Cobot Care
VAC

Innovation · efficiency · excellence



Vacuum handling solutions for Thai factories

Cobot Care VAC

Precision vacuum handling
selected for your workpiece

01

About CobotCare

CobotCare Thailand supplies vacuum handling components and collaborative-robot (cobot) spare parts to factories in Thailand.

This catalogue covers vacuum grippers, vacuum generators, buffer rods, suction cups and accessories for automated handling: cartons, sheet metal, glass, wood, electronics and more.

Tell us the workpiece (weight, size, surface) and we help you choose the cup, vacuum source and fittings. Items are supplied to order with a quotation.

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Industry Application Identification Description

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Industry UI	Industry Definition	Brief description	Recommended Selection - Vacuum Generator	Recommended Selection - Vacuum Suction Cup
	PACKAGING (Carton)	The packaging industry is mainly targeted at applications such as handling, logistics, palletizing, and warehousing of cardboard boxes. Its characteristics include easy deformation, breathability, moderate weight, and variable size when absorbing workpieces, with low requirements for the accuracy of the suction position	Multi stage vacuum generator, utilizing flow rate to compensate for ventilation loss	Based on the performance of materials such as NBR and PU, it is generally recommended to use corrugated suction cups for actual suction
	PACKAGING (Plastic Bag)	The packaging industry mainly targets applications such as grabbing, sorting, and transporting plastic bags, packaging bags, and cling film. Its characteristics include soft, deformable, wrinkled, and breathable suction of workpieces	Choose a vacuum generator based on actual working weight and performance	Should have strong performance and be matched with suction cups according to actual situations
	GLASS	The glass industry mainly focuses on the handling and grasping of glass, industrial glass, architectural glass, etc. Its characteristics are that the surface of the workpiece is smooth and even, requiring a strong grasping force and high vacuum degree for glass	Choose a vacuum generator based on actual working weight and performance	NBR material, outstanding wear resistance and grip resistance, generally recommended flat suction cup
	METAL SHEET (Sheet Metal)	The metal sheet metal industry is mainly aimed at applications such as metal sheet handling and fixed processing. Its characteristics include absorbing new deformations of workpieces, severe surface oil stains, high strength, and heavy weight	Choose a vacuum generator based on actual working weight and performance	SFF、SFM、STC、SFB、SOF、SOB
	METAL SHEET (Thick Metal Plate)	The metal sheet metal industry is mainly aimed at applications such as handling and fixed processing of thick metal plates. Its characteristics include heavy suction of workpieces, severe surface oil stains, large internal support for suction cups, and high requirements for suction cup wear resistance	Choose a vacuum generator based on actual working weight and performance	NBR, PU and other materials have strong and outstanding wear resistance, and flat suction cups are generally recommended
	AUTOMOTIVE	The automobile manufacturing industry is characterized by absorbing workpieces such as metal sheet metal with high strength, high surface smoothness, and heavy weight	Multi stage vacuum generator, utilizing flow rate to compensate for ventilation loss	NBR, PU and other materials have strong wear resistance and outstanding performance. Choose suction cups according to the actual situation
	WOOD	The woodworking industry mainly focuses on the handling and application of wood, fiberboard, wooden boards, handicrafts, etc. Its characteristics are uneven surface, breathability, heavy weight, and certain wear and tear on the surface fabric of suction cups	Choose a vacuum generator based on actual working weight and performance	NBR material with outstanding wear resistance
	FABRIC	The textile industry mainly focuses on the handling of fabrics, gauze, and other materials. Its characteristics include easy deformation, breathability, light weight, and a requirement for suction cups with a large vacuum flow rate	Choose a vacuum generator based on actual working weight and performance	POM material special suction cup, suction cup comes with vacuum generating device, generally recommended high flow suction cup
	COMPOSITE	Mainly targeting the handling of composite materials such as leather and fiber cotton, it is characterized by breathable suction of workpieces, light weight, heavy weight, and requires a large vacuum flow rate for suction cups	Choose a vacuum generator based on actual working weight and performance	Select the corresponding suction cup according to the actual situation
	STONE	The stone industry mainly focuses on the handling of marble, tiles, metal mesh panels, etc. Its characteristics are uneven surface suction of workpieces and high requirements for suction cup deformation	Multi stage vacuum generator, AMAL, etc., use flow rate to compensate for ventilation loss	NF - foaming nitrile rubber, DF - foam rubber material, deformation can be guaranteed, S silicone material, HD high temperature resistant rubber sucker material, generally recommended to use high temperature resistant
	INJECTION MOLDING	The injection molding industry is mainly aimed at applications such as post injection handling and tray placement. Its characteristics include high temperature resistance, oil contamination on workpieces, anti-corrosion of suction cups, and high deformation requirements	Choose a vacuum generator based on actual working weight and performance	Select suction cups according to the actual workpiece situation
	ROBOT	The robotics industry mainly targets screws, bent sheet metal, and wheel hub grasping, characterized by fast response speed, integrated wiring, and high safety factor systems	Choose a vacuum generator based on actual working weight and performance	Select suction cups based on actual workpieces
	MACHINE	Mechanical equipment maintenance and other operations are carried out in conjunction with intelligent manufacturing equipment for grasping and handling actions. Its characteristics are small and lightweight, space saving, and mostly made of metal products	Choose a vacuum generator based on actual working weight and performance	Select suction cups based on actual workpieces
	ELECTRONIC (Screen)	The handling of display screens for mobile phones, tablets, etc. is characterized by no film, no deformation, anti-static, and small size	Choose a vacuum generator based on actual working weight and performance	Special customized products such as SNT, SZU, SZC, SZB, SFF, SFA, etc. should be considered with or without coating and support
	ELECTRONIC (PCB Board)	The electronics industry mainly focuses on the handling of electronic components, characterized by small suction surfaces, light weight, no traces, and requirements for the conductivity of suction cups	Choose a vacuum generator based on actual working weight and performance	NBR, S silicone conductive rubber, PE and other materials of rubber, choose single-layer or S folded suction cup according to the actual situation
	PHARMACEUTICALS	The medical industry mainly focuses on the handling of medical packaging, medical devices, etc. Its characteristics are that the suction surface of the workpiece is clean and alcohol free. During trial operation, high requirements are placed on the suction cup for chemical resistance	Choose a vacuum generator based on actual working weight and performance	Special specification material suction cup, corrosion-resistant, wear-resistant, weather resistant
	FOOD	The food industry mainly focuses on the transportation of bread, chocolate, milk, etc. Its characteristics are that the suction surface of the workpiece is not scratched, the weight is light, and pharmaceutical packaging requires high suction cup materials	Choose a vacuum generator based on actual working weight and performance	Food grade silicone material suction cup, flexible material or food grade POM material suction cup
	NEW ENERGY (Photovoltaic)	The new energy industry mainly focuses on the handling of solar panels and solar cells. Its characteristics include breathable and fragile workpiece suction, precise suction requirements, and a large vacuum flow rate	Choose a vacuum generator based on actual working weight and performance	Flat suction cup
	NEW ENERGY (Li - Battery)	The new energy lithium battery industry mainly focuses on the handling of lithium batteries, battery cells, combination batteries, etc. Its characteristics are corrosiveness, explosion resistance, and anti-static	Choose a vacuum generator based on actual working weight and performance	Corrosion resistant suction cups made of EPDM material, fluororubber material, etc

Industry Application Identification Description

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Performance UI	Property definition	Brief description	Suitable for suction cups
	BREATHABILITY	Corresponding to breathable workpieces, the main feature is to use a low vacuum high flow vacuum generator (usually using a composite suction cup) to compensate for the loss of breathability through flow and establish vacuum gripping of workpieces	SLB、SLP
	CURVED SURFACE	Workpieces that can correspond to curved surfaces or certain shaped surfaces can be grasped, and generally, folding suction cups can be used for plane compensation	All with folding suction cups
	SLIP RESISTANCE	For workpieces with smooth surfaces and the need to prevent side slip during gripping, flat ribbed suction cups or flat internal exclusive patterns can generally be used	All flat ribbed or flat patterned suction cups
	CORRESPONDING TO ROUGH SURFACES	For rough surfaces such as wooden boards, stones, and workpieces with high roughness, in order to prevent air leakage, sponge suction cups are generally selected for compensating for small pores in workpiece grasping	SNP、SOP
	HEAVY DUTY TYPE	For high load and high load workpiece grasping, heavy-duty suction cups and installation accessories are generally selected	Flat suction cup with larger diameter, PSPH heavy-duty buffer support rod
	ANTI ROTATION	For workpieces with precise positioning and directional requirements, anti rotation function is required for gripping	Anti rotation buffer support rod, etc
	FOOD GRADE SAFETY CERTIFICATION	For workpieces that require safety certification in the food or medical industry, suction cups made of WS food grade white silicone or POM (formaldehyde resin) material that have been certified by the FDA are generally used	WS material suction cup, SNT-P series
	TUBULAR OBJECT	Select a specialized concave suction cup for gripping tubular or rod-shaped workpieces	SOG
	STRIP	For grasping long and narrow workpieces, a specialized elliptical suction cup can be selected	SOB、SOF
	CORROSION RESISTANCE	For anti-corrosion requirements (such as battery fluid, chemical environment, etc.), fluororubber or EPDM material suction cups can be selected	F/E material suction cup
	HIGH LIFESPAN	For high wear occasions that require a grip that is more durable than the general lifespan, special material suction cups can be used	V/Umaterial suction cup
	BULB	For grasping spherical objects, a deep conical specialized suction cup should be selected	SZD、SBS
	WATERPROOF AND OIL RESISTANT	For grasping oily workpieces, it is necessary to use oil resistant materials and specially designed suction cups	SFM、SBF、STC、SFF wait
	COMPOSITE PRODUCTS	A composite product consisting of a vacuum generator and vacuum suction cups, which saves space, is easy to install, and has a wide range of applications	SLB、SLW、SLP、SNT、SLF wait
	ANTI DEFORMATION	For grasping anti deformation workpieces, different specifications of suction cups can be selected according to different situations of different workpieces	SF、SFF、SFT、SFA wait
	HIGH TEMPERATURE RESISTANCE OF 180 DEGREES	Items that can withstand high temperatures up to 180 degrees can be grasped using suction cups made of heat-resistant materials	HD, Si material suction cup
	HIGH TEMPERATURE RESISTANCE OF 400 DEGREES CELSIUS	Grab items that can withstand high temperatures up to 400 degrees Celsius	SHT

vacuum degree

The difference between standard atmospheric pressure and absolute pressure

Pressure Unit

Conversion Table for Positive Pressure Units

	Pa(N/m2)	kPa	bar	kg/cm2	torr	psi(ibf/in2)	inHg
1 Pa	1	0.001	0.00001	10.1792×10^{-3}	7.50062×10^{-3}	0.145038×10^{-3}	0.3×10^{-3}
1 kPa	1,000	1	0.01	10.1792×10^{-3}	7.50062	0.145038	0.3
1 bar	100,000	100	1	1.01972	750.062	14.5038	30
1 kg/cm²	98,066.5	98.0665	0.980665	1	735.559	14.2233	29.42
1 torr	133.322	0.133322	1.33322×10^{-3}	1.35951×10^{-3}	1	19.3368×10^{-3}	0.04
1 psi	6,894.76	6.89476	68.9476×10^{-3}	70.3096×10^{-3}	51.7149	1	2.07

Negative pressure unit conversion table

	mbar	kPa	-kPa	%vacuum	torr	-mmHg	-inHg
atmospheric pressure	1013	101.3	0	0	760	0	0
	913	91.3	10	9.9	685	75	3
	813	81.3	20	19.7	610	150	6
	713	71.3	30	29.6	535	225	9
	613	61.3	40	39.5	460	300	12
	513	51.3	50	49.3	385	375	15
	413	41.3	60	59.2	310	450	18
	313	31.3	70	69.1	235	525	21
	213	21.3	80	79	160	600	24
	113	11.3	90	89	85	675	27
absolute vacuum	0	0	101.3	100	0	760	30

internet traffic

The volume of air passing through a specified cross-section per unit time. Flow Unit Conversion Table

	m3/s	m3/h	NL/min	NL/s	ft3/min(scfm)
1 m³/s	1	3,600	60,000	1,000	2,118.9
1 m³/h	0.28×10^{-3}	1	16.6667	0.2778	0.5885
1 NL/min	16.67×10^{-6}	0.06	1	0.0167	0.035
1 NL/s	1×10^{-3}	3.6	60	1	2.1189
1 ft³/min	0.472×10^{-3}	1.6992	28.32	0.4720	1

The generation of vacuum

It is the high-speed flow of compressed air that adsorbs the air in the vacuum chamber, creating negative pressure in the vacuum chamber and forming a vacuum

Introduction to the application of suction cups

In vacuum applications, there are sealed and unsealed systems. A sealing system refers to an application where there is no leakage between the suction cup and the object being adsorbed. Example: Moving glass panels/Moving metal panels with smooth surfaces/Vacuuming containers/Testing airtightness

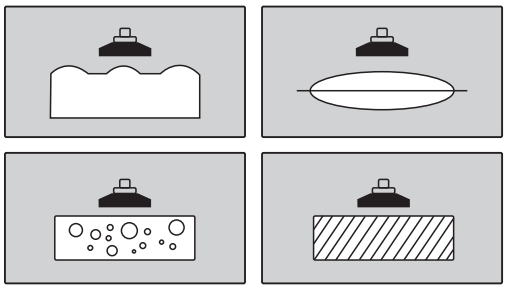


Figure 1.1 Surface image of an object

Non sealed systems refer to applications where there is leakage between the suction cup and the object being adsorbed. For example, if the product has pores or leaks through the edge of the suction cup when the surface of the object is rough, it may also be applied in situations where both situations cause leakage simultaneously.Example: handling cardboard boxes/handling foam boards/handling rough ceramic floors, etc

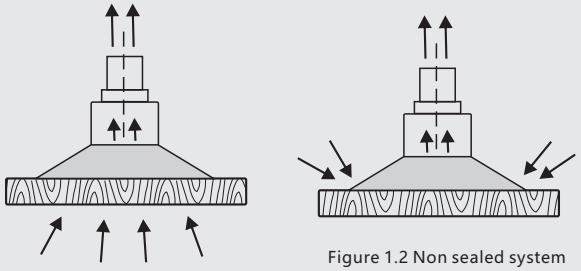


Figure 1.2 Non sealed system

Suction cup type

Flat suction cup

- ◇ Short compression stroke, capable of fast handling and adaptability
- ◇ Handling objects with smooth surfaces
- ◇ Suitable for heavy horizontal or vertical handling and flipping actions

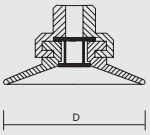


Figure 1.3 Flat suction cup

1.5 fold corrugated suction cup

- ◇ Suitable for handling objects with uneven and curved surfaces
- ◇ The compression stroke is relatively large, and height compensation can be appropriately applied to workpieces with uneven surfaces
- ◇ Suitable for horizontal or vertical handling and slight flipping movements

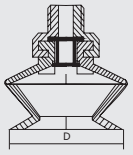


Figure 1.4 1.5 Folded Ripple Suction Cup

Multi folded corrugated suction cup

- ◇ The compression stroke is large, which can greatly compensate for the height of workpieces with uneven surfaces
- ◇ Suitable for handling objects with uneven and curved surfaces
- ◇ The load capacity is very limited and not suitable for fast handling and reversing actions

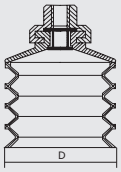


Figure 1.5 Multi fold corrugated suction cup

◇ Due to the significant reduction in energy consumption of vacuum generators generating vacuum pressures above -80kPa, we recommend the optimal working vacuum pressure range for vacuum suction cups to be -60kPa~-80kPa

attraction

The maximum weight that a suction cup can grasp an object during vertical lifting is directly proportional to the effective suction area and vacuum pressure of the suction cup.

Calculation formula for suction force of suction cup:

F=PxS

F=attraction

P=The difference between atmospheric pressure and the internal pressure of the vacuum suction cup, that is, the degree of vacuum

S=Effective adsorption area

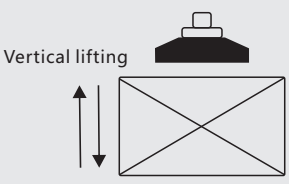


Figure 1.6 Movement Method

lateral force

The maximum weight that the suction cup can grasp an object during lateral lifting is related to the suction force and friction of the suction cup.

Calculation formula for lateral force:

$F_L = PxSx\mu$

μ=coefficient of friction

The friction coefficient "u" refers to the ratio of the frictional force between the vacuum suction cup and the workpiece surface to the suction force of the suction cup. The internal structure of the vacuum suction cup, the type of workpiece surface, and the friction coefficient have a significant impact on the same workpiece surface. Among them, vacuum suction cups with internal support ribs have a higher friction coefficient than those with internal flatness; The same type of vacuum suction cup has a longer friction coefficient on dry rough surfaces than on wet smooth surfaces.

Table 1.1 Friction Coefficient Table (Reference)

Surface type of workpiece	Friction coefficient μ
Wet or oily surfaces	0.1~0.4
Smooth and flat surface (glass, slate, plastic, metal)	0.5
Rough and flat surface (dry)	1

safety factor

The calculated suction or lateral force is only a theoretical value, and in practical applications, many important factors must also be considered, such as the size and shape of the suction cup, the surface smoothness and hardness of the workpiece, the shape, the handling speed, the flipping action, etc. Therefore, when selecting suction cups, the safety factor k should be considered, where k>2.

Table 1.2 Safety Factor Table (Reference)

Type of workpiece or working condition	Safety factor k
Smooth and flat surface of workpiece	2
Smooth and flat workpiece surface moving or flipping at high speed	4
Rough or irregular workpiece surface	4
Carton packaging	4
Soft bag packaging	6

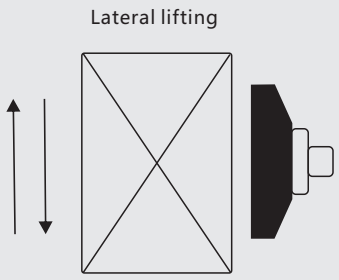


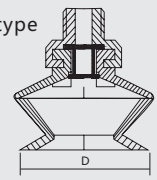
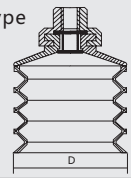
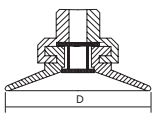
Figure 1.6 Movement Method

Suction cup diameter selection

After selecting the suction cup style based on the stability and geometric principles of the object being operated, we can calculate the approximate diameter of the suction cup required for the job using the following formula,

D=Suction cup diameter (mm)
K=safety factor (refer to Table 1.1)
V=Vacuum degree (- kPa)
N=number of suction cups used in the application
M=weight of the operated object (kg)

Table 1.3 Calculation formulas for suction cup diameters of different types

Suction cup style	formula	Suction cup style	formula
1.5 folded corrugated type 		Multi fold corrugated type 	
Flat 		In theory (without deformation)	

case

SEALING SYSTEM

Determine the type and quantity of suction cups required to transport a smooth and flat aluminum plate with a size of 2000x2000mm and a weight of 260kq.Operate at low speed in the horizontal direction through the pulley

The adsorption surface is nearly smooth and flat, with a safety factor of 2

In order to ensure stability during transportation and avoid deformation and bending of aluminum plate products due to gravity, we selected 8 vacuum suction cups for arrangement and calculated at a vacuum degree of -60kPa.

