structure for P - Suction lip

Applications

- ✓ Plastic bag
- ✓ Pouch bag



P - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-P15	1.43	0.30	0.50	0.60
1B20-P17	1.53	0.35	0.60	0.74
1B20-P20	1.83	0.40	0.80	0.90
1B20-P27	2.73	0.80	1.79	2.44
1B20-P32	4.13	1.08	2.13	2.62
1B40-P48	14.4	2.14	3.57	5.00
1B40-P60	21.5	2.60	5.27	5.92
1B60-P70				
1B60-P80				
2B20-P15	3.54	0.30	0.50	0.60
2B20-P17	3.64	0.35	0.60	0.74
2B20-P20	3.94	0.40	0.80	0.90
2B20-P27	4.84	0.80	1.79	2.44
2B20-P32	6.24	1.08	2.13	2.62
2B40-P48	21.8	2.14	3.57	5.00
2B40-P60	28.9	2.60	5.27	5.92
2B60-P70				
2B60-P80				

* 1B60-P70, 1B60-P80, 2B60-P70 and 2B60-P80 are required to contact VMECA for lifting force.

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

Material Resistance

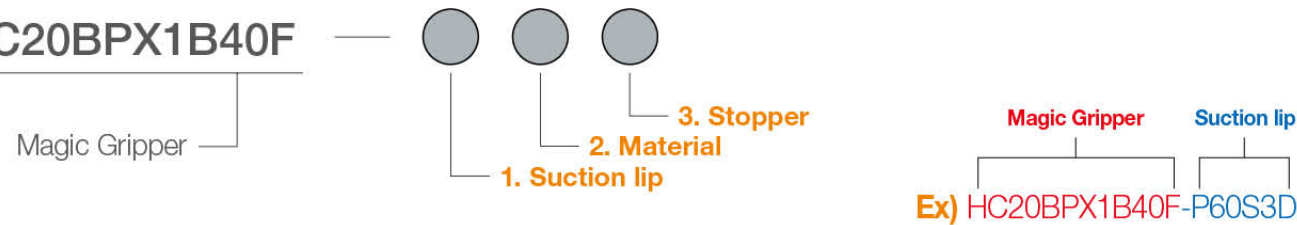
Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor

SUCTION CUPS Magic suction cups



Build an Ordering No.

HC20BPX1B40F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
P type lip, 15mm diameter	○			P15
P type lip, 17mm diameter	○			P17
P type lip, 20mm diameter	○			P20
P type lip, 27mm diameter	○			P27
P type lip, 32mm diameter	○			P32
P type lip, 48mm diameter		○		P48
P type lip, 60mm diameter		○		P60
P type lip, 70mm diameter			○	P70
P type lip, 80mm diameter			○	P80

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
D type	D

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS20-D	Stopper D type for P15, P17, P20, P27 & P32	MS60-D	Stopper D type for P70 & P80
MS40-D	Stopper D type for P48 & P60		

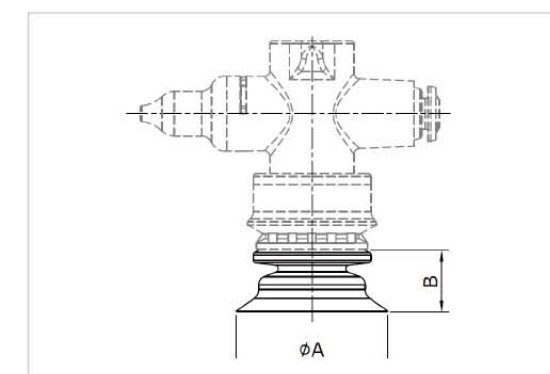
Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter
VTFE40	Filter (200mesh) for 40mm bellow diameter		

Spare Parts – Suction lip

Model No.	Description	Model No.	Description
P15-N6	P type - 15mm diameter, NBR	P15-W3	P type - 15mm diameter, White Silicone, 30° hardness (FDA)
P17-N6	P type - 17mm diameter, NBR	P17-W3	P type - 17mm diameter, White Silicone, 30° hardness (FDA)
P20-N6	P type - 20mm diameter, NBR	P20-W3	P type - 20mm diameter, White Silicone, 30° hardness (FDA)
P27-N6	P type - 27mm diameter, NBR	P27-W3	P type - 27mm diameter, White Silicone, 30° hardness (FDA)
P32-N6	P type - 32mm diameter, NBR	P32-W3	P type - 32mm diameter, White Silicone, 30° hardness (FDA)
P48-N6	P type - 48mm diameter, NBR	P48-W3	P type - 48mm diameter, White Silicone, 30° hardness (FDA)
P60-N6	P type - 60mm diameter, NBR	P60-W3	P type - 60mm diameter, White Silicone, 30° hardness (FDA)
P70-N6	P type - 70mm diameter, NBR	P70-W3	P type - 70mm diameter, White Silicone, 30° hardness (FDA)
P80-N6	P type - 80mm diameter, NBR	P80-W3	P type - 80mm diameter, White Silicone, 30° hardness (FDA)
P15-S3	P type - 15mm diameter, Silicone, 30° hardness	P15-W5	P type - 15mm diameter, White Silicone, 50° hardness (FDA)
P17-S3	P type - 17mm diameter, Silicone, 30° hardness	P17-W5	P type - 17mm diameter, White Silicone, 50° hardness (FDA)
P20-S3	P type - 20mm diameter, Silicone, 30° hardness	P20-W5	P type - 20mm diameter, White Silicone, 50° hardness (FDA)
P27-S3	P type - 27mm diameter, Silicone, 30° hardness	P27-W5	P type - 27mm diameter, White Silicone, 50° hardness (FDA)
P32-S3	P type - 32mm diameter, Silicone, 30° hardness	P32-W5	P type - 32mm diameter, White Silicone, 50° hardness (FDA)
P48-S3	P type - 48mm diameter, Silicone, 30° hardness	P48-W5	P type - 48mm diameter, White Silicone, 50° hardness (FDA)
P60-S3	P type - 60mm diameter, Silicone, 30° hardness	P60-W5	P type - 60mm diameter, White Silicone, 50° hardness (FDA)
P70-S3	P type - 70mm diameter, Silicone, 30° hardness	P70-W5	P type - 70mm diameter, White Silicone, 50° hardness (FDA)
P80-S3	P type - 80mm diameter, Silicone, 30° hardness	P80-W5	P type - 80mm diameter, White Silicone, 50° hardness (FDA)
P15-S5	P type - 15mm diameter, Silicone, 50° hardness	P15-U6	P type - 15mm diameter, Urethane
P17-S5	P type - 17mm diameter, Silicone, 50° hardness	P17-U6	P type - 17mm diameter, Urethane
P20-S5	P type - 20mm diameter, Silicone, 50° hardness	P20-U6	P type - 20mm diameter, Urethane
P27-S5	P type - 27mm diameter, Silicone, 50° hardness	P27-U6	P type - 27mm diameter, Urethane
P32-S5	P type - 32mm diameter, Silicone, 50° hardness	P32-U6	P type - 32mm diameter, Urethane
P48-S5	P type - 48mm diameter, Silicone, 50° hardness	P48-U6	P type - 48mm diameter, Urethane
P60-S5	P type - 60mm diameter, Silicone, 50° hardness	P60-U6	P type - 60mm diameter, Urethane
P70-S5	P type - 70mm diameter, Silicone, 50° hardness	P70-U6	P type - 70mm diameter, Urethane
P80-S5	P type - 80mm diameter, Silicone, 50° hardness	P80-U6	P type - 80mm diameter, Urethane

Dimensional Data



※ The dimension is measured when the lip is assembled

[Unit : mm]

Model	ØA	B
P15	15.5	8.6
P17	17	9
P20	20	9.9
P27	27	11
P32	34	13.2
P48	48	18.7
P60	60	21.7
P70		
P80		

* P70 and P80 are required to contact VMECA for dimension.



F type

Examples of use

Yogurts, Thin metal sheets, Carton boxes, Veneer sheets, Glasses



F - Suction lip

Features

- ✓ F type Suction lip is excellent for flat and easily curved object handling such as thin box, glass and wooden panel
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

- ✓ Stopper
- ✓ F - Suction lip



Products Structure for F - Suction lip

Applications

- ✓ Metal sheet
- ✓ Glass
- ✓ Thin film



F - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-F25	1.53	1.4	2.9	3.7
1B20-F30	2.03	1.9	3.8	4.3
1B40-F45	10.9	3.4	8	9.3
1B40-F55	11.7	4.4	9.9	11.9
2B20-F25	3.64	1.4	2.9	3.7
2B20-F30	4.14	1.9	3.8	4.3
2B40-F45	18.3	3.4	8	9.3
2B40-F55	19.1	4.4	9.9	11.9

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
Polyurethane	60	Translucent Orange	0-60

Material Resistance

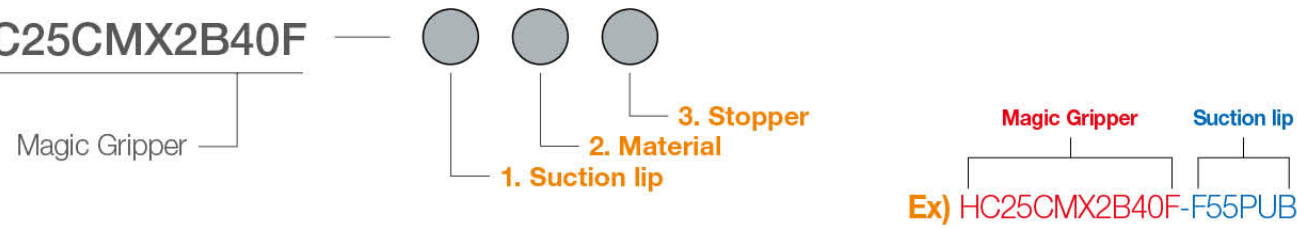
Description	NBR (Nitrile)
Wear Resistance	Excellent
Oil	Excellent
Weather / Ozone	Fair
Alcohol	Good
Acid	Fair

SUCTION CUPS Magic suction cups



Build an Ordering No.