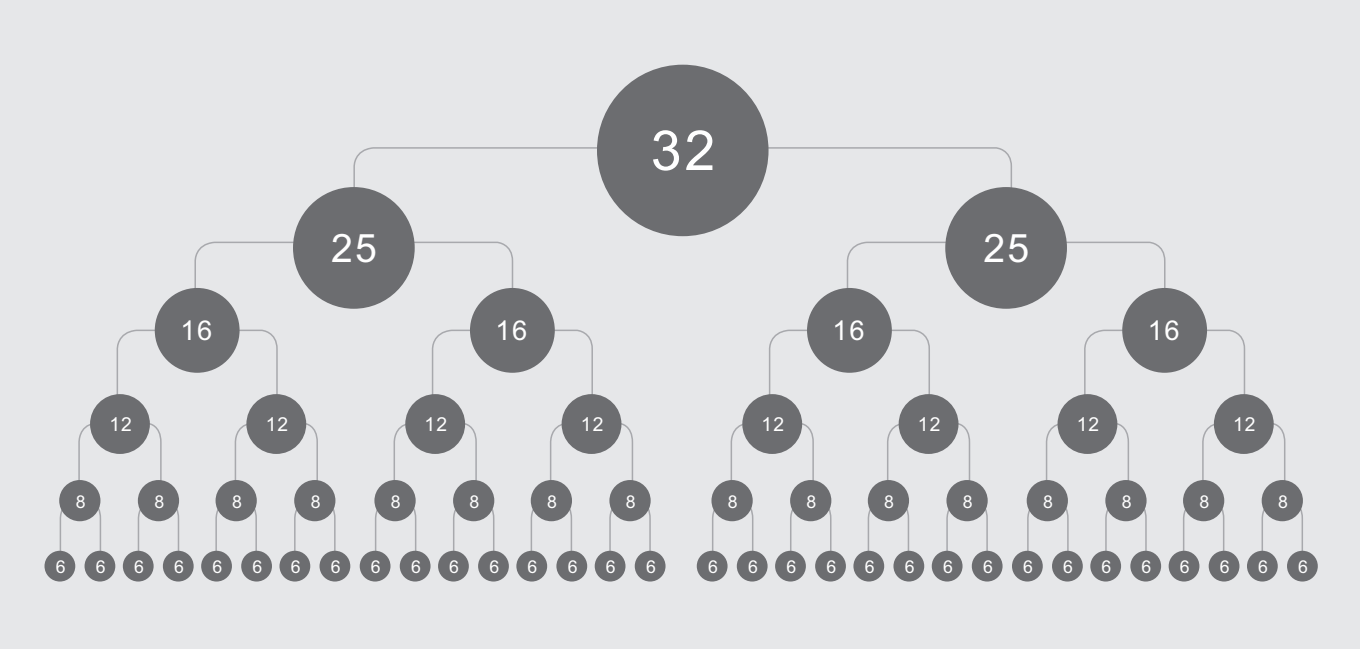
From Table 1.3, we can conclude that

m=260kg k=2 V=-60kPa n=8

$$D=139.5\times\sqrt{\frac{m\times k}{V\times n}} \Rightarrow D=139.5\times\sqrt{\frac{260\times 2}{60\times 8}}=145.19\text{mm}\approx \boxed{150\text{ mm}}$$

Based on this diameter, we can choose AIRBEST flat suction cup

Division diagram



Common usage in the domestic market

- The specification of hoses below ϕ 16 (including 16) refers to the outer diameter size of the hose, while the specification of hoses above 16 refers to the inner diameter size of the hose.
- This diagram uses splitters or hoses for air flow diversion, and is approximately equivalent to the actual cross-sectional area of the air flow path. It is not a strictly equivalent diagram and is only for customer selection reference.

Property

material	Short term contact temperature 'C ≤ 30s	Long term exposure temperature 'C>30s	wear resistance	oil resistivity	weather ability	resistivity
N-Nitrile rubber	- 20 ~ +110	- 10 ~ +80	◎	◎	○	-
S-Silicone rubber	- 40 ~ +250	- 30 ~ +200	×	×	◎	-
CN-Conductive nitrile rubber	- 10 ~ +100	- 10 ~ +70	◎	◎	○	10? - 10?
CS - conductive silicone rubber	- 30 ~ +200	- 20 ~ +160	×	×	○	10? - 10?
U - Polyurethane rubber	+10 ~ +60	+10 ~ +40	◎	◎	◎	-
F - Fluororubber	- 10 ~ +350	- 5 ~ +300	◎	○	○	-
E - EPDM rubber	- 30 ~ +150	- 20 ~ +120	○	×	◎	-
HS - High temperature silicone rubber	- 20 ~ +300	- 50 ~ +250	△	×	◎	-
HD - High temperature/seamless material	- 10 ~ +180	- 5 ~ +160	◎	◎	◎	-
NR - Natural Rubber	- 20 ~ +80	- 10 ~ +60	◎	×	△	-
NF - foam chloroprene rubber	- 20 ~ +80	- 10 ~ +60	◎	△	◎	-
OF - Geranium foam rubber	- 20 ~ +80	- 10 ~ +60	◎	×		

◎ : Very good ○ : Excellent △ : Generally × : Not allowed

Storage instructions for vacuum suction cups

temperature

The suitable storage temperature for vacuum suction cups is 15 ° C to 25 ° C [59 ° F-77 ° F]

humidity

The relative humidity of the vacuum suction cup storage environment should be below 65% and there should be no condensation, while also avoiding extreme humidity or dryness

light

Please store in a dark place to avoid direct sunlight or high-intensity ultraviolet light

radiation

Please avoid exposing the product to ionizing radiation

O_3 ozone

Ozone will cause serious harm to products

deformation

The product should be stored under loose conditions to avoid being squeezed

inventory turns

Please implement inventory management according to the principle of First In First Out to ensure that the warehouse always has the latest manufactured or delivered products

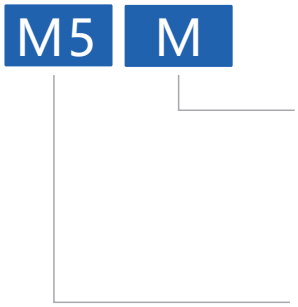
Color and hardness description of suction cup

material	hardness	describe
S-Silicone rubber 50	50°	The suction cup color is blue, with a calibrated hardness of 50 °
WS - white silicone rubber 50	50°	The suction cup color is white, with a calibrated hardness of 50 °
CS - conductive silicone rubber 50	55°	The suction cup is black in color and marked with a red marker pen (red dots) on the surface, with a calibrated hardness of 55 °

The color and hardness of the suction cup are represented by the above icon in the sample for reference only. In addition, due to the color difference caused by sample printing and the difference between the calibrated hardness of the material and the actual hardness of the suction cup itself (generally within the range of+5 °), it is a normal phenomenon

Thread specification description

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Thread type

M	External thread specifications generally refer to the national standard coarse thread pitch or fine thread pitch, please refer to the parameters of each product for details
F	Internal thread specifications generally refer to the national standard coarse thread pitch or fine thread pitch, please refer to the parameters of each product for details

Internal and external specifications of threads

M	Metric thread specifications, international cylindrical pipe thread specifications. 60 ° equilateral tooth profile, represented by pitch size (mm). Universal marking methods, such as M5, M8, M10, etc
G	British pipe thread specifications, international cylindrical thread specifications. 55 ° British non sealed cylindrical pipe thread. Inch thread identification, with a uniform specification of "indicating number/8"
T	NPT thread, American standard 60 ° cone pipe thread. Inch thread identification, with a uniform specification of "indicating number/8"
N	NPSF thread, American fuel pipe with anti dense parallel thread specification. Inch thread identification, with a uniform specification of "indicating number/8"
R	British conical pipe thread, inch thread identification, uniform specification is "indicate number/8"

illustrate with examples

specifications	**Actual definition of thread size (combined with thread specification identification)**	
G	1	G1：British pipe thread G1/8
T	4	T4：American standard NPT1/2
N	8	N8：American standard NPSF1“
R	12	R12：British taper pipe thread R1 "1/2
...	...	

Specification description for connecting threads in the model			
G1M	G1/8 External thread specification	G6F	G3/4 Internal thread specification
G2M	G1/4 External thread specification	G8F	G1" Internal thread specification
G3M	G3/8 External thread specification	G12F	G1"1/2 Internal thread specification
G4F	G1/2 External thread specification		

Note: The thread pitch not specified in this sample is assumed to be the national standard coarse tooth specification



Classification of connector accessories series

S	Universal card embedded suction cup connector. Unilateral universal thread specifications (conventional metric threads, pipe thread specifications, etc.), Specification for single-sided card embedded suction cup connection
T	Universal threaded adapter. Both sides have universal thread specifications (conventional metric threads, pipe thread specifications, etc.), Applied to thread specification conversion and relay connection
F	Fixed connector. There are various specifications, divided into two types of intake specifications: straight through type and side inlet type. There are various specifications of connectors, such as direct insertion type and threaded connection. Suitable for installation with small space and no need for buffer support rods
B	Spherical joint, capable of rotating a certain angle for installation. Both sides have universal thread specifications (conventional metric threads, pipe thread specifications, etc.), Applied in situations where the installation angle needs to be adjusted
H	Rotating bracket, can be installed according to the application angle. Can correspond to trusses and be installed with locking mechanism
E	Flexible joint, capable of rotating a certain angle and automatically resetting
P	Quick plug connector, suitable for use in very rough environments, with a long lifespan. Connecting components acting on vacuum systems
Q	The pagoda joint is suitable for harsh working conditions and has a long service life. Can be used in conjunction with standard air tubes and steel wire tubes on the market

Fixed code for connector products

J	joint

Fixed code for installation accessories products

p	Install accessories

Usage environment

⚠ warn

1. Places where there is a risk of falling during operation must provide some form of fall prevention measures to ensure safety
2. Avoid using vacuum pipelines when subjected to long-term pressure of 0.1 MPa or above. Due to the non explosion proof joints of the vacuum device, the use in these situations can easily damage the equipment
3. When there are two or more suction cups in a vacuum generator, a suction failure of one suction cup can easily cause a decrease in vacuum at other suction cups, and the workpiece may also fall off
4. Do not use in environments containing corrosive gases, flammable gases, explosive gases, chemicals, seawater or steam, and never allow vacuum systems to inhale such substances
5. Avoid using the vacuum generator port to block or increase exhaust resistance, as this careless use can cause flow loss or vacuum reduction
6. In situations where the equipment is directly exposed to sunlight, protective covers should be added
7. Avoid using equipment in environments with excessive vibration as it may cause malfunctions

Design/Setting

⚠ warn

1. Pay attention to the vacuum pressure drop caused by air supply or power supply failure, which may cause the workpiece to fall. Therefore, sufficient preventive measures must be taken
2. Manually inspect and mark the vacuum generator port on the main body. Incorrect pipeline connections can damage the equipment
3. The air source of the vacuum generator should be clean air, and lubricants should never be used in the air source. Impurities or oil in compressed air can easily cause malfunctions and reduce performance
4. In situations where there is leakage from the workpiece or piping. If the suction flow is insufficient, there will be poor suction. In situations where the piping is long or thick. The volume of the piping increases, and the suction response time is too long
5. The effective cross-sectional area of the vacuum side piping should be selected based on the maximum suction flow rate of the vacuum generator, and the effective cross-sectional area of the supply side piping should be selected based on the maximum air consumption of the vacuum generator

maintenance

⚠ warn

1. The silencing components of the muffler and the filter element of the filter should be regularly maintained and inspected. Component blockage can reduce performance or cause product damage
2. Only after fully understanding the components of the generator can replacement be carried out
3. Do not use water or solvents to clean or spray equipment
4. In the vacuum system, please avoid using an oil mist device in the front pipeline of the vacuum generator. Oil mist accumulation at the nozzle of the generator can easily cause blockage and lead to a decrease in the performance of the generator
5. Please avoid using adhesive tape for pipeline connections on vacuum circuits, especially at joint connections. Raw tape is prone to detachment and blockage of internal pipelines, resulting in a decrease in the performance of the vacuum generator

install

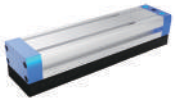
⚠ warn

1. Avoid using the vacuum generator port to block or increase exhaust resistance, as this careless use can cause flow loss or vacuum reduction
2. Do not remove the rotatable resin shell, force it to sway or rotate, which may cause resin damage or leakage
3. Equipment must not be used in places with flammable or explosive solid or gaseous gases, as it may cause fires or explosions

Vacuum suction series

60MMStandard sponge suction cup BMSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





General

80MMStandard sponge suction cup BMSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





General

130MMStandard sponge suction cup BMSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





General

150MMStandard sponge suction cup BMSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





General

200MMStandard sponge suction cup BMSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge

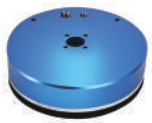




General

Circular sponge suction cup FBBMSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: sponge





General

120*60MMStandard sponge suction cup FBBMSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: sponge





General

160*80MMStandard sponge suction cup FBBMSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- ◇ Adsorption surface type: sponge





General

30MMStandard dense array suction cup PCBSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: Silicone suction nozzle





3C electronics



Metal thick plate



metal sheet



injection molding

30MMT shaped dense array suction cup PCBSERIES

- Vacuum type: external vacuum source
- Adsorption surface type: Silicone suction nozzle





3C electronics



Metal thick plate



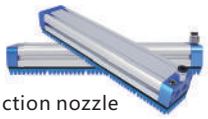
metal sheet



injection molding

60MMStandard dense array suction cup PCBSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: Silicone suction nozzle




3C electronics


Metal thick plate


metal sheet


injection molding

Plate edge dense array suction cup BBPCBSERIES

- Vacuum type: external vacuum source
- Adsorption surface type: Silicone suction nozzle


3C electronics


glass plate


metal plate



Strong magnet dense array suction cup FBPCBSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: Silicone suction nozzle




3C electronics


glass plate


metal plate

Dense array suction cup with spring rod FBPCBSERIES

- Buffer stroke: 10-20mm
- Adsorption surface type: Silicone suction nozzle




3C electronics


Video film


metal sheet

60MMSuction cup type vacuum suction cup IVSCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: suction cup


General

80MMSuction cup type vacuum suction cup IVSCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: suction cup




General

130MMSuction cup type vacuum suction cup IVSCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: suction cup




General

150MMSuction cup type vacuum suction cup IVSCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: suction cup




General

200MMSuction cup type vacuum suction cup IVSCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: suction cup




General

Oval sponge suction cup SBCSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: sponge




General

Circuit board fan sponge suction cup HMVCSERIES

- Vacuum type: external fan/vacuum pump/vacuum generator
- Adsorption surface type: sponge





General

Sponge suction cup HMVCSERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





General

Thin lip composite suction cup VCIESERIES

- Vacuum type: Built in vacuum generator
- Adsorption surface type: sponge





3C electronics



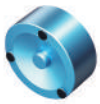
new energy



breathability

Contactless suction cup FJCSERIES

- Diameter: 20~120mm
- Adsorption force: 2~89N





composite material



breathability

Photovoltaic suction cup FJCSERIES

- Vacuum degree: 4.5~11kPa
- Vacuum flow rate: 330~490NL/min





composite material



breathability



new energy

Needle suction cup NPSGSERIES

- Diameter: 45~120
- Adsorption force: 24~50N





composite material



Fiber textile

Circular sponge vacuum suction f x s BRSERIES

- Vacuum type: external vacuum source
- Adsorption surface type: sponge





Stone



Rough surface

Circular sponge vacuum suction cup+support rod BRSERIES

- Vacuum type: external vacuum source
- Adsorption surface type: sponge





Stone



Rough surface

Array of suction cups FBPCBSERIES

- Vacuum type: Built-in vacuum generator / External vacuum source5
- Adsorption surface type: Silicone suctio





3C electronics



Metal thick plate



metal sheet



injection molding

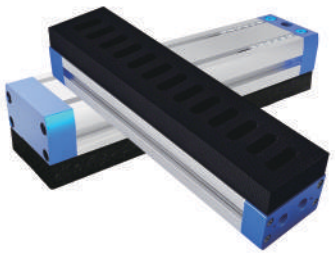
BM SERIES

Sponge suction cup -60mm standard sponge suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

Efficient protection of sensitive materials

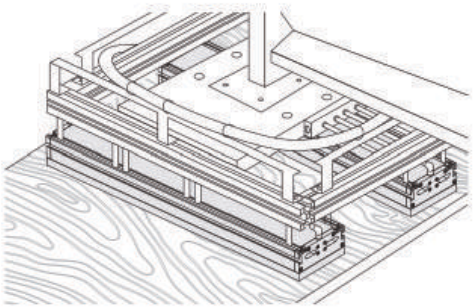
Quickly switch to high-speed transportation

Durable and easy to maintain with low vacuum requirements

Porous breathable smal object group suction

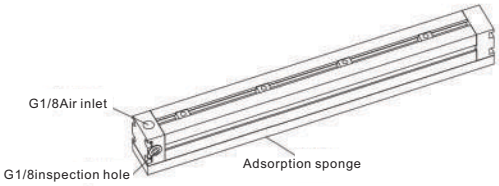
application

- **Electronics industry**: PCB board and screen module handling
- **Food packaging**: palletizing of flexible packaging bags and boxed products
- **Automotive manufacturing**: installation of interior parts and rubber seals
- **Logistics warehousing**: Automated sorting of express packages
- **Building materials industry**: rapid transportation of wooden boards, metal plates, etc



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M5-M6), the number of nuts is assembled according to the length dimension
- Suction tool BM190-1200x60 with 2 gas supply ports (G1/8F) and 1 vacuum detection port(1-M5), Direct exhaust from the side of the gas supply port cover
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R optionsSuction cup sponge: blank - no filter screen, F - with filter screen optional



BM SERIES

Sponge suction cup -60mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-BM-310-60-DXF-3R-LS2L-L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
BM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service	60mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2pieces

Model specifications

CCV-HM-240-60-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service)	60mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

BM SERIES

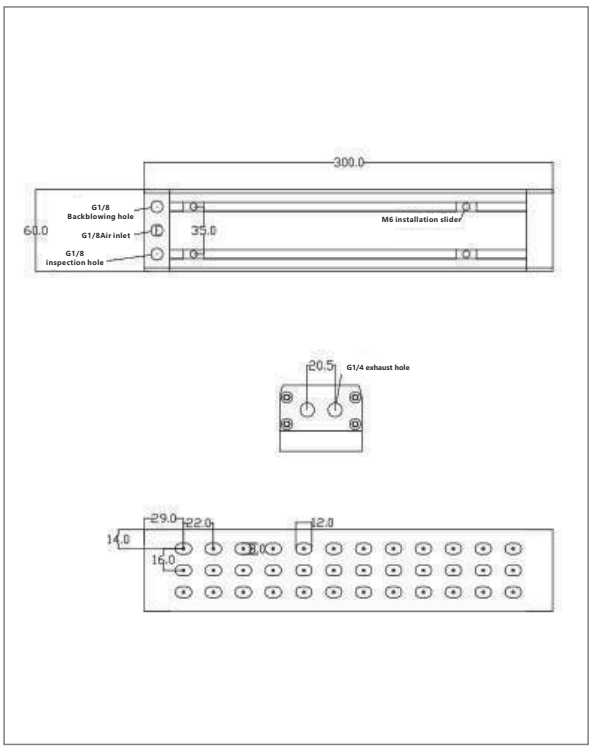
Sponge suction cup -60mm standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
60Wide sponge suction cup (2 rows of holes)	BM-200-60	0.8	5 - 8	φ8 - φ10	160	600	117.6	26
	BM-250-60	0.8	5 - 8	φ8 - φ10	160	600	147	34
	BM-300-60	0.9	5 - 8	φ8 - φ10	160	600	176.4	41
	BM-350-60	1.0	5 - 8	φ8 - φ10	160	600	205.8	49
	BM-400-60	1.1	5 - 8	φ8 - φ10	160	600	235.2	56
	BM-450-60	1.2	5 - 8	φ8 - φ10	160	600	264.6	64
	BM-500-60	1.3	5 - 8	φ8 - φ10	160	600	294	71
	BM-550-60	1.4	5 - 8	φ8 - φ10	160	600	323.4	79
	BM-600-60	1.5	5 - 8	φ8 - φ10	160	600	352.8	86
	BM-650-60	1.5	5 - 8	φ8 - φ10	160	600	382.2	94
	BM-700-60	1.6	5 - 8	φ8 - φ10	160	600	411.6	101
	BM-750-60	1.7	5 - 8	φ8 - φ10	160	600	441	109
	BM-800-60	1.8	5 - 8	φ8 - φ10	320	1200	470.4	116
	BM-850-60	1.9	5 - 8	φ8 - φ10	320	1200	499.8	124
	BM-900-60	2.0	5 - 8	φ8 - φ10	320	1200	529.2	131
	BM-950-60	2.1	5 - 8	φ8 - φ10	320	1200	558.6	139
	BM-1000-60	2.2	5 - 8	φ8 - φ10	320	1200	588	146
	BM-1100-60	2.3	5 - 8	φ8 - φ10	320	1200	646.8	161
	BM-1200-60	2.5	5 - 8	φ8 - φ10	320	1200	705.6	176

Size specifications (mm)



model	L	W
BM-200-60	200	60
BM-250-60	250	60
BM-300-60	300	60
BM-350-60	350	60
BM-400-60	400	60
BM-450-60	450	60
BM-500-60	500	60
BM-550-60	550	60
BM-600-60	600	60
BM-650-60	650	60
BM-700-60	700	60
BM-750-60	750	60
BM-600-60	600	60
BM-850-60	850	60
BM-900-60	900	60
BM-950-60	950	60
BM-1000-60	1000	60
BM-1100-60	1100	60
BM-1200-60	120	60