HC25CMX2B40F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
F type lip, 25mm diameter	○			F25
F type lip, 30mm diameter	○			F30
F type lip, 45mm diameter		○		F45
F type lip, 55mm diameter		○		F55

2. Material

Description	Ordering No.
Polyurethane	PU

3. Stopper

Description	Ordering No.
B type	B
C type	C
D type	D

Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter	VTFE40	Filter (200mesh) for 40mm bellow diameter

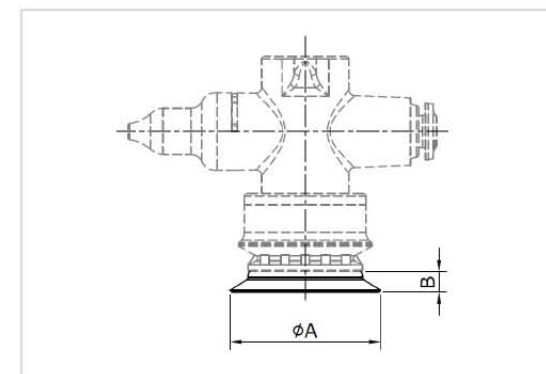
Spare Parts – Suction lip

Model No.	Description	Model No.	Description
F25-PU	F type - 25mm diameter, Polyurethane	F45-PU	F type - 45mm diameter, Polyurethane
F30-PU	F type - 30mm diameter, Polyurethane	F55-PU	F type - 55mm diameter, Polyurethane

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS20-B	Stopper B type for F25 & F30	MS40-B	Stopper B type for F45 & F55
MS20-C	Stopper C type for F25 & F30	MS40-C	Stopper C type for F45 & F55
MS20-D	Stopper D type for F25 & F30	MS40-D	Stopper D type for F45 & F55

Dimensional Data



※ The dimension is measured when the lip is assembled.

[Unit : mm]

Model	ØA	B
F25	26	3.5
F30	33	3.5
F45	47	6
F55	55	6



MBL type

Examples of use

Food (Fruits), Eggs, Plastic products, Plastic bags



MBL - Suction lip

Features

- ✓ Excellent for irregular curved surface and rough surface
- ✓ Dual lip structure to increase safety caused by lip worn and torn
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

- ✓ Stopper
- ✓ MBL - Suction lip



Products Structure for MBL - Suction lip

Applications

- ✓ Food (Fruits)
- ✓ Egg
- ✓ Plastic bag
- ✓ Pouch bag



MBL - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-MBL4030	17.36	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79
2B20-MBL4030	24.76	1.07 / 1.84	2.1 / 3.8	2.76 / 4.79

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

Material Resistance

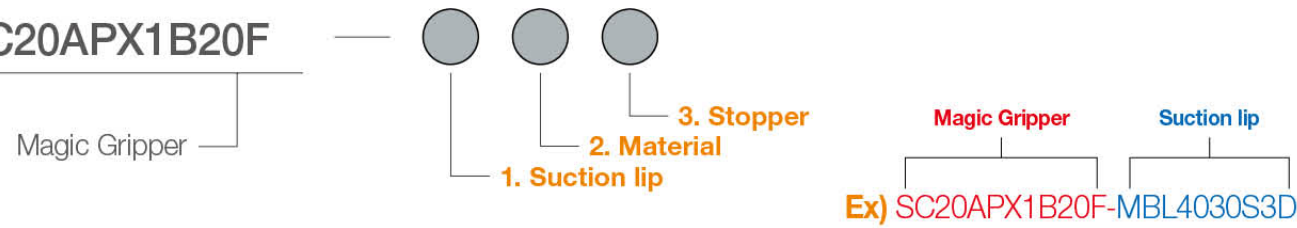
Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor

SUCTION CUPS Magic suction cups



Build an Ordering No.

SC20APX1B20F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
MBL type lip, inner lip 30mm diameter, outer lip 41mm diameter		O		MBL4030

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
D type	D

Spare Parts – Filters

Model No.	Description
VTFE40	Filter (200mesh) for 40mm bellow diameter

Spare Parts – Suction lip

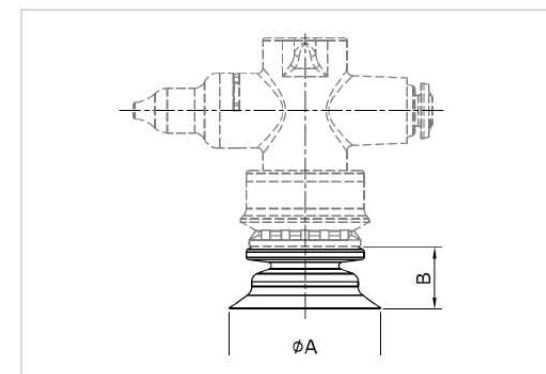
Model No.	Description
MBL4030-N6	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, NBR
MBL4030-S3	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 30° hardness
MBL4030-S5	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, Silicone, 50° hardness
MBL4030-W3	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 30° hardness (FDA)
MBL4030-W5	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, White Silicone, 50° hardness (FDA)
MBL4030-U6	MBL type - inner lip 30mm diameter, outer lip 41mm diameter, Urethane

Spare Parts – Stoppers

Model No.	Description
MS40-D	Stopper D type

Dimensional Data

[Unit : mm]



※ The dimension is measured when the lip is assembled

Model	ØA	ØA'	B
MBL4030	41	30	20.5



MBU type

Examples of use

Concaved surface, Plastic bags, Metal sheets, Plywood, Carton boxes



MBU - Suction lip

Features

- ✓ Widely cover for increased degree of height compensation
- ✓ Excellent for curved products
- ✓ Various stopper options & suction lip materials to cover different application in best condition