BM SERIES

Sponge suction cup -80mm standard sponge suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

Efficient protection of sensitive materials

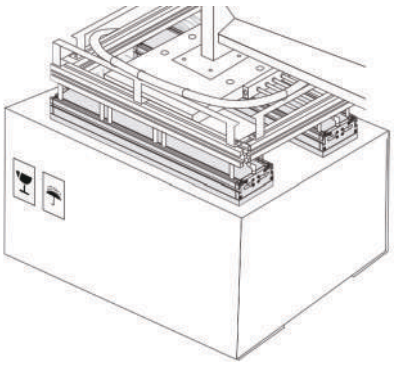
Quickly switch to high-speed transportation

Durable and easy to maintain with low vacuum requirements

Porous breathable smal object group suction

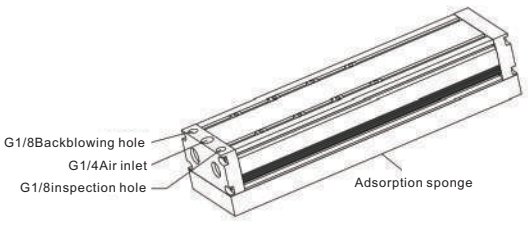
application

- **Electronics industry**: PCB board and screen module handling
- **Food packaging**: palletizing of flexible packaging bags and boxed products
- **Automotive manufacturing**: installation of interior parts and rubber seals
- **Logistics warehousing**: Automated sorting of express packages
- **Building materials industry**: rapid transportation of wooden boards, metal plates, etc



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M5-M6), the number of nuts is assembled according to the length dimension
- Suction tool BM190-1200x80 with 2 gas supply ports (G1/8F) and 1 vacuum detection port(1-M5), Direct exhaust from the side of the gas supply port cover
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R optionsSuction cup sponge: blank - no filter screen, F - with filter screen optional



BM SERIES

Sponge suction cup -80mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-BM-310-80-DXF-3R-LS2L-L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
BM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service	80mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2pieces

Model specifications

CCV-HM-240-80-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service)	80mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

BM SERIES

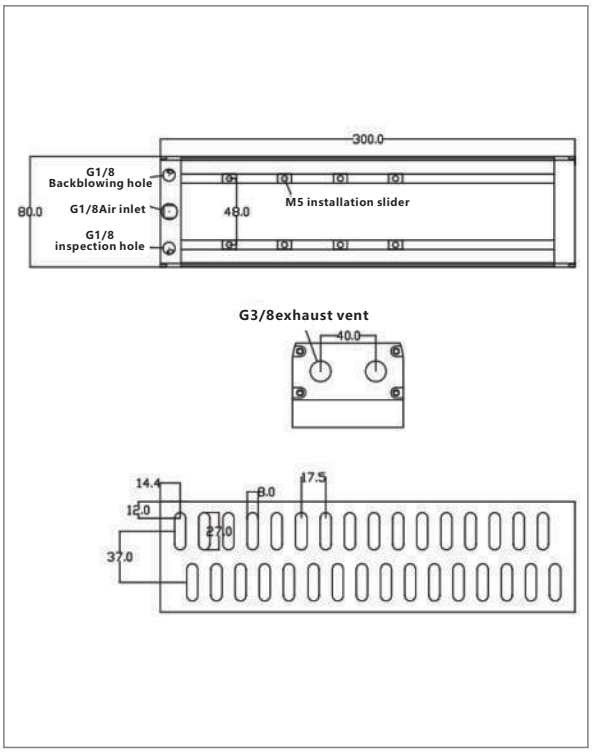
Sponge suction cup -80mm standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
80Wide sponge suction cup (2 rows of holes)	BM-200-80	1.1	5 - 8	φ8 - φ10	80	300	156.8	19
	BM-250-80	1.3	5 - 8	φ8 - φ10	80	300	196	25
	BM-300-80	1.5	5 - 8	φ8 - φ10	80	300	235.2	31
	BM-350-80	1.6	5 - 8	φ8 - φ10	160	600	274.4	36
	BM-400-80	1.8	5 - 8	φ8 - φ10	160	600	313.6	42
	BM-450-80	1.9	5 - 8	φ8 - φ10	160	600	352.8	48
	BM-500-80	2.1	5 - 8	φ8 - φ10	160	600	392	53
	BM-550-80	2.3	5 - 8	φ8 - φ10	160	600	431.2	59
	BM-600-80	2.4	5 - 8	φ8 - φ10	160	600	470.4	65
	BM-650-80	2.6	5 - 8	φ8 - φ10	160	600	509.6	71
	BM-700-80	2.7	5 - 8	φ8 - φ10	160	600	548.8	76
	BM-750-80	2.9	5 - 8	φ8 - φ10	240	900	588	82
	BM-800-80	3.1	5 - 8	φ8 - φ10	160	600	627.2	88
	BM-850-80	3.2	5 - 8	φ8 - φ10	160	600	666.4	93
	BM-900-80	3.4	5 - 8	φ8 - φ10	160	600	705.6	99
	BM-950-80	3.5	5 - 8	φ8 - φ10	160	600	744.8	105
	BM-1000-80	3.7	5 - 8	φ8 - φ10	240	900	784	111
	BM-1100-80	4.0	5 - 8	φ8 - φ10	240	900	862.4	122
	BM-1200-80	4.3	5 - 8	φ8 - φ10	320	1200	940.8	133

尺寸规格(mm)



型号	L	W
BM-200-80	200	80
BM-250-80	250	80
BM-300-80	300	80
BM-350-80	350	80
BM-400-80	400	80
BM-450-80	450	80
BM-500-80	500	80
BM-550-80	550	80
BM-600-80	600	80
BM-650-80	650	80
BM-700-80	700	80
BM-750-80	750	80
BM-800-80	800	80
BM-850-80	850	80
BM-900-80	900	80
BM-950-80	950	80
BM-1000-80	1000	80
BM-1100-80	1100	80
BM-1200-80	1200	80

BM SERIES

Cobot Care VAC

Sponge suction cup -130mm standard sponge suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

Efficient protection of sensitive materials

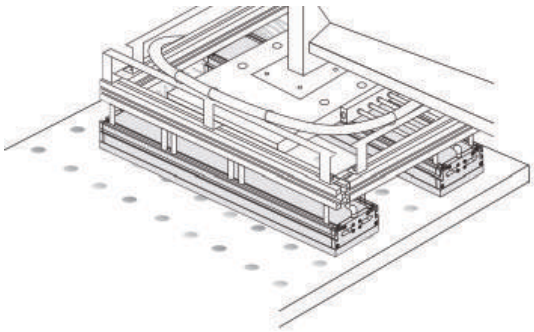
Quickly switch to high-speed transportation

Durable and easy to maintain with low vacuum requirements

Porous breathable smal object group suction

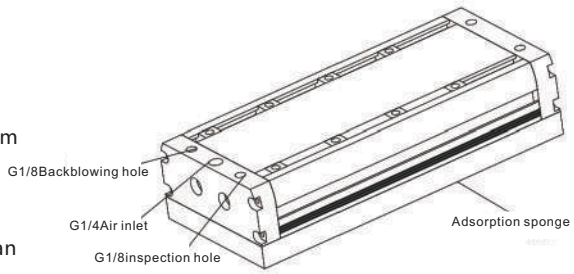
application

- **Electronics industry**: PCB board and screen module handling
- **Food packaging**: palletizing of flexible packaging bags and boxed products
- **Automotive manufacturing**: installation of interior parts and rubber seals
- **Logistics warehousing**: Automated sorting of express packages
- **Building materials industry**: rapid transportation of wooden boards, metal plates, etc



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M5-M6), the number of nuts is assembled according to the length dimension
- Suction tool BM190-1200x130 with 2 gas supply ports (G1/8F) and 1 vacuum detection port(1-M5), Direct exhaust from the side of the gas supply port cover
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R optionsSuction cup sponge: blank - no filter screen, F - with filter screen optional



BM SERIES

Sponge suction cup -130mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-BM-310-130-DXF-3R-LS2L-L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
BM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service	130mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2pieces

Model specifications

CCV-HM-240-130-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service)	130mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

BM SERIES

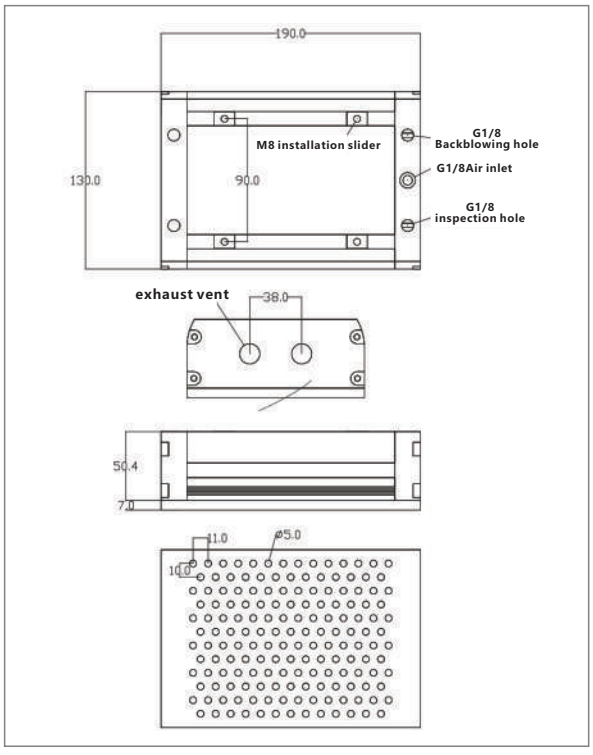
Sponge suction cup -130mm standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
130Wide sponge suction cup (3 rows of holes)	BM-190-130	1.4	5 - 8	φ8 - φ10	80	300	242.06	27
	BM-240-130	1.6	5 - 8	φ8 - φ10	80	300	305.76	36
	BM-310-130	1.9	5 - 8	φ8 - φ10	160	600	394.94	48
	BM-415-130	2.4	5 - 8	φ8 - φ10	160	600	528.71	66
	BM-442-130	2.5	5 - 8	φ8 - φ10	160	600	563.108	70
	BM-500-130	2.8	5 - 8	φ8 - φ10	160	600	637	80
	BM-610-130	3.3	5 - 8	φ8 - φ10	160	600	777.14	99
	BM-700-130	3.7	5 - 8	φ8 - φ10	160	600	891.8	114
	BM-800-130	4.2	5 - 8	φ8 - φ10	160	600	1019.2	132
	BM-900-130	4.7	5 - 8	φ8 - φ10	240	900	1146.4	149
	BM-1000-130	5.1	5 - 8	φ8 - φ10	240	900	1274	166
	BM-1100-130	5.6	5 - 8	φ8 - φ10	320	1200	1401.4	183
	BM-1200-130	6.1	5 - 8	φ8 - φ10	320	1200	1528.8	200
	BM-1300-130	6.5	5 - 8	φ8 - φ10	480	1800	1656.2	217
	BM-1400-130	7.0	5 - 8	φ8 - φ10	480	1800	1783.6	234

Size specifications (mm)



model	L	W
BM-200-130	200	130
BM-250-130	250	130
BM-300-130	300	130
BM-350-130	350	130
BM-400-130	400	130
BM-450-130	450	130
BM-500-130	500	130
BM-550-130	550	130
BM-600-130	600	130
BM-650-130	650	130
BM-700-130	700	130
BM-750-130	750	130
BM-1300-130	1300	130
BM-850-130	850	130
BM-900-130	900	130
BM-950-130	950	130
BM-1000-130	1000	130
BM-1100-130	1100	130
BM-1200-130	120	130

BM SERIES

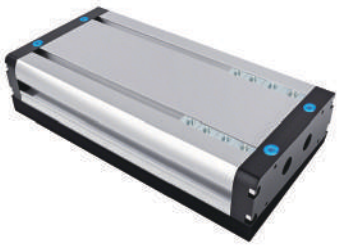
Sponge suction cup -150mm standard sponge suction cup

Cobot Care VAC

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

Efficient protection of sensitive materials

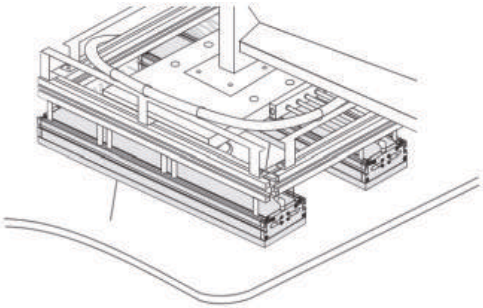
Quickly switch to high-speed transportation

Durable and easy to maintain with low vacuum requirements

Porous breathable smal object group suction

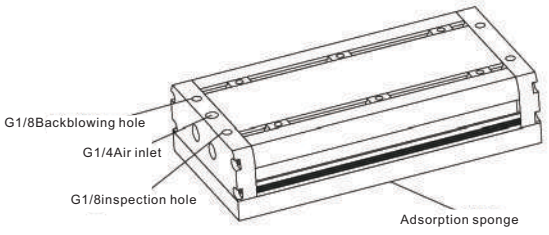
application

- **Electronics industry**: PCB board and screen module handling
- **Food packaging**: palletizing of flexible packaging bags and boxed products
- **Automotive manufacturing**: installation of interior parts and rubber seals
- **Logistics warehousing**: Automated sorting of express packages
- **Building materials industry**: rapid transportation of wooden boards, metal plates, etc



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M5-M6), the number of nuts is assembled according to the length dimension
- Suction tool BM190-1200x150 with 2 gas supply ports (G1/8F) and 1 vacuum detection port(1-M5), Direct exhaust from the side of the gas supply port cover
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R optionsSuction cup sponge: blank - no filter screen, F - with filter screen optional



BM SERIES

Sponge suction cup -150mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-BM-310-150-DXF-3R-LS2L-L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
BM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service	150mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2pieces

Model specifications

CCV-HM-240-150-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service)	150mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

BM SERIES

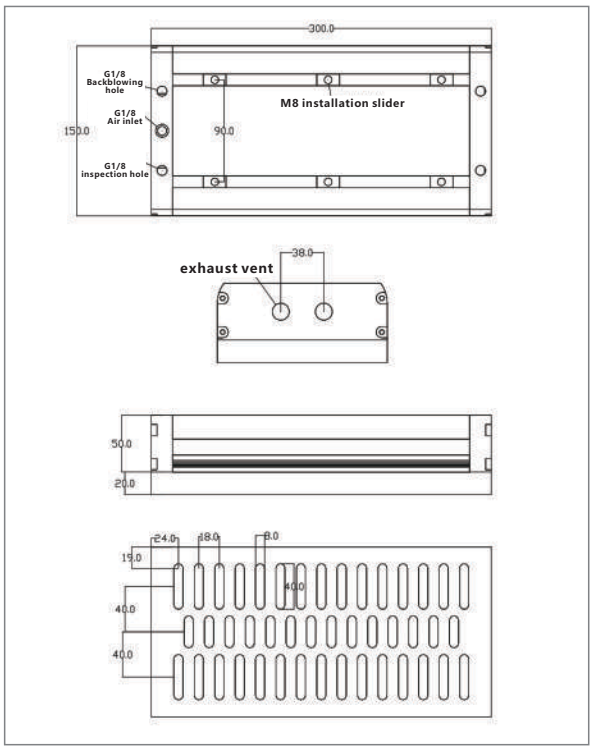
Sponge suction cup -150mm standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
150Wide sponge suction cup (3 rows of holes)	BM-200-150	1.8	5 - 8	φ8 - φ10	80	300	294	29
	BM-250-150	2.1	5 - 8	φ8 - φ10	80	300	367.5	37
	BM-300-150	2.4	5 - 8	φ8 - φ10	160	600	441	46
	BM-350-150	2.7	5 - 8	φ8 - φ10	160	600	514.5	54
	BM-400-150	3.0	5 - 8	φ8 - φ10	160	600	588	63
	BM-450-150	3.3	5 - 8	φ8 - φ10	160	600	661.5	72
	BM-500-150	3.6	5 - 8	φ8 - φ10	160	600	735	80
	BM-550-150	3.9	5 - 8	φ8 - φ10	160	600	808.5	89
	BM-600-150	4.2	5 - 8	φ8 - φ10	160	600	882	97
	BM-650-150	4.5	5 - 8	φ8 - φ10	160	600	955.5	106
	BM-700-150	4.8	5 - 8	φ8 - φ10	160	600	1029	114
	BM-750-150	5.1	5 - 8	φ8 - φ10	160	600	1102.5	123
	BM-800-150	5.4	5 - 8	φ8 - φ10	160	600	1176	132
	BM-850-150	5.7	5 - 8	φ8 - φ10	160	600	1249.5	140
	BM-900-150	6.0	5 - 8	φ8 - φ10	240	900	1323	149
	BM-950-150	6.3	5 - 8	φ8 - φ10	240	900	1396.5	157
	BM-1000-150	6.6	5 - 8	φ8 - φ10	320	1200	1470	166
	BM-1100-150	7.2	5 - 8	φ8 - φ10	320	1200	1617	183
	BM-1200-150	7.8	5 - 8	φ8 - φ10	480	1800	1764	200

Size specifications (mm)



model	L	W
BM-200-150	200	150
BM-250-150	250	150
BM-300-150	300	150
BM-350-150	350	150
BM-400-150	400	150
BM-450-150	450	150
BM-500-150	500	150
BM-550-150	550	150
BM-600-150	600	150
BM-650-150	650	150
BM-700-150	700	150
BM-750-150	750	150
BM-800-150	800	150
BM-850-150	850	150
BM-900-150	900	150
BM-950-150	950	150
BM-1000-150	1000	150
BM-1100-150	1100	150
BM-1200-150	1200	150

BM SERIES

Sponge suction cup -200mm standard sponge suction cup

Cobot Care VAC

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

Efficient protection of sensitive materials

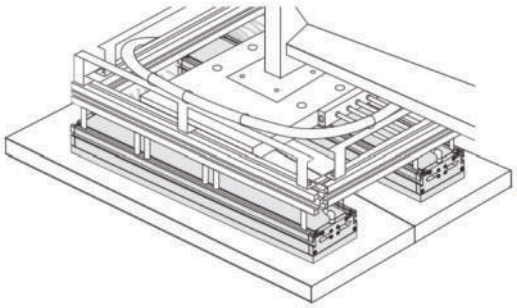
Quickly switch to high-speed transportation

Durable and easy to maintain with low vacuum requirements

Porous breathable smal object group suction

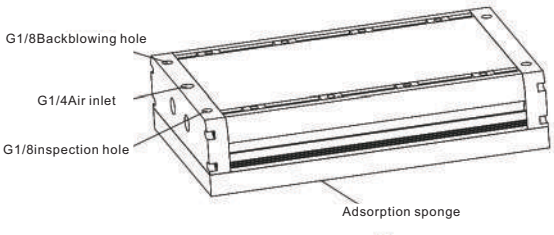
application

- **Electronics industry**: PCB board and screen module handling
- **Food packaging**: palletizing of flexible packaging bags and boxed products
- **Automotive manufacturing**: installation of interior parts and rubber seals
- **Logistics warehousing**: Automated sorting of express packages
- **Building materials industry**: rapid transportation of wooden boards, metal plates, etc



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M5-M6), the number of nuts is assembled according to the length dimension
- Suction tool BM190-1200x200 with 2 gas supply ports (G1/8F) and 1 vacuum detection port(1-M5), Direct exhaust from the side of the gas supply port cover
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R optionsSuction cup sponge: blank - no filter screen, F - with filter screen optional



BM SERIES

Sponge suction cup -200mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-BM-310-200-DXF-3R-LS2L-L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
BM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service	200mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2pieces

Model specifications

CCV-HM-240-200-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	②length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (For more sizes, please contact customer service)	200mm