Products Structure for MBU - Suction lip

Product Structure

- ✓ Stopper
- ✓ MBU - Suction lip

Applications

- ✓ Plastic bag
- ✓ Metal sheet
- ✓ Plywood
- ✓ Carton box



MBU - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-MBU17	1.92	0.39	0.57	0.67
1B20-MBU23	2.49	0.52	0.79	0.91
1B20-MBU27	3.1	0.55	0.94	1.05
2B20-MBU17	4.03	0.39	0.57	0.67
2B20-MBU23	4.6	0.52	0.79	0.91
2B20-MBU27	5.21	0.55	0.94	1.05

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

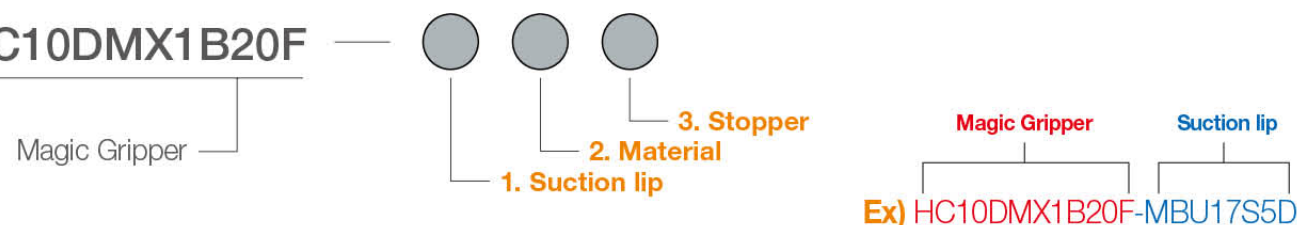
Material Resistance

Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor



Build an Ordering No.

HC10DMX1B20F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
MBU type lip, 17mm diameter	○			MBU17
MBU type lip, 23mm diameter	○			MBU23
MBU type lip, 27mm diameter	○			MBU27

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
D type	D

Spare Parts – Filters

Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter

Spare Parts – Suction lip

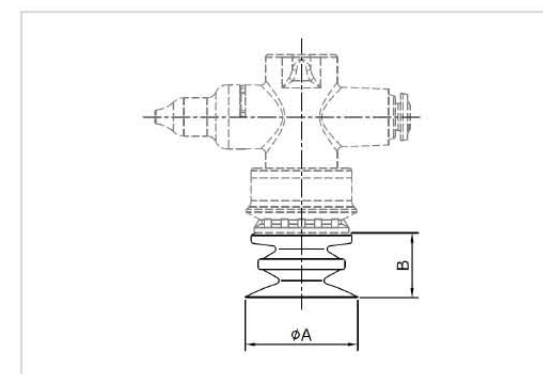
Model No.	Description
MBU17-N6	MBU type - 17mm diameter, NBR
MBU23-N6	MBU type - 23mm diameter, NBR
MBU27-N6	MBU type - 27mm diameter, NBR
MBU17-S3	MBU type - 17mm diameter, Silicone, 30° hardness
MBU23-S3	MBU type - 23mm diameter, Silicone, 30° hardness
MBU27-S3	MBU type - 27mm diameter, Silicone, 30° hardness
MBU17-S5	MBU type - 17mm diameter, Silicone, 50° hardness
MBU23-S5	MBU type - 23mm diameter, Silicone, 50° hardness
MBU27-S5	MBU type - 27mm diameter, Silicone, 50° hardness
MBU17-W3	MBU type - 17mm diameter, White Silicone, 30° hardness (FDA)
MBU23-W3	MBU type - 23mm diameter, White Silicone, 30° hardness (FDA)
MBU27-W3	MBU type - 27mm diameter, White Silicone, 30° hardness (FDA)
MBU17-W5	MBU type - 17mm diameter, White Silicone, 50° hardness (FDA)
MBU23-W5	MBU type - 23mm diameter, White Silicone, 50° hardness (FDA)
MBU27-W5	MBU type - 27mm diameter, White Silicone, 50° hardness (FDA)
MBU17-U6	MBU type - 17mm diameter, Urethane
MBU23-U6	MBU type - 23mm diameter, Urethane
MBU27-U6	MBU type - 27mm diameter, Urethane

Spare Parts – Stoppers

Model No.	Description
MS20-D	Stopper D type

Dimensional Data

[Unit : mm]



※ The dimension is measured when the lip is assembled

Model	ØA	B
MBU17	17	13.5
MBU23	23	13.5
MBU27	27	13.5



MD type

Examples of use

Automobile Roofs and Doors, Metal Sheets, Plastic Sheets, Veneer Sheets, Shaped Metal panels



MD - Suction lip

Features

- ✓ Suitable for curved or irregular surfaces
- ✓ Excellent performance for round corners and edges.
- ✓ Various stopper options & suction lip materials to cover different application in best condition



Products Structure for MD - Suction lip

Product Structure

- ✓ Stopper
- ✓ MD - Suction lip



MD - Suction lip being used in thin plastic bag application – Ice cream

Applications

- ✓ Automobile roof and door
- ✓ Metal sheet
- ✓ Veneer sheet

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B20-MD22	2.67	0.71	1.61	2.2
2B20-MD22	4.78	0.71	1.61	2.2

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

Material Resistance

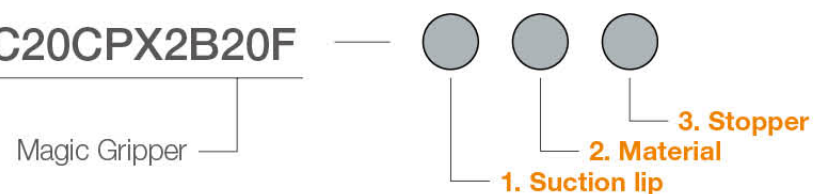
Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor

SUCTION CUPS Magic suction cups



Build an Ordering No.

HC20CPX2B20F



Ex) **HC20CPX2B20F**-**MD22S5D**

1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
MD type lip, 22mm diameter	O			MD22

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
D type	D

Spare Parts – Middle bellows

Model No.	Description	Model No.	Description
MB2.5/20	Middle bellows 2.5 folds	MB3.5/20	Middle bellows 3.5 folds

Spare Parts – Stoppers

Model No.	Description
MS20-D	Stopper D type

Spare Parts – Filters

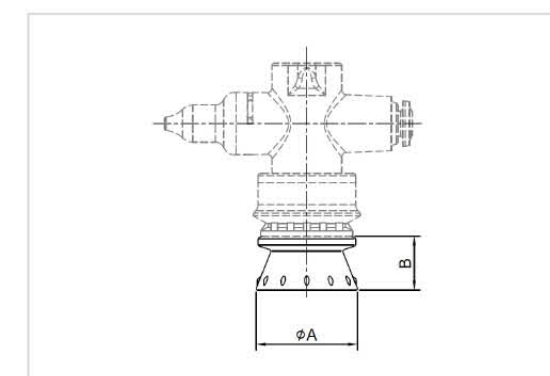
Model No.	Description
VTFE20	Filter (200mesh) for 20mm bellow diameter

Spare Parts – Suction lip

Model No.	Description
MD22-N6	MD type - 22mm diameter, NBR
MD22-S3	MD type - 22mm diameter, Silicone, 30° hardness
MD22-S5	MD type - 22mm diameter, Silicone, 50° hardness
MD22-W3	MD type - 22mm diameter, White Silicone, 30° hardness (FDA)
MD22-W5	MD type - 22mm diameter, White Silicone, 50° hardness (FDA)
MD22-U6	MD type - 22mm diameter, Urethane

Dimensional Data

[Unit : mm]



※ The dimension is measured when the lip is assembled

Model	ØA	B
MD22	22	11.6



SF type

Examples of use

Marbles, Paving Slabs, Bricks, Rough Wood, Masonry



SF - Suction lip

Features

- ✓ Excellent performance for rough and uneven surfaces
- ✓ Various stopper options & suction lip materials to cover different application in best condition



Products Structure for MU - Suction lip

Product Structure

- ✓ Stopper
- ✓ SF - Suction lip

Applications

- ✓ Uneven surface products
- ✓ Brick
- ✓ Marble
- ✓ Metal sheet
- ✓ Wood



SF - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
B1.5/20-SF30	3.35	0.94	2.53	3.3
B1.5/40-SF40	13.75	1.74	4.36	6.12
B1.5/60-SF60	34.17	2.87	7.3	10.34
B2.5/20-SF30	5.48	0.94	2.53	3.3
B2.5/40-SF40	21.02	1.74	4.36	6.12
B2.5/60-SF60	54.93	2.87	7.3	10.34

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
EPDM	15	Black	-0~120

INSERT PAD

Material	Hardness Shore (°)	Color	Temperature (°C)
NBR (Nitrile)	60	Black	-20 ~ 110
S5 - Silicone	50	Red	-70 ~ 200
W5 - White Silicone	50	Translucent White	-70 ~ 200

Material Resistance

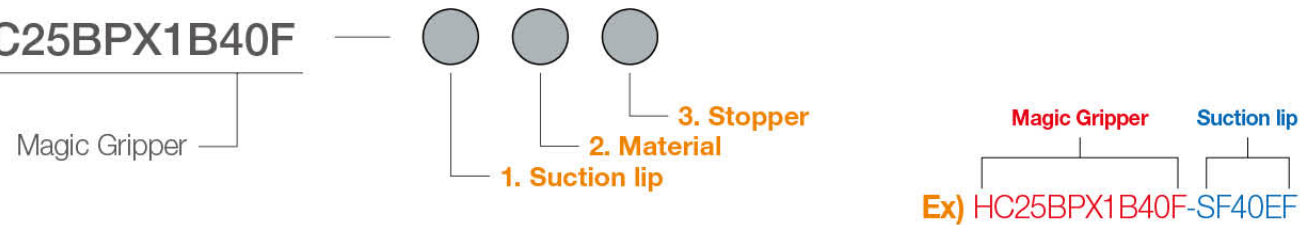
Description	NBR (Nitrile)	Silicone	White Silicone
Wear Resistance	Excellent	Good	Good
Oil	Excellent	Poor	Poor
Weather / Ozone	Fair	Excellent	Excellent
Alcohol	Good	Good	Good
Acid	Fair	Poor	Poor

SUCTION CUPS Magic suction cups



Build an Ordering No.