④ Sponge hole rows	⑤Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

BM SERIES

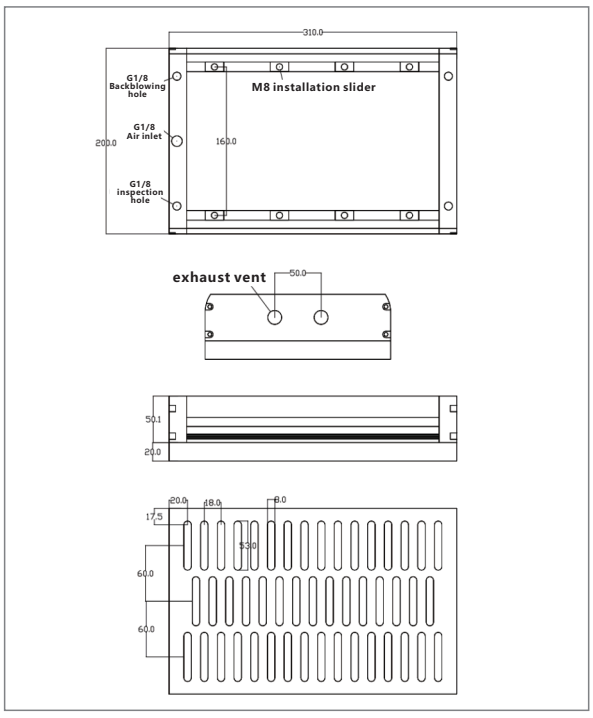
Sponge suction cup -200mm standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
200Wide sponge suction cup (3 rows of holes)	BM-200-200	2.2	5 - 8	φ8 - φ10	160	600	392	29
	BM-250-200	2.6	5 - 8	φ8 - φ10	160	600	490	37
	BM-300-200	3.0	5 - 8	φ8 - φ10	160	600	588	46
	BM-350-200	3.4	5 - 8	φ8 - φ10	160	600	686	54
	BM-400-200	3.8	5 - 8	φ8 - φ10	160	600	784	63
	BM-450-200	4.2	5 - 8	φ8 - φ10	160	600	882	72
	BM-500-200	4.6	5 - 8	φ8 - φ10	160	600	980	80
	BM-550-200	4.9	5 - 8	φ8 - φ10	160	600	1078	89
	BM-600-200	5.3	5 - 8	φ8 - φ10	160	600	1176	97
	BM-650-200	5.7	5 - 8	φ8 - φ10	160	600	1274	106
	BM-700-200	6.1	5 - 8	φ8 - φ10	160	600	1372	114
	BM-750-200	6.5	5 - 8	φ8 - φ10	160	600	1470	123
	BM-800-200	6.9	5 - 8	φ8 - φ10	160	600	1568	132
	BM-850-200	7.2	5 - 8	φ8 - φ10	160	600	1666	140
	BM-900-200	7.6	5 - 8	φ8 - φ10	240	900	1764	149
	BM-950-200	8.0	5 - 8	φ8 - φ10	240	900	1862	157
	BM-1000-200	8.4	5 - 8	φ8 - φ10	320	1200	1960	166
	BM-1100-200	9.2	5 - 8	φ8 - φ10	480	1800	2156	183
	BM-1200-200	9.9	5 - 8	φ8 - φ10	480	1800	2352	200

Size specifications (mm)



model	L	W
BM-200-200	200	200
BM-250-200	250	200
BM-300-200	300	200
BM-350-200	350	200
BM-400-200	400	200
BM-450-200	450	200
BM-500-200	500	200
BM-550-200	550	200
BM-600-200	600	200
BM-650-200	650	200
BM-700-200	700	200
BM-750-200	750	200
BM-800-200	800	200
BM-850-200	850	200
BM-900-200	900	200
BM-950-200	950	200
BM-1000-200	1000	200
BM-1100-200	1100	200
BM-1200-200	1200	200

FBBM SERIES

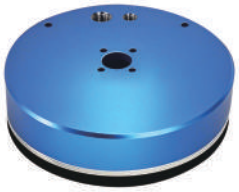
Circular sponge suction cup

Cobot Care VAC

Stone material Rough Surface

characteristic

- The shell is made of high-quality aluminum alloy material
- The symmetrical shape of a standard circle ensures uniform force distribution and is suitable for most flat or curved surfaces
- The surface is a porous and soft sponge layer (made of EPDM foam material),
- Bottom or embedded hard suction cups (such as silicone or rubber).
- Built in throttle valve structure of the product (optional)



advantage

High adaptability sealing performance

Buffer protection function

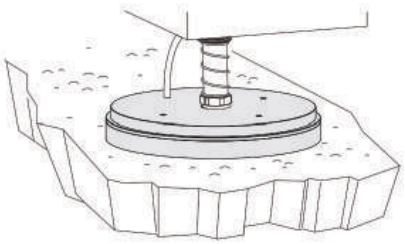
Efficient adsorption and rapid response

Durable and easy to maintain

Strong universality

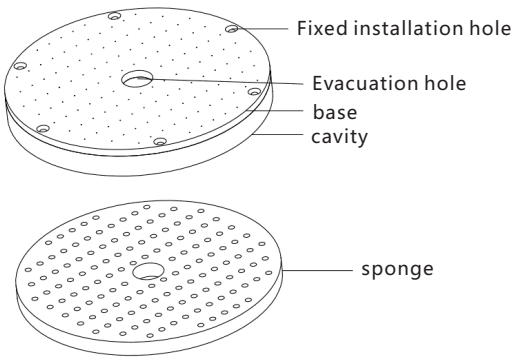
application

- **Photovoltaic industry**: handling solar silicon wafers and glass panels
- **Logistics sorting**: Processing boxes and bagged itemsCNC machining: fixing thin plate materials
- **Automated production line**: cooperate with robots for workpiece transfer
- **Electronic circuit industry**: electronic material tray grabbing(The disc can be used universally within a certain size, and special sizes can be customize non-standard)



structure

- Composed of metal support plate and sponge, the sponge comes with adhesive backing and can be directly attached to the support plate



FBBM SERIES

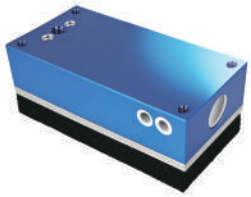
Sponge suction cup -120-60MM standard sponge suction cup

Cobot Care VAC

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- Using polyurethane (PU) or nitrile rubber (NBR) sponge, with a longer lifespan than ordinary rubber suction cups
- The porous structure allows air to be quickly expelled, and the adsorption response is fast (capturing can be completed within 0.1~0.3 seconds)
- Built in check valve structure in the product (optional)



advantage

Non destructive grasping

Adapt to complex surfaces

Efficient and energy-saving

Durable and easy to maintain with low vacuum requirements

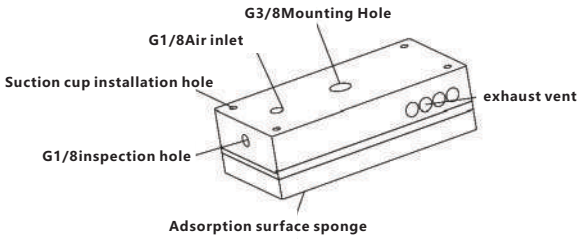
Anti pollution and long lifespan

application

- **Electronic manufacturing industry**: PCB handling, FPC (flexible circuit board) grabbing, LCD screen bonding
- **Packaging and logistics**: automatic stacking of cartons, foam boxes and plastic bags
- **Glass&Acrylic Processing**: Handling and polishing glass and organic glass plates to avoid suction cup marks
- A**utomotive parts**: assembly of non-metallic components such as interior parts and rubber gaskets
- **Assembly of 3C products**: precise positioning of phone cases and tablet cover plates

structure

- The body is made of aluminum alloy to ensure structural strength
- Assemble standard threads (such as M5, G1/8) or quick change fittings to connect the vacuum system
- The suction tool is equipped with one gas supply port (G1/8F) and one vacuum detection port G1/8, as well as four exhaust holes
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R options
  Suction cup sponge: blank - no filter screen, F - with filter screen optional



FBBM SERIES

Sponge suction cup -60mm standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-FBBM-120-60-DXF-3R-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
FBBM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (Contact customer service for more sizes)	60mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2 pieces

Model specifications

CCV-HM-120-60-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (Contact customer service for more sizes)	60mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

FBBM SERIES

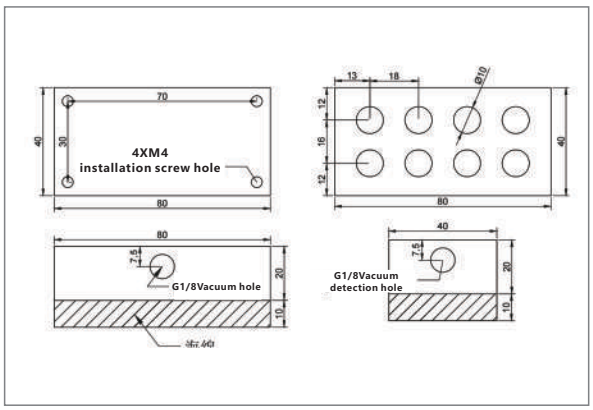
Sponge suction cup -120-60MM standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Diameter of gas supply pipemm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
60Wide sponge suction cup(3 rows of holes)	FBBM-200-60	0.8	5 - 8	φ8 - φ10	160	600	117.6	26
	FBBM-250-60	0.8	5 - 8	φ8 - φ10	160	600	147	34
	FBBM-300-60	0.9	5 - 8	φ8 - φ10	160	600	176.4	41
	FBBM-350-60	1.0	5 - 8	φ8 - φ10	160	600	205.8	49
	FBBM-400-60	1.1	5 - 8	φ8 - φ10	160	600	235.2	56
	FBBM-450-60	1.2	5 - 8	φ8 - φ10	160	600	264.6	64
	FBBM-500-60	1.3	5 - 8	φ8 - φ10	160	600	294	71
	FBBM-550-60	1.4	5 - 8	φ8 - φ10	160	600	323.4	79
	FBBM-600-60	1.5	5 - 8	φ8 - φ10	160	600	352.8	86
	FBBM-650-60	1.5	5 - 8	φ8 - φ10	160	600	382.2	94
	FBBM-700-60	1.6	5 - 8	φ8 - φ10	160	600	411.6	101
	FBBM-750-60	1.7	5 - 8	φ8 - φ10	160	600	441	109
	FBBM-800-60	1.8	5 - 8	φ8 - φ10	320	1200	470.4	116
	FBBM-850-60	1.9	5 - 8	φ8 - φ10	320	1200	499.8	124
	FBBM-900-60	2.0	5 - 8	φ8 - φ10	320	1200	529.2	131
	FBBM-950-60	2.1	5 - 8	φ8 - φ10	320	1200	558.6	139
	FBBM-1000-60	2.2	5 - 8	φ8 - φ10	320	1200	588	146
	FBBM-1100-60	2.3	5 - 8	φ8 - φ10	320	1200	646.8	161
	FBBM-1200-60	2.5	5 - 8	φ8 - φ10	320	1200	705.6	176

Size specifications (mm)



型号	L	W
FBBM-200-60	200	60
FBBM-250-60	250	60
FBBM-300-60	300	60
FBBM-350-60	350	60
FBBM-400-60	400	60
FBBM-450-60	450	60
FBBM-500-60	500	60
FBBM-550-60	550	60
FBBM-600-60	600	60
FBBM-650-60	650	60
FBBM-700-60	700	60
FBBM-750-60	750	60
FBBM-600-60	600	60
FBBM-850-60	850	60
FBBM-900-60	900	60
FBBM-950-60	950	60
FBBM-1000-60	1000	60
FBBM-1100-60	1100	60
FBBM-1200-60	120	60

FBBM SERIES

Cobot Care VAC

Sponge suction cup -160-80MM standard sponge suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Adopting a built-in high flow vacuum generator
- Using polyurethane (PU) or nitrile rubber (NBR) sponge, with a longer lifespan than ordinary rubber suction cups
- The porous structure allows air to be quickly expelled, and the adsorption response is fast (capturing can be completed within 0.1~0.3 seconds)
- Built in check valve structure in the product (optional)



advantage

Non destructive grasping

Adapt to complex surfaces

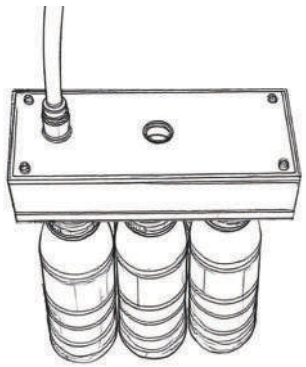
Efficient and energy-saving

Durable and easy to maintain with low vacuum requirements

Anti pollution and long lifespan

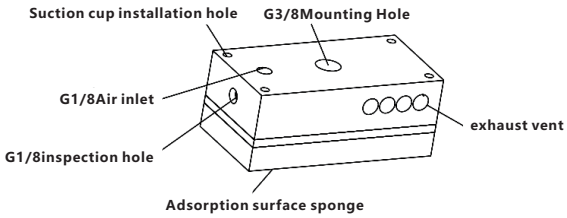
application

- **Electronic manufacturing industry**: PCB handling, FPC (flexible circuit board) grabbing, LCD screen bonding
- **Packaging and logistics**: automatic stacking of cartons, foam boxes and plastic bags
- **Glass&Acrylic Processing**: Handling and polishing glass and organic glass plates to avoid suction cup marks
- **Automotive parts**: assembly of non-metallic components such as interior parts and rubber gaskets
- **Assembly of 3C products**: precise positioning of phone cases and tablet cover plates



structure

- The body is made of aluminum alloy to ensure structural strength
- Assemble standard threads (such as M5, G1/8) or quick change fittings to connect the vacuum system
- The suction tool is equipped with one gas supply port (G1/8F) and one vacuum detection port G1/8, as well as four exhaust holes
- The suction tool comes standard with an internal high flow generator and an optional check valve
- The sponge type adsorption surface is available in 3R and 5R options
  Suction cup sponge: blank - no filter screen, F - with filter screen optional



FBBM SERIES

Sponge suction cup -160-80MM standard sponge suction cup

Cobot Care VAC

Model specifications

CCV-FBBM-120-80-DXF-3R-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
FBBM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (Contact customer service for more sizes)	80mm

④ Valve body form	⑤ Sponge hole rows	⑥ Number of generators
XK throttle valve DXF self closing valve	3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	LS1L 1 piece LS2L 2 pieces

Model specifications

CCV-HM-120-80-3R-20-F

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
HM	190mm 500mm 730mm 240mm 610mm 800mm 310mm 640mm 850mm 415mm 680mm 900mm 442mm 700mm 1000mm (Contact customer service for more sizes)	80mm

④ Sponge hole rows	⑤ Sponge thickness	⑥ Is there a filter screen available
3R-3 rows of holes (suction hole spacing 18mm) 5R-5 row holes (suction hole spacing 18mm)	20mm 30mm 15mm 10mm	Empty self - no filter F - with filter screen

FBBM SERIES

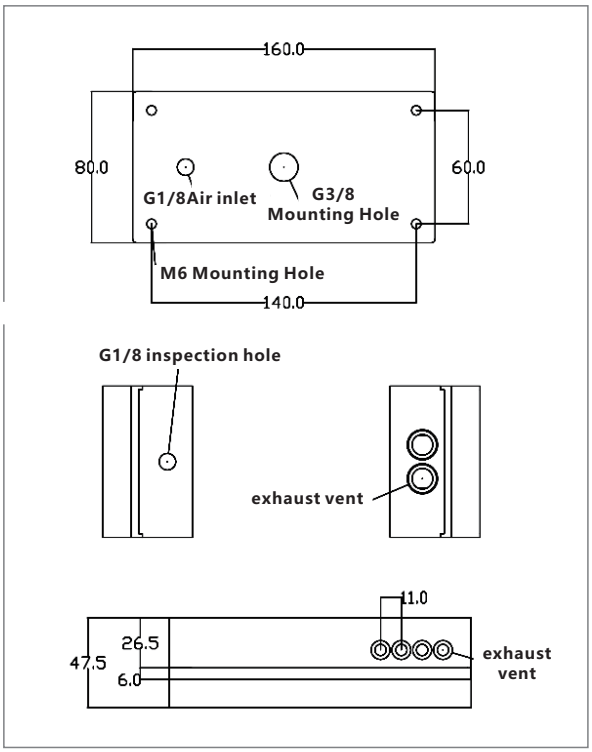
Sponge suction cup -160-80MM standard sponge suction cup

Cobot Care VAC

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction holes in pcs
80Sponge suction cup	FBBM-200-80	1.1	5 - 8	φ8 - φ10	80	300	156.8	19
	FBBM-250-80	1.3	5 - 8	φ8 - φ10	80	300	196	25
	FBBM-300-80	1.5	5 - 8	φ8 - φ10	80	300	235.2	31
	FBBM-350-80	1.6	5 - 8	φ8 - φ10	160	600	274.4	36
	FBBM-400-80	1.8	5 - 8	φ8 - φ10	160	600	313.6	42
	FBBM-450-80	1.9	5 - 8	φ8 - φ10	160	600	352.8	48
	FBBM-500-80	2.1	5 - 8	φ8 - φ10	160	600	392	53
	FBBM-550-80	2.3	5 - 8	φ8 - φ10	160	600	431.2	59
	FBBM-600-80	2.4	5 - 8	φ8 - φ10	160	600	470.4	65
	FBBM-650-80	2.6	5 - 8	φ8 - φ10	160	600	509.6	71
	FBBM-700-80	2.7	5 - 8	φ8 - φ10	160	600	548.8	76
	FBBM-750-80	2.9	5 - 8	φ8 - φ10	240	900	588	82
	FBBM-800-80	3.1	5 - 8	φ8 - φ10	160	600	627.2	88
	FBBM-850-80	3.2	5 - 8	φ8 - φ10	160	600	666.4	93
	FBBM-900-80	3.4	5 - 8	φ8 - φ10	160	600	705.6	99
	FBBM-950-80	3.5	5 - 8	φ8 - φ10	160	600	744.8	105
	FBBM-1000-80	3.7	5 - 8	φ8 - φ10	240	900	784	111
	FBBM-1100-80	4.0	5 - 8	φ8 - φ10	240	900	862.4	122
	FBBM-1200-80	4.3	5 - 8	φ8 - φ10	320	1200	940.8	133

Size specifications (mm)



model	L	W
FBBM-200-80	200	80
FBBM-250-80	250	80
FBBM-300-80	300	80
FBBM-350-80	350	80
FBBM-400-80	400	80
FBBM-450-80	450	80
FBBM-500-80	500	80
FBBM-550-80	550	80
FBBM-600-80	600	80
FBBM-650-80	650	80
FBBM-700-80	700	80
FBBM-750-80	750	80
FBBM-800-80	800	80
FBBM-850-80	850	80
FBBM-900-80	900	80
FBBM-950-80	950	80
FBBM-1000-80	1000	80
FBBM-1100-80	1100	80
FBBM-1200-80	1200	80

PCB SERIES

Cobot Care VAC

Vacuum suction tool -30mm standard dense array suction cup


3C Electronics


Metal thick plate


sheet metal


Injection molding

characteristic

- Flexible materials, non-destructive workpieces
- Modular design, highly integrated and space saving
- Dense display, unit built-in check valve works independently, strong universality
- Detachable module design, easy to maintain in the later stage



advantage


Non destructive grasping


Strong compatibility


Automated integration

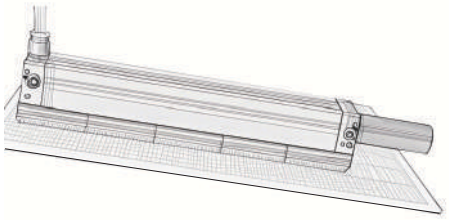

Energy saving and efficient


Partition control unit


Do not suck the next layer of workpiece

application

- **Circuit board**: loading and unloading of non component boards
- **Injection molding industry**: demolding and material collection of plastic products
- **Hardware industry**: grabbing of various cut and processed sheet materials



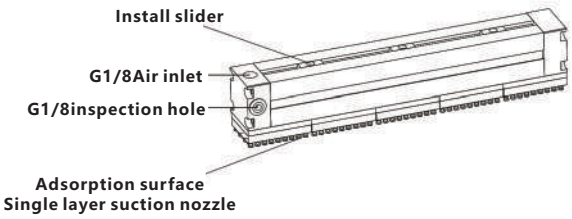
Main structure

- **Main structure**

  Installation slider: single slider track, built-in M5/M6 slider, flexible installation and fixationInlet and detection holes: G1/8Adsorption surface: single-layer suction nozzle, double-layer suction nozzle optional

- **Functional components**

  Pressure sensor (optional): Real time monitoring of vacuum level, triggering an alarm when abnormal.Built in vacuum generator (optional)Free matching muffler:
  C: perpendicular to the ground P: parallel to the ground



PCB SERIES

Vacuum suction tool -30mm standard dense array suction cup

Cobot Care VAC

Model specifications

CCV-PCB-210-30-D1-LS2L-P

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
PCB	126mm 168mm 210mm 252mm 294mm 336mm 378mm 420mm (Contact customer service for more sizes)	30mm