HC25BPX1B40F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
SF type lip, 30mm diameter	○			SF30
SF type lip, 40mm diameter		○		SF40
SF type lip, 50mm diameter			○	SF50

2. Material

Description	Ordering No.
Sponge lip EPDM	E

3. Stopper

Description	Ordering No.
F type : Only for SF Suction lip	F

Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE40	Filter (200mesh) for 40mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter

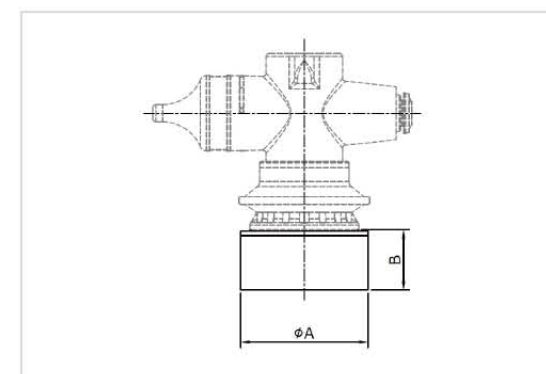
Spare Parts – Suction lip

Model No.	Description	Model No.	Description
SF3020-E	SF type - 30mm diameter, EPDM	SF4030-E	SF type - 40mm diameter, EPDM
SF5040-E	SF type - 50mm diameter, EPDM		

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS20-F	Stopper F type for SF30	MS60-F	Stopper F type for SF50
MS40-F	Stopper F type for SF40		

Dimensional Data



※ The dimension is measured when the lip is assembled

[Unit : mm]

Model	ØA	B
SF30	30	14.5
SF40	40	18.8
SF50	50	27.1



MU type

Examples of use

Carton boxes, Small components, Packaging materials, Metal sheets, Printing industry



MU - Suction lip

Features

- ✓ Excellent performance for flat stable surfaces
- ✓ Various stopper options & suction lip materials to cover different application in best condition



Product Structure

- ✓ Stopper
- ✓ MU - Suction lip

Products Structure for MU - Suction lip



MU - Suction lip being used in thin plastic bag application – Ice cream

Applications

- ✓ Carton box
- ✓ Metal sheet
- ✓ Printing industry

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B40-MU45	9.93	0.66	1.34	1.79
1B40-MU55	12.19	1.34	2.81	3.37
1B60-MU65	26.90	2.24	4.37	5.50
1B60-MU75	31.98	3.93	8.18	10.32
1B60-MU80				
2B40-MU45	17.33	0.66	1.34	1.79
2B40-MU55	19.58	1.34	2.81	3.37
2B60-MU65	47.70	2.24	4.37	5.50
2B60-MU75	52.78	3.93	8.18	10.32
2B60-MU80				

* 1B60-MU80 and 2B60-MU80 are required to contact VMECA for lifting force.

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

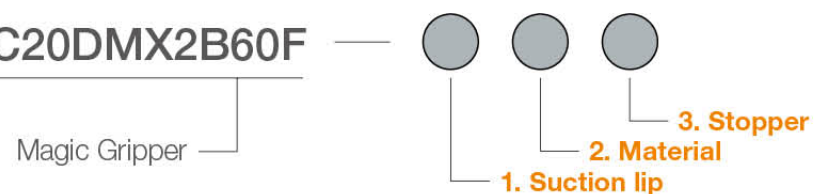
Material Resistance

Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor



Build an Ordering No.

HC20DMX2B60F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
MU type lip, 45mm diameter		○		MU45
MU type lip, 55mm diameter		○		MU55
MU type lip, 65mm diameter			○	MU65
MU type lip, 75mm diameter			○	MU75
MU type lip, 80mm diameter			○	MU80

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
G type : Only for MF&MU Suction lip	G

Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE40	Filter (200mesh) for 40mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter

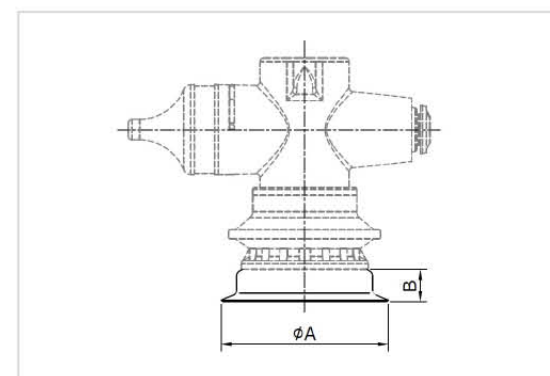
Spare Parts – Suction lip

Model No.	Description	Model No.	Description
MU45-N6	MU type - 45mm diameter, NBR	MU45-W3	MU type - 45mm diameter, White Silicone, 30° hardness (FDA)
MU55-N6	MU type - 55mm diameter, NBR	MU55-W3	MU type - 55mm diameter, White Silicone, 30° hardness (FDA)
MU65-N6	MU type - 65mm diameter, NBR	MU65-W3	MU type - 65mm diameter, White Silicone, 30° hardness (FDA)
MU75-N6	MU type - 75mm diameter, NBR	MU75-W3	MU type - 75mm diameter, White Silicone, 30° hardness (FDA)
MU80-N6	MU type - 80mm diameter, NBR	MU75-W3	MU type - 80mm diameter, White Silicone, 30° hardness (FDA)
MU45-S3	MU type - 45mm diameter, Silicone, 30° hardness	MU45-W5	MU type - 45mm diameter, White Silicone, 50° hardness (FDA)
MU55-S3	MU type - 55mm diameter, Silicone, 30° hardness	MU55-W5	MU type - 55mm diameter, White Silicone, 50° hardness (FDA)
MU65-S3	MU type - 65mm diameter, Silicone, 30° hardness	MU65-W5	MU type - 65mm diameter, White Silicone, 50° hardness (FDA)
MU75-S3	MU type - 75mm diameter, Silicone, 30° hardness	MU75-W5	MU type - 75mm diameter, White Silicone, 50° hardness (FDA)
MU80-S3	MU type - 80mm diameter, Silicone, 30° hardness	MU80-W5	MU type - 80mm diameter, White Silicone, 50° hardness (FDA)
MU45-S5	MU type - 45mm diameter, Silicone, 50° hardness	MU45-U6	MU type - 45mm diameter, Urethane
MU55-S5	MU type - 55mm diameter, Silicone, 50° hardness	MU55-U6	MU type - 55mm diameter, Urethane
MU65-S5	MU type - 65mm diameter, Silicone, 50° hardness	MU65-U6	MU type - 65mm diameter, Urethane
MU75-S5	MU type - 75mm diameter, Silicone, 50° hardness	MU75-U6	MU type - 75mm diameter, Urethane
MU80-S5	MU type - 80mm diameter, Silicone, 50° hardness	MU80-U6	MU type - 80mm diameter, Urethane

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS40-G	Stopper G type for MU45 & MU55	MS60-G	Stopper G type for MU65 & MU75 & MU80

Dimensional Data



* The dimension is measured when the lip is assembled

[Unit : mm]

Model	ØA	B
MU45	45	8.5
MU55	55	8.9
MU65	65	10.7
MU75	75	11.7
MU80		

* MU80 is required to contact VMECA for dimension.



MF type

Examples of use

Metal Sheets, Plastic, Veneer Sheets, Carton boxes



MF - Suction lip

Features

- ✓ Good lifting force for both horizontal and vertical application
- ✓ Various stopper options & suction lip materials to cover different application in best condition

Product Structure

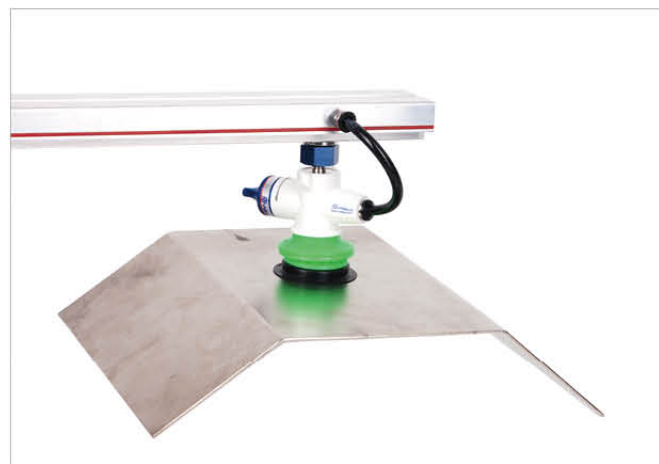
- ✓ Stopper
- ✓ MF - Suction lip



Products Structure for MF - Suction lip

Applications

- ✓ Metal sheet
- ✓ Veneer sheet
- ✓ Carton boxes



MF - Suction lip being used in thin plastic bag application – Ice cream

Recommended Lifting Force (Max.)

Model	Volume (cm ³)	Lifting Force (Kg) - Perpendicular		
		- 20 kPa	- 60 kPa	- 90 kPa
1B40-MF45	9.63	0.67	1.62	2.12
1B40-MF55	12.19	1.34	2.81	3.48
1B60-MF65	26.40	2.24	4.49	5.61
1B60-MF75	31.58	4.04	8.31	10.70
1B60-MF80				
2B40-MF45	17.03	0.67	1.62	2.12
2B40-MF55	19.59	1.34	2.81	3.48
2B60-MF65	47.20	2.24	4.49	5.61
2B60-MF75	52.38	4.04	8.31	10.70
2B60-MF80				

* 1B60-MF80 and 2B60-MF80 are required to contact VMECA for lifting force.

Material Specifications

Material	Hardness Shore (°)	Color	Temperature (°C)
N6- NBR (Nitrile)	60	Black	-20~110
S3 - Silicone	30	Translucent White	-70~200
S5 - Silicone	50	Red	-70~200
W3 - White Silicone (FDA)	30	Translucent White	-70~200
W5 - White Silicone (FDA)	50	Translucent White	-70~200
U6 - Urethane	60	Dark Grey	0~100