④ Number of suction cup layers	⑤ Does it include a vacuum generator	⑥ Silencer orientation
D1: 1st floor S2: 2nd floor	LS: Built in vacuum generator FJ: Excluding vacuum generator	C:Perpendicular to the ground P:Parallel to the ground

Technical parameters (single-layer D1)

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
30Circuit board suction cup	PCB - 126 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
	PCB - 168 - 30	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
	PCB - 210 - 30	0.43	5 - 8	φ8 - φ10	80	300	61.74	5
	PCB - 252 - 30	0.49	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 294 - 30	0.55	5 - 8	φ8 - φ10	80	300	86.44	7
	PCB - 336 - 30	0.62	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 378 - 30	0.68	5 - 8	φ8 - φ10	80	300	111.13	9
	PCB - 420 - 30	0.74	5 - 8	φ8 - φ10	80	300	123.48	10

Technical parameters (double-layer D2)

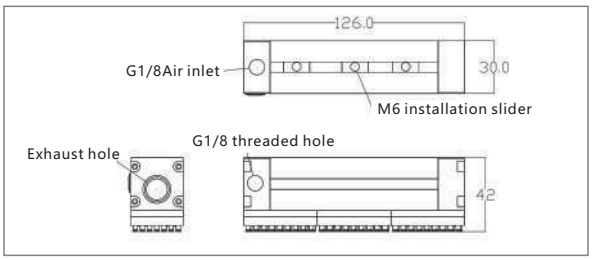
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
30Circuit board suction cup	PCB - 126 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
	PCB - 168 - 30	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
	PCB - 210 - 30	0.43	5 - 8	φ8 - φ10	80	300	61.74	5
	PCB - 252 - 30	0.49	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 294 - 30	0.55	5 - 8	φ8 - φ10	80	300	86.44	7
	PCB - 336 - 30	0.62	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 378 - 30	0.68	5 - 8	φ8 - φ10	80	300	111.13	9
	PCB - 420 - 30	0.74	5 - 8	φ8 - φ10	80	300	123.48	10

PCB SERIES

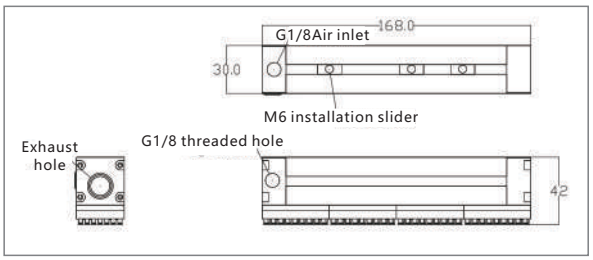
Vacuum suction tool -30mm standard dense array suction cup

Cobot Care VAC

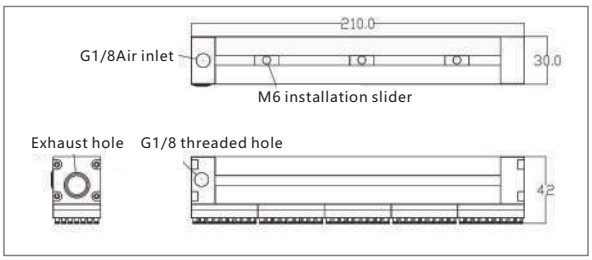
Size specifications (mm)



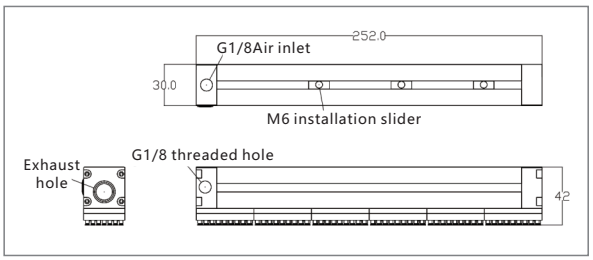
◇ PCB-126-30



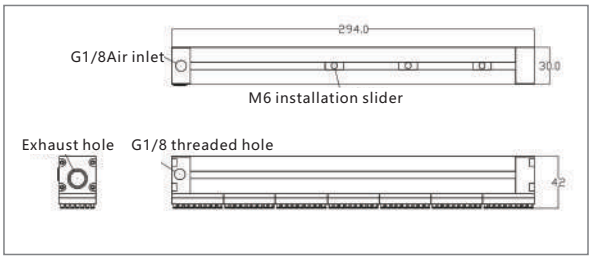
◇ PCB-168-30



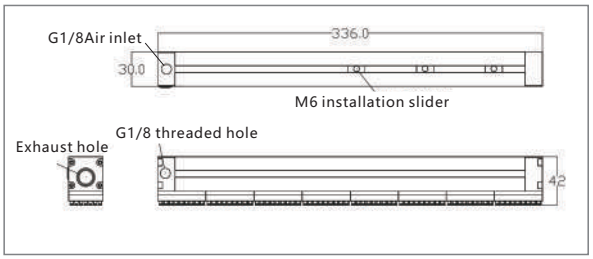
◇ PCB-210-30



◇ PCB-252-30



◇ PCB-294-30



◇ PCB-336-30

PCBT SERIES

Cobot Care VAC

Vacuum suction tool -30mMT dense array suction cup


3C Electronics


Metal thick plate


sheet metal


Injection molding

characteristic

- Flexible materials, non-destructive workpieces
- Modular design, highly integrated and space saving
- Dense display, unit built-in check valve works independently, strong universality
- Detachable module design, easy to maintain in the later stage



advantage


Non destructive grasping


Strong compatibility


Automated integration

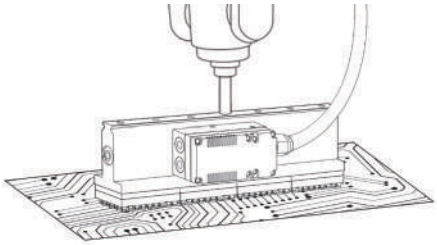

Energy saving and efficient


Partition control unit


Do not suck the next layer of workpiece

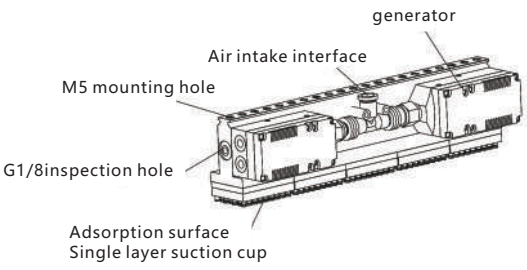
application

- **Circuit board**: loading and unloading of non component boards
- **Injection molding industry**: demolding and material collection of plastic products
- **Hardware industry**: grabbing of various cut and processed sheet materials



structure

- T-shaped substrate, made of metal (aluminum alloy), lightweight and durable
- Built in pipeline connection suction hole and external vacuum generator
- The suction cup can be equipped with single-layer or double-layer suction nozzles.
- Silicone/polyurethane material, porous design enhances adsorption capacity
- Multiple M5 mounting holes on the top for fixing on the robotic arm or workbench
- Side with G1/8 detection hole



PCBT SERIES

Vacuum suction tool -30mMT dense array suction cup

Cobot Care VAC

Model specifications

CCV-PCBT-210-30-D1-LS2L

① ② ③ ④ ⑤

① Product series	② length	③ width
PCBT	126mm 168mm 210mm 252mm 294mm 336mm 378mm 420mm (Contact customer service for more sizes)	30mm 60mm

④ Number of suction cup layers	⑤ Does it include a vacuum generator
D1: 1st floor S2: 2nd floor	LS: Built in vacuum generator FJ: External vacuum generator

Technical parameters (single-layer D1)

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
30 wide T-shaped circuit board suction cup	PCB - 126 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
	PCB - 168 - 30	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
	PCB - 210 - 30	0.43	5 - 8	φ8 - φ10	80	300	61.74	5
	PCB - 252 - 30	0.49	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 294 - 30	0.55	5 - 8	φ8 - φ10	80	300	86.44	7
	PCB - 336 - 30	0.62	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 378 - 30	0.74	5 - 8	φ8 - φ10	160	600	111.13	9
	PCB - 420 - 30	0.80	5 - 8	φ8 - φ10	160	600	123.48	10

Technical parameters (double-layer D2)

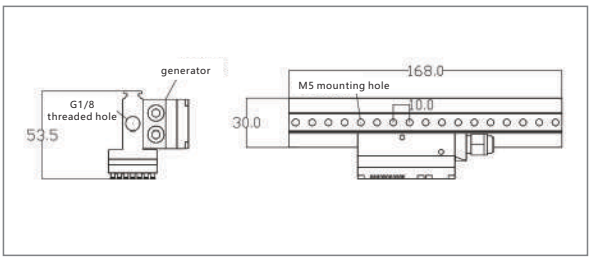
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
30 wide T-shaped circuit board suction cup	PCB - 126 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
	PCB - 168 - 30	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
	PCB - 210 - 30	0.43	5 - 8	φ8 - φ10	80	300	61.74	5
	PCB - 252 - 30	0.49	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 294 - 30	0.55	5 - 8	φ8 - φ10	80	300	86.44	7
	PCB - 336 - 30	0.62	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 378 - 30	0.74	5 - 8	φ8 - φ10	160	600	111.13	9
	PCB - 420 - 30	0.80	5 - 8	φ8 - φ10	160	600	123.48	10

PCBT SERIES

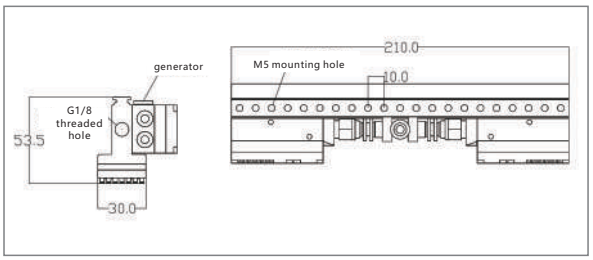
Vacuum suction tool -30mMT dense array suction cup

Cobot Care VAC

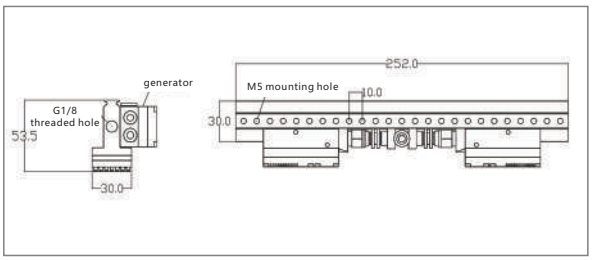
Size specifications (mm)



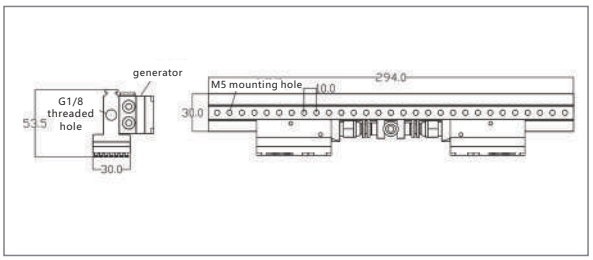
◇ PCB-168-30



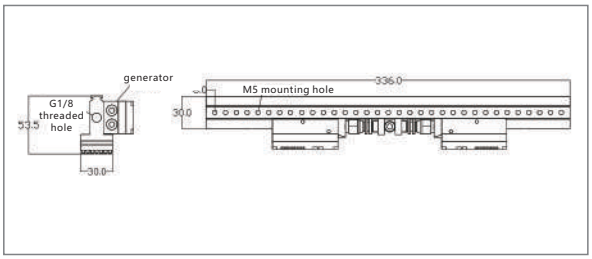
◇ PCB-210-30



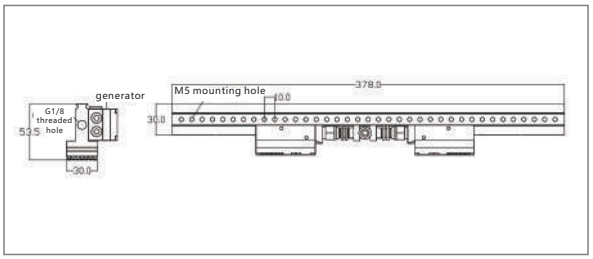
◇ PCB-252-30



◇ PCB-294-30



◇ PCB-336-30



◇ PCB-378-30

PCB SERIES

Cobot Care VAC

Vacuum suction tool -60mm standard dense array suction cup


3C Electronics

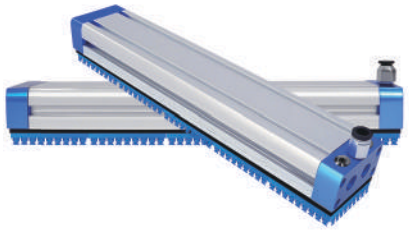

Metal thick plate


sheet metal


Injection molding

characteristic

- Flexible materials, non-destructive workpieces
- Modular design, highly integrated and space saving
- Dense display, unit built-in check valve works independently, strong universality
- Detachable module design, easy to maintain in the later stage



advantage


Non destructive grasping


Strong compatibility


Automated integration


Energy saving and efficient


Partition control unit


Do not suck the next layer of workpiece

application

- **Circuit board**: loading and unloading of non component boards
- **Injection molding industry**: demolding and material collection of plastic products
- **Hardware industry**: grabbing of various cut and processed sheet materials

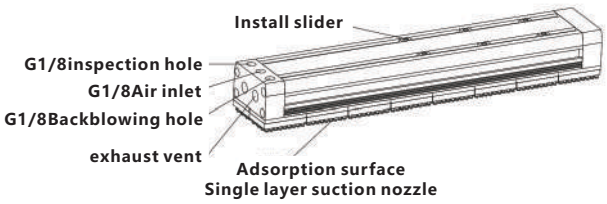
Main structure

- **Main structure**

  Installation slider: single slider track, built-in M5/M6 slider, flexible installation and fixationInlet and detection holes: G1/8Adsorption surface: single-layer suction nozzle, double-layer suction nozzle optional

- **Functional components**

  Pressure sensor (optional): Real time monitoring of vacuum level, triggering an alarm when abnormal.Built in vacuum generator (optional)Free matching muffler:
  C: perpendicular to the ground P: parallel to the ground



PCB SERIES

Vacuum suction tool -60mm standard dense array suction cup

Cobot Care VAC

Model specifications

CCV-PCB-210-60-D1-LS2L-P

① ② ③ ④ ⑤ ⑥

① Product series	② length	③ width
PCB	126mm 168mm 210mm 252mm 294mm 336mm 378mm 420mm (Contact customer service for more sizes)	60mm

④ Number of suction cup layers	⑤ Does it include a vacuum generator	⑥ Silencer orientation
D1: 1st floor S2: 2nd floor	LS: Built in vacuum generator FJ: Excluding vacuum generator	C:Perpendicular to the ground P:Parallel to the ground

Technical parameters (single-layer D1)

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity
60 wide circuit board suction cup	PCB - 126 - 60	1.22	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 168 - 60	1.32	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 210 - 60	1.49	5 - 8	φ8 - φ10	160	600	123.48	10
	PCB - 252 - 60	1.60	5 - 8	φ8 - φ10	160	600	148.18	12
	PCB - 294 - 60	1.71	5 - 8	φ8 - φ10	160	600	172.87	14
	PCB - 336 - 60	1.82	5 - 8	φ8 - φ10	160	600	197.57	16
	PCB - 378 - 60	1.92	5 - 8	φ8 - φ10	160	600	222.26	18
	PCB - 420 - 60	2.03	5 - 8	φ8 - φ10	160	600	246.96	20

Technical parameters (double-layer D2)

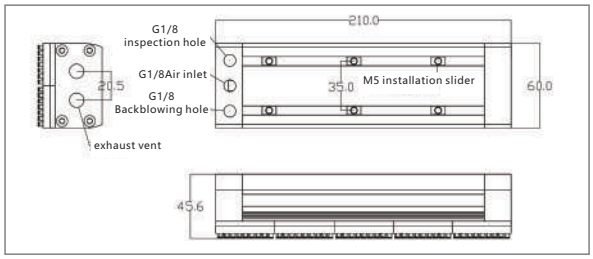
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60 wide circuit board suction cup	PCB - 126 - 60	1.22	5 - 8	φ8 - φ10	80	300	74.09	6
	PCB - 168 - 60	1.32	5 - 8	φ8 - φ10	80	300	98.78	8
	PCB - 210 - 60	1.49	5 - 8	φ8 - φ10	160	600	123.48	10
	PCB - 252 - 60	1.60	5 - 8	φ8 - φ10	160	600	148.18	12
	PCB - 294 - 60	1.71	5 - 8	φ8 - φ10	160	600	172.87	14
	PCB - 336 - 60	1.82	5 - 8	φ8 - φ10	160	600	197.57	16
	PCB - 378 - 60	1.92	5 - 8	φ8 - φ10	160	600	222.26	18
	PCB - 420 - 60	2.03	5 - 8	φ8 - φ10	160	600	246.96	20

PCB SERIES

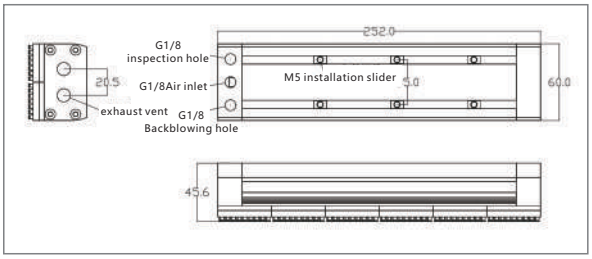
Vacuum suction tool -60mm standard dense array suction cup

Cobot Care VAC

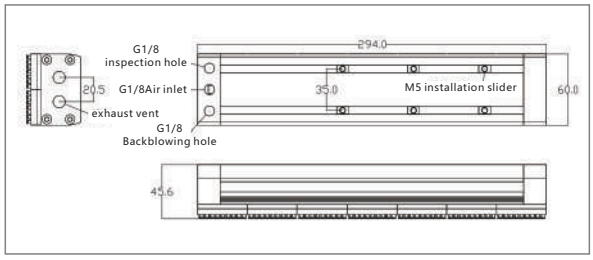
Size specifications (mm)



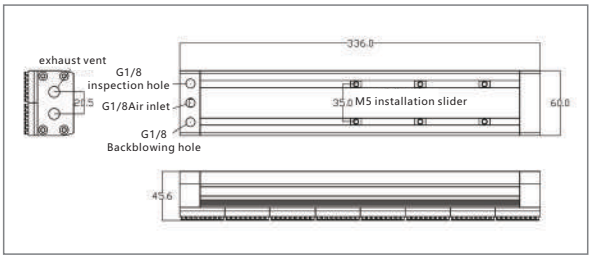
◇ PCB-210-60



◇ PCB-252-60



◇ PCB-294-60



◇ PCB-336-60

BBPCB SERIES

Cobot Care VAC

Vacuum suction tool - Plate edge dense array suction cup

3C Electronics | Glass plate | Metal plate | Stone material

characteristic

- Specially designed to adsorb the edges of the board without requiring extensive contact
- Adapt to boards of different thicknesses and materials
- Compact size, suitable for applications with limited space
- Compared to traditional suction cups, it consumes less energy

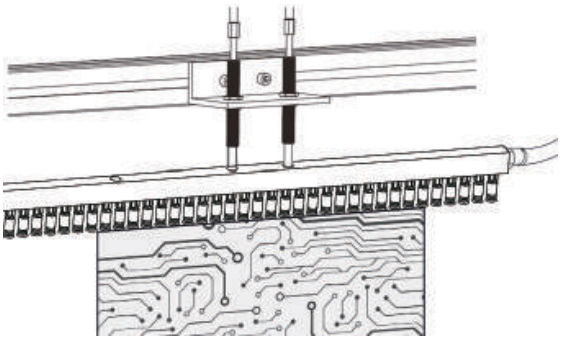


advantage

efficient production | Reduce contact area | High flexibility | high reliability | Easy to integrate

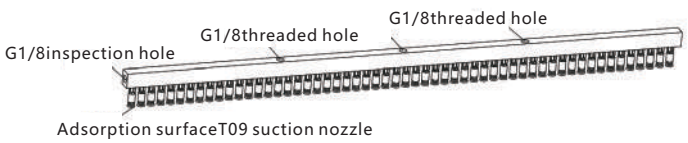
application

- **Glass processing industry**: handling and positioning of flat glass
- **Metal sheet processing**: Processing metal sheets, such as aluminum plates, steel plates, etc
- **Printed Circuit Board (PCB) Production**: Handling and Positioning PCB Boards
- **Solar panel manufacturing**: Processing silicon wafers and finished solar panels
- **Furniture manufacturing**: handling materials such as wooden boards and artificial boards
- **Packaging industry**: Processing materials such as cardboard and corrugated paper



structure

- Wear resistant and corrosion-resistant aluminum alloy material
- Ensure good sealing with the edge of the board, commonly using silicone or polyurethane materials
- Internal channel connected to vacuum system
- The top is equipped with G1/8 threaded holes for easy installation of robotic arms or handling equipment
- Vacuum degree detection sensor can be optionally selected
- Built in quick release valve, quickly release vacuum, put down the board
- Edge design with anti-collision protection structure



BBPCB SERIES

Vacuum suction tool - Plate edge dense array suction cup

Cobot Care VAC

Model specifications

CCV-BBPCB-500-18-15-T05S

① ② ③ ④ ⑤ ⑥

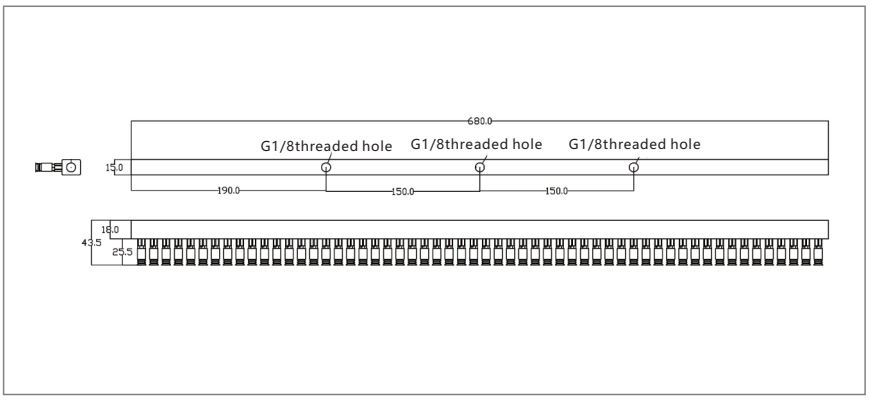
① Product series	② length	③ width
D B P CD	400mm 500mm 600mm 700mm 800mm.....	15mm 18mm

④ height	⑤ Suction nozzle diameter	⑥ Material of nozzle
18mm	T-05 T-07 T-09	S: Silicone gel N: Rubber

Technical parameter BT-05

Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-18 module quantity (pieces)
BBPCB - 400 - 18	0.31	5 - 8	φ8 - φ10	80	180	37.04	3
BBPCB - 500 - 18	0.37	5 - 8	φ8 - φ10	80	180	49.39	4
BBPCB - 600- 18	0.43	5 - 8	φ8 - φ10	80	180	61.74	5
BBPCB - 700 - 18	0.49	5 - 8	φ8 - φ10	80	180	74.09	6
BBPCB - 800 - 18	0.55	5 - 8	φ8 - φ10	80	180	86.44	7
BBPCB - 900 - 18	0.62	5 - 8	φ8 - φ10	80	180	98.78	8
BBPCB - 1000 - 18	0.74	5 - 8	φ8 - φ10	118	180	111.13	9
BBPCB - 1100 - 18	0.80	5 - 8	φ8 - φ10	118	180	123.48	10

Size specifications (mm)



◇ BBPCB-680-18

FBPCB SERIES

Cobot Care VAC

Vacuum suction tool - non-standard dense array suction cup

3C Electronics | Metal thick plate | Robot industry

characteristic

- Flexible materials, non-destructive workpieces
- Modular design, highly integrated and space saving
- Dense display, unit built-in check valve works independently, strong universality
- Detachable module design, easy to maintain in the later stage



advantage

Cells work independently

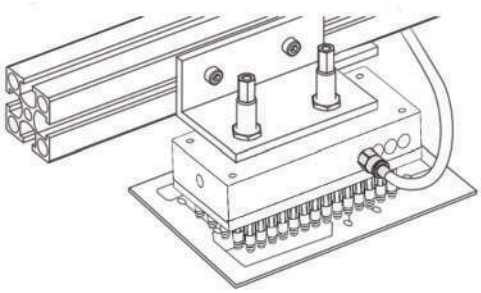
Leakage and self sealing blockage

Integrated module design
Efficient and space saving

Low maintenance cost
Single nozzle valve replacement

application

- **Circuit board**: loading and unloading of non component boards
- **Injection molding industry**: demolding and material collection of plastic products
- **Hardware industry**: grabbing of various cut and processed sheet materials



structure

- **main structure**

  G1/8 mounting hole, 4 4XM5 mounting holes

  Inlet and detection holes: G1/8

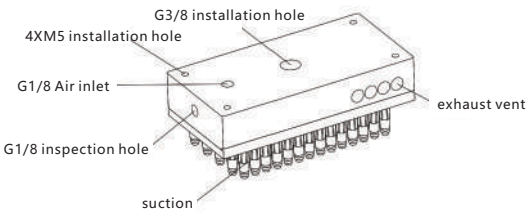
  Adsorption surface: BT-05/BT-07/BT-09 suction nozzle optional

- **Functional components**

  Pressure sensor (optional): Real time monitoring of vacuum level, triggering an alarm when abnormal.

  Built in vacuum generator (optional)

  Built in muffler



FBPCB SERIES

Vacuum suction tool - non-standard dense array suction cup

Cobot Care VAC

Model specifications

CCV-FBPCB-120-60-T05S-VTM20

① ② ③ ④ ⑤ ⑥

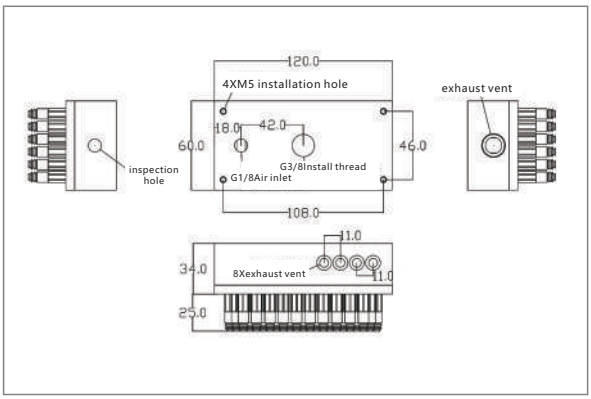
① Product series	② length	③ width
FBPCB	120mm 160mm	60mm 80mm

④ suction	⑤ Material of nozzle	⑥ Does it include a vacuum generator
T-05 T-07 T-09	S: Silicone gel N: Rubber	LS: Built in vacuum generator FJ: External vacuum generator

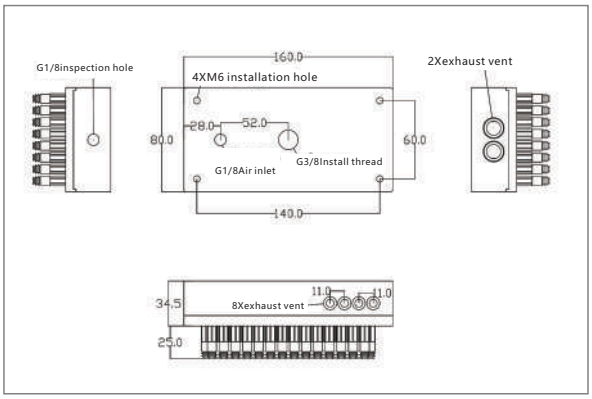
Technical parameter BT-05

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-60 module quantity (pieces)
60Circuit board suction cup	PCB - 126 - 60	0.31	5 - 8	φ8 - φ10	80	600	37.04	3
	PCB - 168 - 60	0.37	5 - 8	φ8 - φ10	80	600	49.39	4
	PCB - 210 - 60	0.43	5 - 8	φ8 - φ10	80	600	61.74	5
	PCB - 252 - 60	0.49	5 - 8	φ8 - φ10	80	600	74.09	6
	PCB - 294 - 60	0.55	5 - 8	φ8 - φ10	80	600	86.44	7
	PCB - 336 - 60	0.62	5 - 8	φ8 - φ10	80	600	98.78	8
	PCB - 378 - 60	0.74	5 - 8	φ8 - φ10	160	600	111.13	9
	PCB - 420 - 60	0.80	5 - 8	φ8 - φ10	160	600	123.48	10

Size specifications (mm)



◇ PCB-120-60



◇ PCB-160-80

FBPCB SERIES

Cobot Care VAC

Vacuum suction tool - Strong magnet dense array suction cup


3C Electronics


Video film


sheet metal

characteristic

- High magnetic energy product materials (such as N52 neodymium magnets) provide stable adsorption force
- By magnetic field adsorption, avoid scratches or deformations caused by physical contact
- No need for mechanical locking, can instantly adsorb or release, improving production efficiency
- Optimize magnetic field distribution to reduce interference with sensitive components on the circuit board, such as Hall sensors




High precision positioning


Strong compatibility


long-life


energy conservation and environmental protection

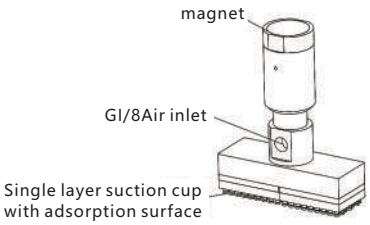

Safe and reliable

application

- **PCB processing**: fixation during drilling, milling, and laser cutting.
- **SMT**: Prevent PCB displacement in high-speed SMT machines.
- **Testing and Inspection**: Stabilize and fix circuit boards in ICT testing and AOI testing.
- **Assembly and welding**: auxiliary fixtures for manual or automated welding.
- **Laboratory research and development**: Quickly replace sample boards to improve experimental efficiency.

structure

- Neodymium magnet or electromagnet array, embedded in aluminum alloy/stainless steel casing
- Manual switch or electronic control device (such as electromagnetic suction cup) to achieve magnetic start stop
- Built in vacuum generator
- The suction cup can be equipped with single-layer or double-layer suction nozzles. Silicone/polyurethane material, porous design enhances adsorption capacity
- Side with G1/8 intake holes



FBPCB SERIES

Vacuum suction tool - Strong magnet dense array suction cup

Cobot Care VAC

Model specifications

CCV-PCB-42-30-LSIM-PM-M24-TS10

① ② ③ ④ ⑤ ⑥ ⑦

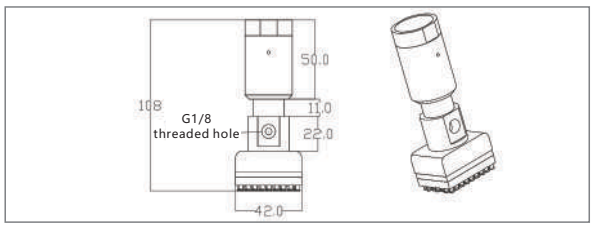
① Product series	② length	③ width
FBPCB	42mm 60mm (Contact customer service for more sizes)	30mm 42mm

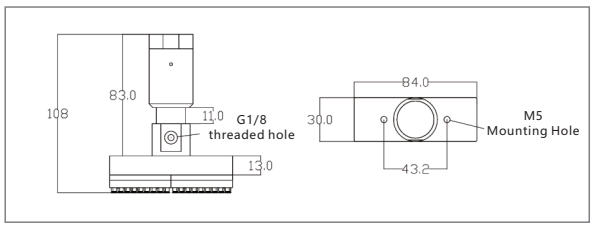
④ Does it include generator	⑤ Strong magnet	⑥ Install thread	⑦ cushion stroke
LSIM: including generator	PM: including		10mm 20mm

Technical Parameter

Model and specification	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
FBPCB - 42 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
FBPCB - 60- 42	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
FBPCB - 84 - 42	0.43	5 - 8	φ8 - φ10	80	300	61.74	5

Size specifications (mm)





model	L	W	H
FBPCB-42-30	42	30	108
FBPCB-60-42	60	42	108
FBPCB-84-30	84	30	108

FBPCB SERIES

Cobot Care VAC

Vacuum suction tool - spring rod dense array suction cup

3C Electronics | breathability | Video film

characteristic

- Adopting a spring rod structure to provide flexible pressure and avoid PCB deformation or damage caused by rigid clamping
- Can adapt to PCBs of different thicknesses (such as 0.2mm~5mm) without frequent adjustments
- Use leverage or button mechanisms to achieve one click fixation or release, improving production efficiency
- Can be combined with vacuum suction cups, magnetic suction cups, etc. to provide a more stable fixing effect

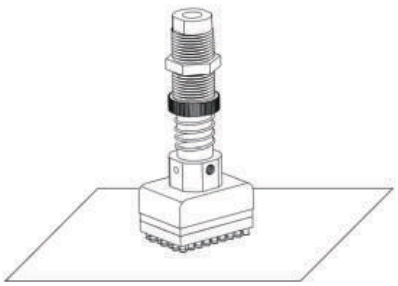


advantage

Protect PCB structure | Efficient operation | long-life | Strong adaptability | Safe and reliable

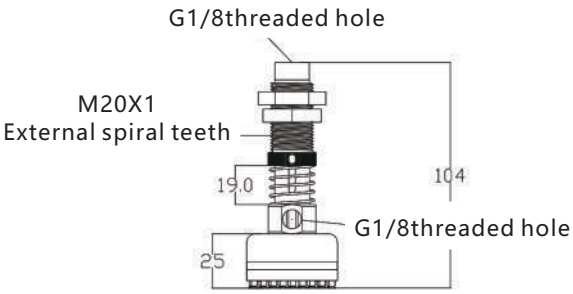
application

- **SMT SMT SMT machine**: Fix PCB to prevent offset during high-speed SMT
- **PCB testing (ICT/FCT)**: Quickly replace test boards to improve detection efficie
- **Laser engraving/drilling**: stable fixation to ensure machining accuracy
- **Manual welding/repair**: Flexible clamping to avoid thermal deformation affecting welding quality
- **Automated assembly line**: with the help of robotic arms to achieve rapid loading and unloading of PCBs



structure

- G1/8 threaded hole, supporting screws or quick release interfaces
- Using stainless steel springs or gas springs
- The suction cup can be equipped with single-layer or double-layer suction nozzles. Silicone/polyurethane material, porous design enhances adsorption capacity
- Manual lever, pneumatic or electric locking
- Equipped with M20X1 external thread



FBPCB SERIES

Vacuum suction tool - spring rod dense array suction cup

Cobot Care VAC

Model specifications

CCV-PCB-42-30-LSIM-PM-M24-TS10

① ② ③ ④ ⑤ ⑥ ⑦

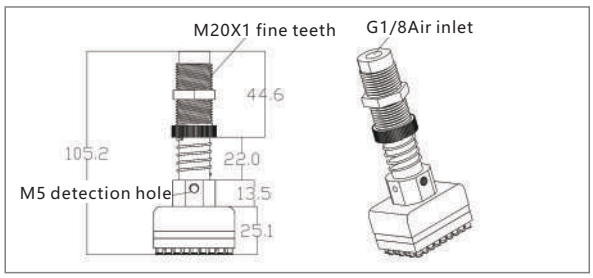
① Product series	② length	③ width
FBPCB	42mm 60mm	30mm 42mm

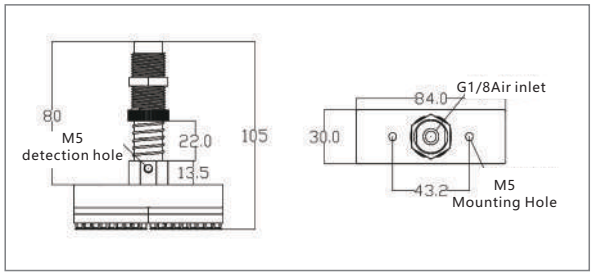
④ Does it include a generator	⑤ Strong magnet	⑥ Install threads	⑦ cushion stroke
LSIM: including generator	PM: including		10mm 20mm

Technical Parameter

Model and specification	Single weight KG	供气压力 bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	42-30 module quantity (pieces)
FBPCB - 42 - 30	0.31	5 - 8	φ8 - φ10	80	300	37.04	3
FBPCB - 60- 42	0.37	5 - 8	φ8 - φ10	80	300	49.39	4
FBPCB - 84 - 30	0.43	5 - 8	φ8 - φ10	80	300	61.74	5

Size specifications (mm)





model	L	W	H
FBPCB-42-30	42	30	105
FBPCB-60-42	60	42	105
FBPCB-84-30	84	30	105

IVSC SERIES

Cobot Care VAC

Vacuum suction tool -60mm suction cup type vacuum suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Modular design allows for quick replacement of suction cups or adjustment of layout to accommodate different goods
- Adopting energy-saving vacuum generator, low gas consumption, low noise, in line with environmental protection requirements
- Support mixing of multiple specifications of goods, adapting to multiple sizes by adjusting the suction cup spacing or grouping control
- The product has a built-in check valve structure (optional), suitable for the surface of slightly deformed workpieces

advantage

Strong compatibility

Universal size

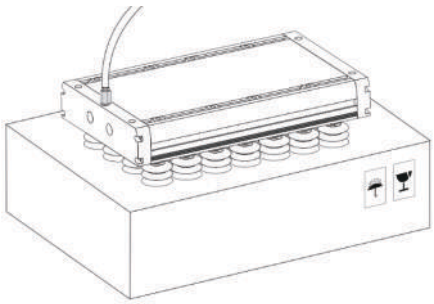
Flexible production

Comes with vacuum protection

Super suction power

application

- **Manufacturing industry**:
  Food and beverage: palletizing boxes for mineral water, canned goods, gift boxes, etc
- **Chemical industry**: Handling bagged powders and barreled raw materials (requiring explosion-proof design)
- **Logistics and warehousing**:
  Sorting and stacking of express boxes in e-commerce warehouses
  Tray loading and unloading in automated three-dimensional warehouse
- **Agriculture**: Automated packaging line for agricultural products (such as boxed fruits and eggs)
- **Automotive industry**: automotive parts or glass parts, metal parts



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M8-M10), the number of nuts is assembled according to the length dimension
- The suction device IVSC200-1200x130 is equipped with one gas supply port (G1/8), one vacuum detection port (G1/8), one blowback hole (G1/8), and one detection hole (G1/4). The gas supply port end cover directly exhausts from the side
- The suction tool comes standard with an internal high flow generator, and can be optionally equipped with a check valve and a throttle valve
- The suction cup type adsorption surface is available in 30mm and 40mm options

IVSC SERIES

Vacuum suction tool -60mm suction cup type vacuum suction cup

Cobot Care VAC

Model specifications

CCV-IVSC-310-60-DXF-G40-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length				③ width
IVSC (Integrated Vacuum Suction Cup)	200mm 250mm 300mm 350mm 400mm	450mm 500mm 550mm 600mm 650mm	700mm 750mm 800mm 850mm 900mm	950mm 1000mm 1100mm 1200mm	60mm

④ Valve body form	⑤ Suction cup diameter	⑥ Number of generators
XK throttle valve DXF self closing valve	30mm 40mm	LS1L: 1 piece LS2L : 2 pieces FJ: External vacuum connection .....