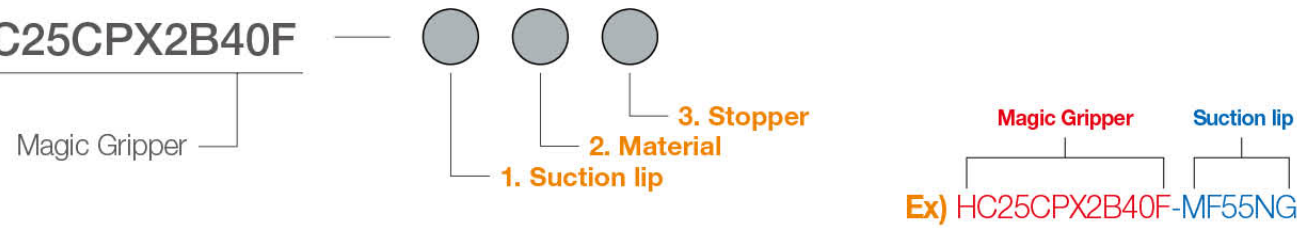
Material Resistance

Description	NBR (Nitrile)	Silicone	White Silicone	Urethane
Wear Resistance	Excellent	Good	Good	Excellent
Oil	Excellent	Poor	Poor	Excellent
Weather / Ozone	Fair	Excellent	Excellent	Excellent
Alcohol	Good	Good	Good	Fair
Acid	Fair	Poor	Poor	Poor



Build an Ordering No.

HC25CPX2B40F



1. Suction lip

Description	Top Bellow 20	Top Bellow 40	Top Bellow 60	Ordering No.
MF type lip, 45mm diameter		○		MF45
MF type lip, 55mm diameter		○		MF55
MF type lip, 65mm diameter			○	MF65
MF type lip, 75mm diameter			○	MF75
MF type lip, 80mm diameter			○	MF80

2. Material

Description	Ordering No.
NBR (Nitrile)	N6
Silicone, 30° hardness	S3
Silicone, 50° hardness	S5
White Silicone, 30° hardness (FDA)	W3
White Silicone, 50° hardness (FDA)	W5
Urethane	U6

3. Stopper

Description	Ordering No.
G type : Only for MF&MU Suction lip	G

Spare Parts – Filters

Model No.	Description	Model No.	Description
VTFE40	Filter (200mesh) for 40mm bellow diameter	VTFE60	Filter (200mesh) for 60mm bellow diameter

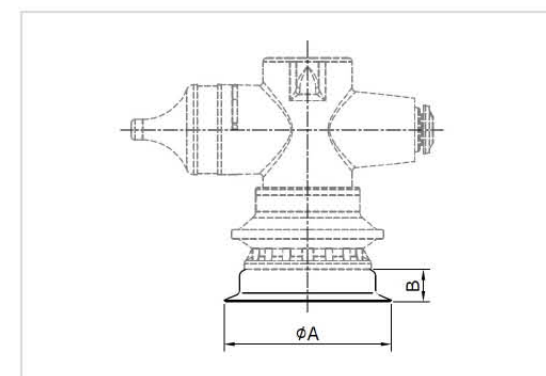
Spare Parts – Suction lip

Model No.	Description	Model No.	Description
MF45-N6	MF type - 45mm diameter, NBR	MF45-W3	MF type - 45mm diameter, White Silicone, 30° hardness (FDA)
MF55-N6	MF type - 55mm diameter, NBR	MF55-W3	MF type - 55mm diameter, White Silicone, 30° hardness (FDA)
MF65-N6	MF type - 65mm diameter, NBR	MF65-W3	MF type - 65mm diameter, White Silicone, 30° hardness (FDA)
MF75-N6	MF type - 75mm diameter, NBR	MF75-W3	MF type - 75mm diameter, White Silicone, 30° hardness (FDA)
MF80-N6	MF type - 80mm diameter, NBR	MF75-W3	MF type - 80mm diameter, White Silicone, 30° hardness (FDA)
MF45-S3	MF type - 45mm diameter, Silicone, 30° hardness	MF45-W5	MF type - 45mm diameter, White Silicone, 50° hardness (FDA)
MF55-S3	MF type - 55mm diameter, Silicone, 30° hardness	MF55-W5	MF type - 55mm diameter, White Silicone, 50° hardness (FDA)
MF65-S3	MF type - 65mm diameter, Silicone, 30° hardness	MF65-W5	MF type - 65mm diameter, White Silicone, 50° hardness (FDA)
MF75-S3	MF type - 75mm diameter, Silicone, 30° hardness	MF75-W5	MF type - 75mm diameter, White Silicone, 50° hardness (FDA)
MF80-S3	MF type - 80mm diameter, Silicone, 30° hardness	MF80-W5	MF type - 80mm diameter, White Silicone, 50° hardness (FDA)
MF45-S5	MF type - 45mm diameter, Silicone, 50° hardness	MF45-U6	MF type - 45mm diameter, Urethane
MF55-S5	MF type - 55mm diameter, Silicone, 50° hardness	MF55-U6	MF type - 55mm diameter, Urethane
MF65-S5	MF type - 65mm diameter, Silicone, 50° hardness	MF65-U6	MF type - 65mm diameter, Urethane
MF75-S5	MF type - 75mm diameter, Silicone, 50° hardness	MF75-U6	MF type - 75mm diameter, Urethane
MF80-S5	MF type - 80mm diameter, Silicone, 50° hardness	MF80-U6	MF type - 80mm diameter, Urethane

Spare Parts – Stoppers

Model No.	Description	Model No.	Description
MS40-G	Stopper G type for MF45 & MF55	MS60-G	Stopper G type for MF65 & MF75 & MF80

Dimensional Data



* The dimension is measured when the lip is assembled

[Unit : mm]

Model	ØA	B
MF45	45	8.5
MF55	55	8.9
MF65	65	10.7
MF75	75	11.7
MF80		

* MF80 is required to contact VMECA for dimension.