Technical Parameter

product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction cups (pcs)
60Integrated suction cup(1 row of 40 suction nozzles)	IVSC-200-60	0.9	5 - 8	φ8 - φ10	80	300	78.4	4
	IVSC-250-60	1.0	5 - 8	φ8 - φ10	80	300	98	6
	IVSC-300-60	1.1	5 - 8	φ8 - φ10	80	300	117.6	7
	IVSC-350-60	1.3	5 - 8	φ8 - φ10	80	300	137.2	8
	IVSC-400-60	1.4	5 - 8	φ8 - φ10	80	300	156.8	9
	IVSC-450-60	1.5	5 - 8	φ8 - φ10	80	300	176.4	10
	IVSC-500-60	1.6	5 - 8	φ8 - φ10	80	300	196	11
	IVSC-550-60	1.7	5 - 8	φ8 - φ10	80	300	215.6	12
	IVSC-600-60	1.9	5 - 8	φ8 - φ10	80	300	235.2	14
	IVSC-650-60	2.0	5 - 8	φ8 - φ10	80	300	254.8	15
	IVSC-700-60	2.1	5 - 8	φ8 - φ10	80	300	274.4	16
	IVSC-750-60	2.2	5 - 8	φ8 - φ10	80	300	294	17
	IVSC-800-60	2.4	5 - 8	φ8 - φ10	80	300	313.6	18
	IVSC-850-60	2.5	5 - 8	φ8 - φ10	80	300	333.2	19
	IVSC-900-60	2.6	5 - 8	φ8 - φ10	80	300	352.8	21
	IVSC-950-60	2.7	5 - 8	φ8 - φ10	80	300	372.4	22
	IVSC-1000-60	2.9	5 - 8	φ8 - φ10	160	600	392	23
	IVSC-1100-60	3.1	5 - 8	φ8 - φ10	160	600	431.2	25
	IVSC-1200-60	3.4	5 - 8	φ8 - φ10	160	600	470.4	27

IVSC SERIES

Vacuum suction tool -60mm suction cup type vacuum suction cup

Cobot Care VAC

Size specifications (mm)

model	L	W
IVSC-200-60	200	60
IVSC-250-60	250	60
IVSC-300-60	300	60
IVSC-350-60	350	60
IVSC-400-60	400	60
IVSC-450-60	450	60
IVSC-500-60	500	60
IVSC-550-60	550	60
IVSC-600-60	600	60
IVSC-650-60	650	60
IVSC-700-60	700	60
IVSC-750-60	750	60
IVSC-800-60	800	60
IVSC-850-60	850	60
IVSC-900-60	900	60
IVSC-950-60	950	60
IVSC-1000-60	1000	60
IVSC-1100-60	1100	60
IVSC-1200-60	1200	60

IVSC SERIES

Cobot Care VAC

Vacuum suction tool -80mm suction cup type vacuum suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Modular design allows for quick replacement of suction cups or adjustment of layout to accommodate different goods
- Adopting energy-saving vacuum generator, low gas consumption, low noise, in line with environmental protection requirements
- Support mixing of multiple specifications of goods, adapting to multiple sizes by adjusting the suction cup spacing or grouping control
- The product has a built-in check valve structure (optional), suitable for the surface of slightly deformed workpieces



advantage

Strong compatibility

Universal size

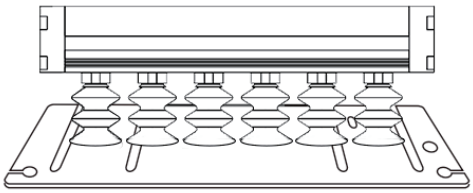
Flexible production

Comes with vacuum protection

Super suction power

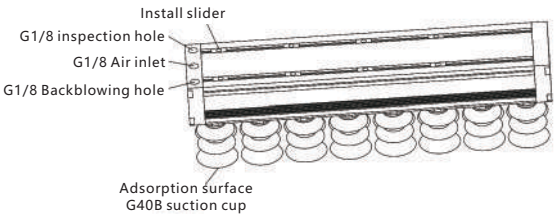
application

- **Manufacturing industry**:
  Food and beverage: palletizing boxes for mineral water, canned goods, gift boxes, etc
- **Chemical industry**: Handling bagged powders and barreled raw materials (requiring explosion-proof design)
- **Logistics and warehousing**:
  Sorting and stacking of express boxes in e-commerce warehouses
  Tray loading and unloading in automated three-dimensional warehouse
- **Agriculture**: Automated packaging line for agricultural products (such as boxed fruits and eggs)
- **Automotive industry**: automotive parts or glass parts, metal parts



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M8-M10), the number of nuts is assembled according to the length dimension
- The suction device IVSC200-1200x130 is equipped with one gas supply port (G1/8), one vacuum detection port (G1/8), one blowback hole (G1/8), and one detection hole (G1/4). The gas supply port end cover directly exhausts from the side
- The suction tool comes standard with an internal high flow generator, and can be optionally equipped with a check valve and a throttle valve
- The suction cup type adsorption surface is available in 30mm and 40mm options



IVSC SERIES

Vacuum suction tool -80mm suction cup type vacuum suction cup

Cobot Care VAC

Model specifications

CCV-IVSC-310-80-DXF-G40-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length				③ width
IVSC (Integrated Vacuum Suction Cup)	200mm	450mm	700mm	950mm	80mm
	250mm	500mm	750mm	1000mm	
	300mm	550mm	800mm	1100mm	
	350mm	600mm	850mm	1200mm	
	400mm	650mm	900mm		

④ Valve body form	⑤ Suction cup diameter	⑥ Number of generators
XK throttle valve	30mm	LS1L: 1 piece
DXF self closing valve	40mm	LS2L : 2 pieces
	.....	FJ: External vacuum connection
		.....

Technical Parameter

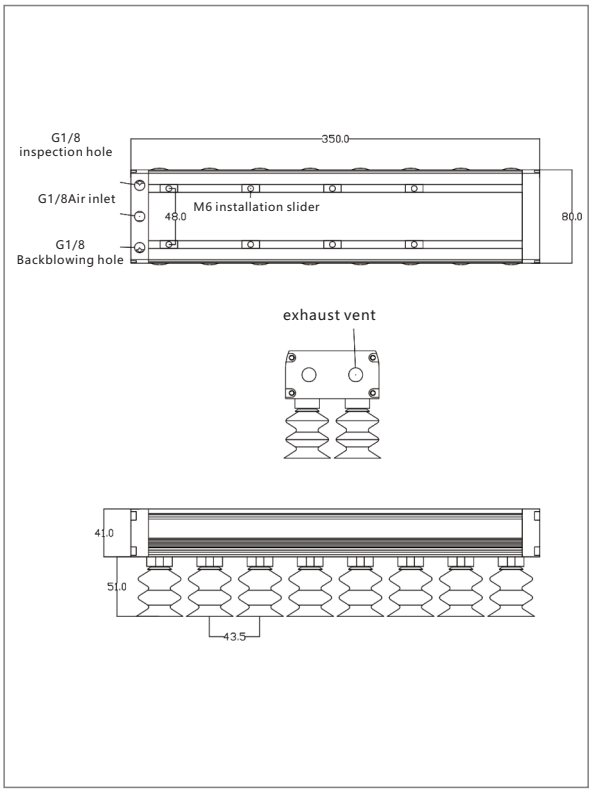
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction cups (pcs)
80Paper box suction device (2 rows of 40 suction cups)	IVSC-200-80	1.4	5 - 8	φ8 - φ10	80	300	156.8	9
	IVSC-250-80	1.6	5 - 8	φ8 - φ10	80	300	196	11
	IVSC-300-80	1.9	5 - 8	φ8 - φ10	80	300	235.2	13
	IVSC-350-80	2.1	5 - 8	φ8 - φ10	80	300	274.4	16
	IVSC-400-80	2.3	5 - 8	φ8 - φ10	80	300	313.6	18
	IVSC-450-80	2.6	5 - 8	φ8 - φ10	80	300	352.8	20
	IVSC-500-80	2.8	5 - 8	φ8 - φ10	160	600	392	23
	IVSC-550-80	3.0	5 - 8	φ8 - φ10	160	600	431.2	25
	IVSC-600-80	3.3	5 - 8	φ8 - φ10	160	600	470.4	27
	IVSC-650-80	3.5	5 - 8	φ8 - φ10	160	600	509.6	30
	IVSC-700-80	3.7	5 - 8	φ8 - φ10	160	600	548.8	32
	IVSC-750-80	4.0	5 - 8	φ8 - φ10	160	600	588	34
	IVSC-800-80	4.2	5 - 8	φ8 - φ10	160	600	627.2	36
	IVSC-850-80	4.4	5 - 8	φ8 - φ10	160	600	666.4	39
	IVSC-900-80	4.7	5 - 8	φ8 - φ10	160	600	705.6	41
	IVSC-950-80	4.9	5 - 8	φ8 - φ10	160	600	744.8	43
	IVSC-1000-80	5.1	5 - 8	φ8 - φ10	160	600	784	46
	IVSC-1100-80	5.6	5 - 8	φ8 - φ10	160	600	862.4	50
	IVSC-1200-80	6.0	5 - 8	φ8 - φ10	160	600	940.8	55

IVSC SERIES

Vacuum suction tool -80mm suction cup type vacuum suction cup

Cobot Care VAC

Size specifications (mm)



model	L	W
IVSC-200-80	200	80
IVSC-250-80	250	80
IVSC-300-80	300	80
IVSC-350-80	350	80
IVSC-400-80	400	80
IVSC-450-80	450	80
IVSC-500-80	500	80
IVSC-550-80	550	80
IVSC-600-80	600	80
IVSC-650-80	650	80
IVSC-700-80	700	80
IVSC-750-80	750	80
IVSC-800-80	800	80
IVSC-850-80	850	80
IVSC-900-80	900	80
IVSC-950-80	950	80
IVSC-1000-80	1000	80
IVSC-1100-80	1100	80
IVSC-1200-80	1200	80

IVSC SERIES

Cobot Care VAC

Vacuum suction tool -130mm suction cup type vacuum suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Modular design allows for quick replacement of suction cups or adjustment of layout to accommodate different goods
- Adopting energy-saving vacuum generator, low gas consumption, low noise, in line with environmental protection requirements
- Support mixing of multiple specifications of goods, adapting to multiple sizes by adjusting the suction cup spacing or grouping control
- The product has a built-in check valve structure (optional), suitable for the surface of slightly deformed workpieces



advantage

Strong compatibility

Universal size

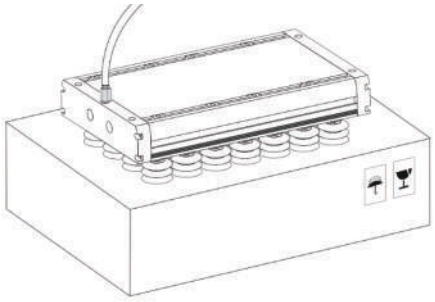
Flexible production

Comes with vacuum protection

Super suction power

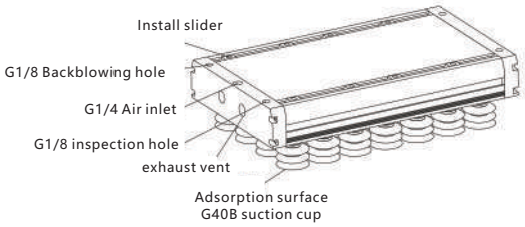
application

- **Manufacturing industry**:
  Food and beverage: palletizing boxes for mineral water, canned goods, gift boxes, etc
- **Chemical industry**: Handling bagged powders and barreled raw materials (requiring explosion-proof design)
- **Logistics and warehousing**:
  Sorting and stacking of express boxes in e-commerce warehouses
  Tray loading and unloading in automated three-dimensional warehouse
- **Agriculture**: Automated packaging line for agricultural products (such as boxed fruits and eggs)
- **Automotive industry**: automotive parts or glass parts, metal parts



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M8-M10), the number of nuts is assembled according to the length dimension
- The suction device IVSC200-1200x130 is equipped with one gas supply port (G1/8), one vacuum detection port (G1/8), one blowback hole (G1/8), and one detection hole (G1/4). The gas supply port end cover directly exhausts from the side
- The suction tool comes standard with an internal high flow generator, and can be optionally equipped with a check valve and a throttle valve
- The suction cup type adsorption surface is available in 30mm and 40mm options



IVSC SERIES

Vacuum suction tool -130mm suction cup type vacuum suction cup

Cobot Care VAC

Model specifications

CCV-IVSC-310-130-DXF-G40-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	②length				③ width
IVSC (Integrated Vacuum Suction Cup)	200mm	450mm	700mm	950mm	130mm
	250mm	500mm	750mm	1000mm	
	300mm	550mm	800mm	1100mm	
	350mm	600mm	850mm	1200mm	
	400mm	650mm	900mm		

④ Valve body form	⑤ Suction cup diameter	⑥ Number of generators
XK throttle valve	30mm	LS1L: 1 piece
DXF self closing valve	40mm	LS2L : 2 pieces
	.....	FJ: External vacuum connection
		.....

Technical Parameter

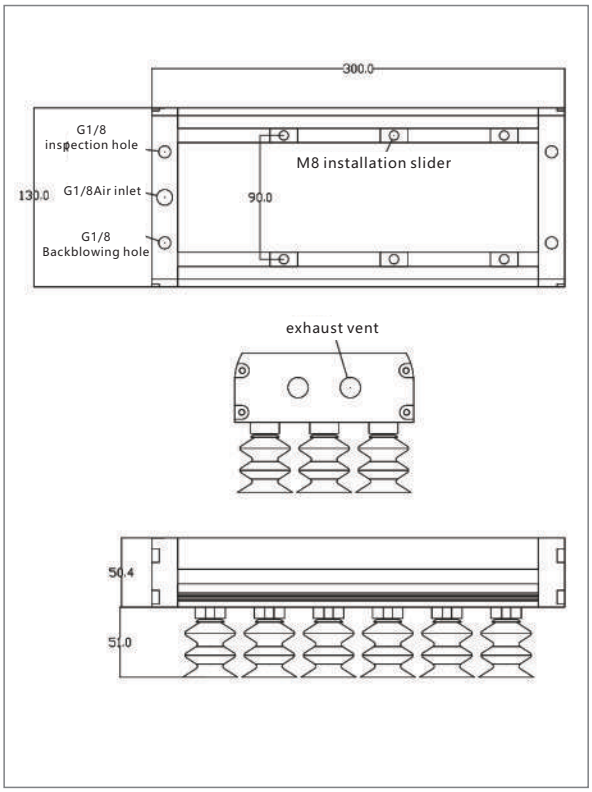
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction cups (pcs)
130Paper box suction device (3 rows of 40 suction cups)	IVSC-130*200	1.8	5 - 8	φ8 - φ10	80	300	254.8	13
	IVSC-130*250	2.2	5 - 8	φ8 - φ10	80	300	318.5	17
	IVSC-130*300	2.5	5 - 8	φ8 - φ10	80	300	382.2	20
	IVSC-130*350	2.9	5 - 8	φ8 - φ10	80	300	445.9	24
	IVSC-130*400	3.2	5 - 8	φ8 - φ10	160	600	509.6	27
	IVSC-130*450	3.5	5 - 8	φ8 - φ10	160	600	573.3	31
	IVSC-130*500	3.9	5 - 8	φ8 - φ10	160	600	637	34
	IVSC-130*550	4.2	5 - 8	φ8 - φ10	160	600	700.7	37
	IVSC-130*600	4.5	5 - 8	φ8 - φ10	160	600	764.4	41
	IVSC-130*650	4.9	5 - 8	φ8 - φ10	160	600	828.1	44
	IVSC-130*700	5.2	5 - 8	φ8 - φ10	160	600	891.8	48
	IVSC-130*750	5.6	5 - 8	φ8 - φ10	160	600	955.5	51
	IVSC-130*800	5.9	5 - 8	φ8 - φ10	160	600	1019.2	55
	IVSC-130*850	6.2	5 - 8	φ8 - φ10	160	600	1082.9	58
	IVSC-130*900	6.6	5 - 8	φ8 - φ10	160	600	1146.6	62
	IVSC-130*1000	7.2	5 - 8	φ8 - φ10	240	900	1274	69
	IVSC-130*1100	7.9	5 - 8	φ8 - φ10	240	900	1401.4	75
	IVSC-130*1200	8.6	5 - 8	φ8 - φ10	240	900	1528.8	82

IVSC SERIES

Vacuum suction tool -130mm suction cup type vacuum suction cup

Cobot Care VAC

Size specifications (mm)



model	L	W
IVSC-200-130	200	130
IVSC-250-130	250	130
IVSC-300-130	300	130
IVSC-350-130	350	130
IVSC-400-130	400	130
IVSC-450-130	450	130
IVSC-500-130	500	130
IVSC-550-130	550	130
IVSC-600-130	600	130
IVSC-650-130	650	130
IVSC-700-130	700	130
IVSC-750-130	750	130
IVSC-800-130	800	130
IVSC-850-130	850	130
IVSC-900-130	900	130
IVSC-950-130	950	130
IVSC-1000-130	1000	130
IVSC-1100-130	1100	130
IVSC-1200-130	1200	130

IVSC SERIES

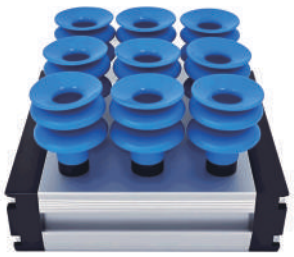
Cobot Care VAC

Vacuum suction tool -150mm suction cup type vacuum suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Modular design allows for quick replacement of suction cups or adjustment of layout to accommodate different goods
- Adopting energy-saving vacuum generator, low gas consumption, low noise, in line with environmental protection requirements
- Support mixing of multiple specifications of goods, adapting to multiple sizes by adjusting the suction cup spacing or grouping control
- The product has a built-in check valve structure (optional), suitable for the surface of slightly deformed workpieces



advantage

Strong compatibility

Universal size

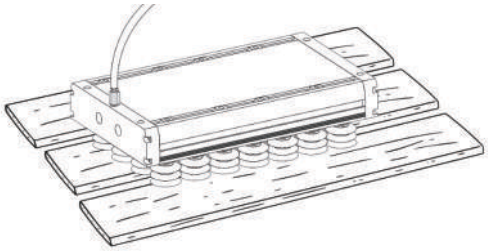
Flexible production

Comes with vacuum protection

Super suction power

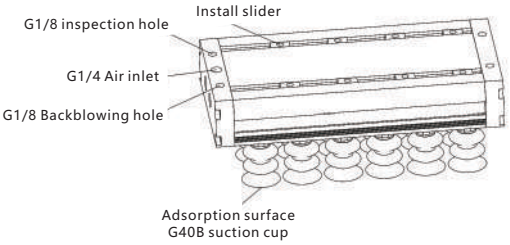
application

- **Manufacturing industry**:
  Food and beverage: palletizing boxes for mineral water, canned goods, gift boxes, etc
- **Chemical industry**: Handling bagged powders and barreled raw materials (requiring explosion-proof design)
- **Logistics and warehousing**:
  Sorting and stacking of express boxes in e-commerce warehouses
  Tray loading and unloading in automated three-dimensional warehouse
- **Agriculture**: Automated packaging line for agricultural products (such as boxed fruits and eggs)
- **Automotive industry**: automotive parts or glass parts, metal parts



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M8-M10), the number of nuts is assembled according to the length dimension
- The suction device IVSC200-1200x130 is equipped with one gas supply port (G1/8), one vacuum detection port (G1/8), one blowback hole (G1/8), and one detection hole (G1/4). The gas supply port end cover directly exhausts from the side
- The suction tool comes standard with an internal high flow generator, and can be optionally equipped with a check valve and a throttle valve
- The suction cup type adsorption surface is available in 30mm and 40mm options



IVSC SERIES

Vacuum suction tool -150mm suction cup type vacuum suction cup

Cobot Care VAC

Model specifications

CCV-IVSC-310-150-DXF-G40-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length				③ width
IVSC (Integrated Vacuum Suction Cup)	200mm 250mm 300mm 350mm 400mm	450mm 500mm 550mm 600mm 650mm	700mm 750mm 800mm 850mm 900mm	950mm 1000mm 1100mm 1200mm	150mm

④ Valve body form	⑤ Suction cup diameter	⑥ Number of generators
XK throttle valve DXF self closing valve	30mm 40mm	LS1L: 1 piece LS2L : 2 pieces FJ: External vacuum connection .....

Technical Parameter

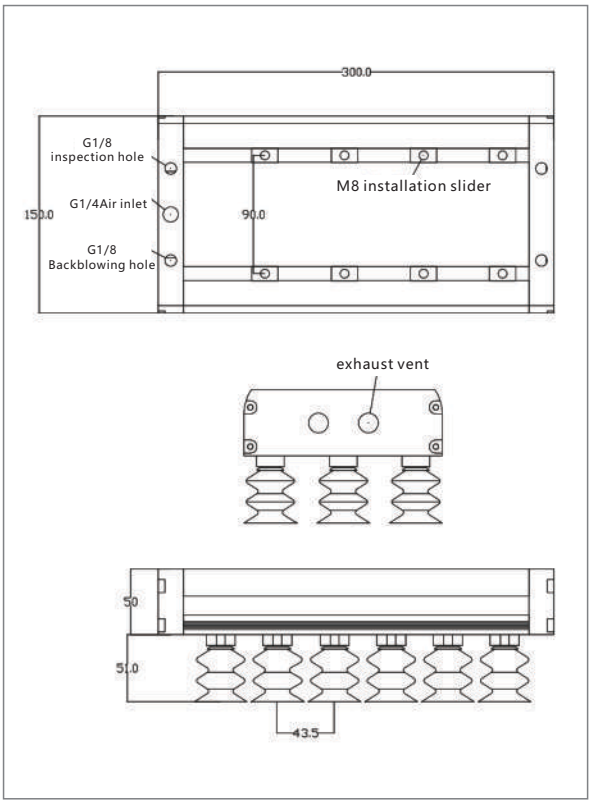
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction cups (pcs)
150Integrated suction cup (3 rows of 40 suction nozzles)	IVSC-200-150	2.2	5 - 8	φ8 - φ10	80	300	254.8	13
	IVSC-250-150	2.6	5 - 8	φ8 - φ10	80	300	318.5	17
	IVSC-300-150	3.0	5 - 8	φ8 - φ10	160	600	382.2	20
	IVSC-350-150	3.4	5 - 8	φ8 - φ10	160	600	445.9	24
	IVSC-400-150	3.8	5 - 8	φ8 - φ10	160	600	509.6	27
	IVSC-450-150	4.2	5 - 8	φ8 - φ10	160	600	573.3	31
	IVSC-500-150	4.7	5 - 8	φ8 - φ10	160	600	637	34
	IVSC-550-150	5.1	5 - 8	φ8 - φ10	160	600	700.7	37
	IVSC-600-150	5.5	5 - 8	φ8 - φ10	160	600	764.4	41
	IVSC-650-150	5.9	5 - 8	φ8 - φ10	160	600	828.1	44
	IVSC-700-150	6.3	5 - 8	φ8 - φ10	160	600	891.8	48
	IVSC-750-150	6.7	5 - 8	φ8 - φ10	160	600	955.5	51
	IVSC-800-150	7.1	5 - 8	φ8 - φ10	160	600	1019.2	55
	IVSC-850-150	7.5	5 - 8	φ8 - φ10	160	600	1082.9	58
	IVSC-900-150	7.9	5 - 8	φ8 - φ10	160	600	1146.6	62
	IVSC-950-150	8.3	5 - 8	φ8 - φ10	160	600	1210.3	65
	IVSC-1000-150	8.7	5 - 8	φ8 - φ10	240	900	1274	69
	IVSC-1100-150	9.5	5 - 8	φ8 - φ10	240	900	1401.4	75
	IVSC-1200-150	10.4	5 - 8	φ8 - φ10	240	900	1528.8	82

IVSC SERIES

Vacuum suction tool -150mm suction cup type vacuum suction cup

Cobot Care VAC

Size specifications (mm)



model	L	W
IVSC-200-150	200	150
IVSC-250-150	250	150
IVSC-300-150	300	150
IVSC-350-150	350	150
IVSC-400-150	400	150
IVSC-450-150	450	150
IVSC-500-150	500	150
IVSC-550-150	550	150
IVSC-600-150	600	150
IVSC-650-150	650	150
IVSC-700-150	700	150
IVSC-750-150	750	150
IVSC-800-150	800	150
IVSC-850-150	850	150
IVSC-900-150	900	150
IVSC-950-150	950	150
IVSC-1000-150	1000	150
IVSC-1100-150	1100	150
IVSC-1200-150	1200	150

IVSC SERIES

Cobot Care VAC

Vacuum suction tool -200mm suction cup type vacuum suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material
- Modular design allows for quick replacement of suction cups or adjustment of layout to accommodate different goods
- Adopting energy-saving vacuum generator, low gas consumption, low noise, in line with environmental protection requirements
- Support mixing of multiple specifications of goods, adapting to multiple sizes by adjusting the suction cup spacing or grouping control
- The product has a built-in check valve structure (optional), suitable for the surface of slightly deformed workpieces

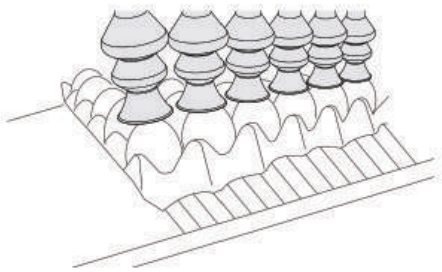


advantage

Strong compatibility | Universal size | Flexible production | Comes with vacuum protection | Super suction power

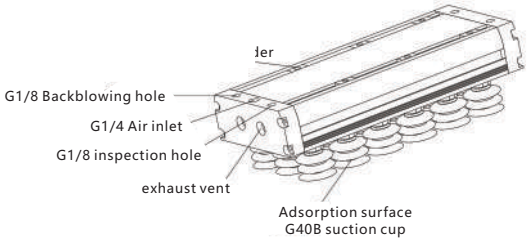
application

- **Manufacturing industry**:
  Food and beverage: palletizing boxes for mineral water, canned goods, gift boxes, etc
- **Chemical industry**: Handling bagged powders and barreled raw materials (requiring explosion-proof design)
- **Logistics and warehousing**:
  Sorting and stacking of express boxes in e-commerce warehouses
  Tray loading and unloading in automated three-dimensional warehouse
- **Agriculture**: Automated packaging line for agricultural products (such as boxed fruits and eggs)
- **Automotive industry**: automotive parts or glass parts, metal parts



structure

- The body is made of aluminum alloy, with T-shaped slots on the front and side respectively, which can be used by customers for installation or assembly of induction switches, etc
- Equipped with standard installation T-nuts (M8-M10), the number of nuts is assembled according to the length dimension
- The suction device IVSC200-1200x130 is equipped with one gas supply port (G1/8), one vacuum detection port (G1/8), one blowback hole (G1/8), and one detection hole (G1/4). The gas supply port end cover directly exhausts from the side
- The suction tool comes standard with an internal high flow generator, and can be optionally equipped with a check valve and a throttle valve
- The suction cup type adsorption surface is available in 30mm and 40mm options



IVSC SERIES

Vacuum suction tool -200mm suction cup type vacuum suction cup

Cobot Care VAC

Model specifications

CCV-IVSC-310-200-DXF-G40-LS2L

① ② ③ ④ ⑤ ⑥

① Product series	② length				③ width
IVSC (Integrated Vacuum Suction Cup)	200mm	450mm	700mm	950mm	200mm
	250mm	500mm	750mm	1000mm	
	300mm	550mm	800mm	1100mm	
	350mm	600mm	850mm	1200mm	
	400mm	650mm	900mm		

④ Valve body form	⑤ Suction cup diameter	⑥ Number of generators
XK throttle valve	30mm	LS1L: 1 piece
DXF self closing valve	40mm	LS2L : 2 pieces
	.....	FJ: External vacuum connection
		.....

Technical Parameter

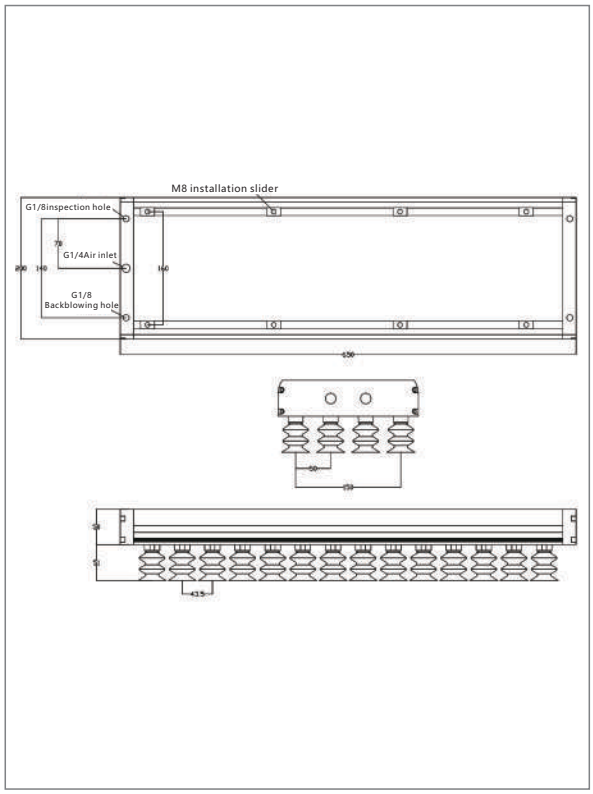
product name	Model and specification (mm)	Single weight KG	Gas supply pressure bar	Gas supply pipe diameter mm	Air consumption NL/min	Maximum vacuum flow rate (NL/Min)	Theoretical maximum suction force N (-80kpa)	Number of suction cups (pcs)
200Paper box suction device (3 rows of 40 suction cups)	IVSC-200*200	1.8	5 - 8	φ8 - φ10	80	300	254.8	13
	IVSC-200*250	2.2	5 - 8	φ8 - φ10	80	300	318.5	17
	IVSC-200*300	2.5	5 - 8	φ8 - φ10	80	300	382.2	20
	IVSC-200*350	2.9	5 - 8	φ8 - φ10	80	300	445.9	24
	IVSC-200*400	3.2	5 - 8	φ8 - φ10	160	600	509.6	27
	IVSC-200*450	3.5	5 - 8	φ8 - φ10	160	600	573.3	31
	IVSC-200*500	3.9	5 - 8	φ8 - φ10	160	600	637	34
	IVSC-200*550	4.2	5 - 8	φ8 - φ10	160	600	700.7	37
	IVSC-200*600	4.5	5 - 8	φ8 - φ10	160	600	764.4	41
	IVSC-200*650	4.9	5 - 8	φ8 - φ10	160	600	828.1	44
	IVSC-200*700	5.2	5 - 8	φ8 - φ10	160	600	891.8	48
	IVSC-200*750	5.6	5 - 8	φ8 - φ10	160	600	955.5	51
	IVSC-200*800	5.9	5 - 8	φ8 - φ10	160	600	1019.2	55
	IVSC-200*850	6.2	5 - 8	φ8 - φ10	160	600	1082.9	58
	IVSC-200*900	6.6	5 - 8	φ8 - φ10	160	600	1146.6	62
	IVSC-200*1000	7.2	5 - 8	φ8 - φ10	240	900	1274	69
	IVSC-200*1100	7.9	5 - 8	φ8 - φ10	240	900	1401.4	75
	IVSC-200*1200	8.6	5 - 8	φ8 - φ10	240	900	1528.8	82

IVSC SERIES

Vacuum suction tool -200mm suction cup type vacuum suction cup

Cobot Care VAC

Size specifications (mm)



model	L	W
IVSC-200-200	200	200
IVSC-250-200	250	200
IVSC-300-200	300	200
IVSC-350-200	350	200
IVSC-400-200	400	200
IVSC-450-200	450	200
IVSC-500-200	500	200
IVSC-550-200	550	200
IVSC-600-200	600	200
IVSC-650-200	650	200
IVSC-700-200	700	200
IVSC-750-200	750	200
IVSC-800-200	800	200
IVSC-850-200	850	200
IVSC-900-200	900	200
IVSC-950-200	950	200
IVSC-1000-200	1000	200
IVSC-1100-200	1100	200
IVSC-1200-200	1200	200

SBC SERIES

Vacuum suction tool - elliptical shape

Cobot Care VAC

general

characteristic

- The shell is made of high-quality aluminum alloy material (stainless steel is optional for the food industry)
- Elliptical design: The elliptical suction cup provides more concentrated suction force
- Elliptical design: The elliptical suction cup provides more concentrated suction forceStandard quick connectors (such as threaded interfaces and flange interfaces) are available for easy connection to vacuum generators or pumps,
- Optional built-in vacuum generator



advantage

Stronger adsorption stability

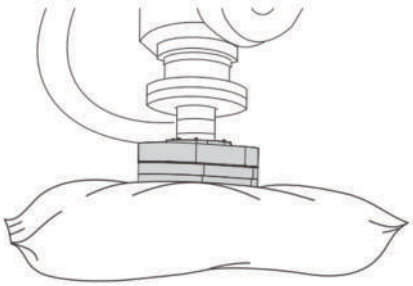
Higher space utilization

Adapt to complex surfaces

Energy saving and efficient

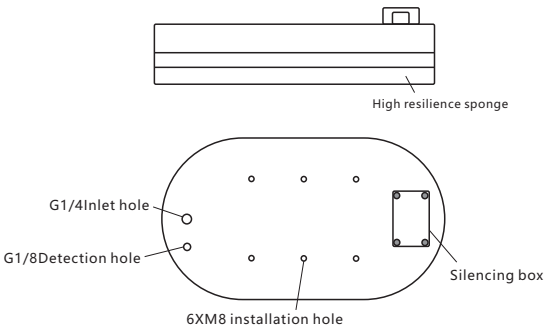
application

- **Logistics and Packaging**: Handling cardboard boxes, woven bags, and flexible packaging (such as food and cosmetics boxes)
- **Glass and building materials**: high-quality workpiece grasping, flexible contact without damaging the workpiece
- **Automotive manufacturing**: handling sheet metal parts, interior components, battery packs, and adapting to curved or irregular structures
- **Food and medicine**: using food grade silicone suction cups to transport packaging bottles and plastic trays, in compliance with hygiene standards
- **Metal processing**: handling steel plates, aluminum coils, stamped parts, high temperature resistance, oil pollution prevention



structure

- he body is made of aluminum alloy and has 6 M8 mounting holes on the front, which can be used by customers for installation or assembly of induction switches, etc
- Adopting a large-area elliptical internal cavity structure design
- Adsorption uses foam sponge, which has good sealing and long service life. The sponge can be purchased separately
- The suction tool has one air inlet (G1/4) and one vacuum detection port (G1/8)
- The top of the suction device is equipped with a silencer box, which is efficient, silent, and noise reducing



SBC SERIES

Vacuum suction tool - elliptical shape

Cobot Care VAC

Model specifications

CCV-SBC-380-250-RS-FJ

① ② ③ ④ ⑤

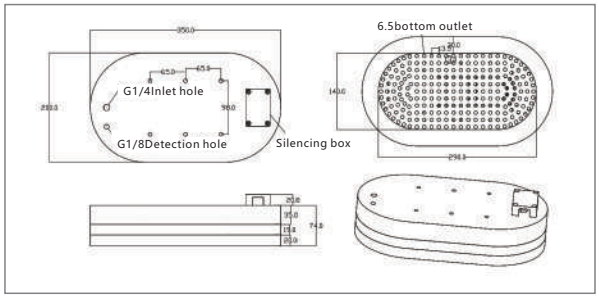
① Product series	② length	③ width
SBC (Soft Bags Cup)	150mm 270mm 300mm 350mm 380mm	90mm 160mm 200mm 250mm

④ Sponge shaped	⑤ Negative pressure supply
RS: Ellipse RQ: Square C: Circular	LS: Built in vacuum FJ: External vacuum source

Technical Parameter

model	Air consumption rate [NL/min]	Maximum suction capacity [NL/min]	Maximum vacuum degree [%]	Suction force [N]	Weight [kg]
SBC-150-90-RS-LS3L	100	700	-85KPA	206	1.5
SBC-270-160-RS-LS3L	240	900	-85KPA	342	1.5
SBC-300-200-RS-LS3L	240	900	-85KPA	432	1.6
SBC-300-200-RS-FJ	240	900	-85KPA	558	2.5
SBC-350-200-RS-LS4L	320	1200	-85KPA	900	3.4
SBC-350-200-RS-FJ	320	1200	-85KPA	1098	3.9
SBC-380-250-RS-LS4L	320	1200	-85KPA	1152	4.0
SBC-380-250-RS-FJ	320	1200	-85KPA	1440	4.8

Size specifications (mm)



model	L	W
SBC-150-90	150	90
SBC-270-160	270	160
SBC-300-200	300	200
SBC-350-200	350	200
SBC-380-250	380	250

HMVC SERIES

Cobot Care VAC

Vacuum suction tool - circuit board fan sponge suction cup


3C Electronics


Video film


sheet metal


Metal thick plate

characteristic

- High elasticity polyurethane (PU) sponge material, can adhere to the small bumps and depressions on the surface of PCB, avoiding component damage caused by hard suction cups
- Surface resistance of 10 ^ 6~10 ^ 9 Ω (compliant with ESD standards) to prevent electrostatic breakdown of sensitive components such as ICs
- Porous sponge structure disperses vacuum stress, even if the PCB has through holes, it can still maintain adsorption force
- Combined with vacuum generator (Venturi principle), adsorption/release response time<50ms
- Aluminum alloy body+engineering plastic components, with a total weight usually less than 100g



advantage


Surface adaptability

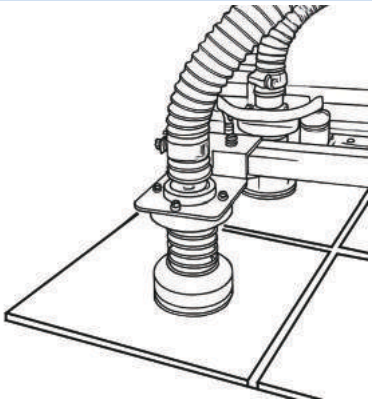

Loss prevention and injury prevention


Static electricity risk


Applicable plate thickness

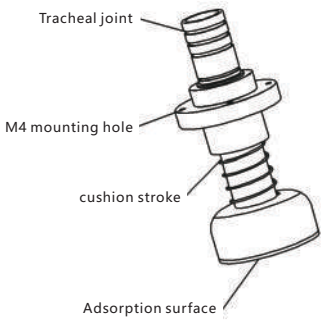
application

- **SMT production line**
  SMT feeder PCB handling (0402 small component protection)
  Reflow soldering plate transfer (temperature resistant sponge can reach 150
- **PCB board splitting process**
  Plate fixation during V-Cut/Outer cutting
  Avoid microcracks caused by mechanical clamping
- **FPC flexible circuit board processing**: adsorb irregular flexible boards without deformation (in conjunction with low vacuum mode)
- **IC testing and sorting**: BGA chip suction placement (electrostatic safety zone application)



structure

- **Adsorption module**
  Porous sponge layer (pore size 0.3~1mm, Shore hardness 20A~40A)
  Vacuum chamber (aluminum alloy CNC machining, air path optimization design)
- **Connection mechanism**
  M5/M6 quick change connector (compatible with Φ 4/Φ 6 trachea)
  Standard industrial flanges (such as ISO 15552)
- **Auxiliary system**
  Vacuum sensor (real-time pressure monitoring)
  Vacuum breaking solenoid valve (quick release)



HMVC SERIES

Vacuum suction tool - circuit board fan sponge suction cup

Cobot Care VAC

Model specifications

CCV-HMVC-C60-C25-FJ-62S

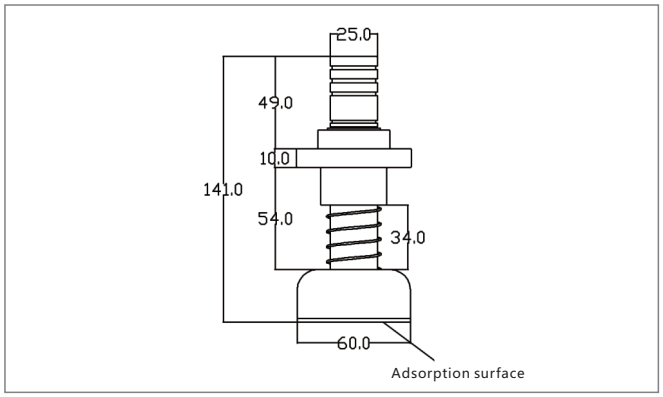
① ② ③ ④ ⑤

① Product series	② Suction cup diameter	③ Connect size	④ Vacuum supply	⑤ Strengthen the cover
HMVC High-flow mark-freevacuum suction Cup	60mm	Diameter: 25mm	FJ: External fan Vacuum pump Vacuum generator	Diameter: 62mm S: Silicone gel N: Rubbe

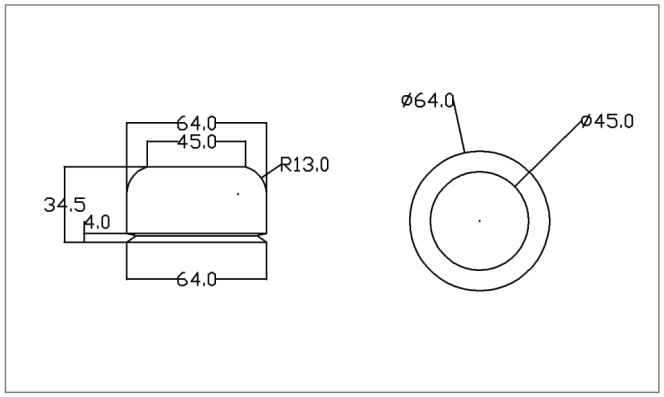
Technical Parameter

model	Air consumption rate [NL/min]	Maximum suction capacity [NL/min]	Maximum vacuum degree [%]	Suction force [N]	Weight [kg]
CCV-HMVC-C60-C25-FJ	100	700	-85KPA	206	0.24
CCV-HMVC-C60-C25-FJ-62S	240	900	-85KPA	342	0.26

Size specifications (mm)



HMVC-C60-C25-FJ



Strengthen the cover

HMVC SERIES

Sponge suction cup

general

characteristic

- The shell is made of high-quality aluminum alloy material, and the circular adsorption surface better fits the adsorbed object
- Adopting a built-in high flow vacuum generator
- The adsorption surface is available in suction cup and sponge types for customers to choose from
- Built in check valve structure in the product (optional)



advantage

Porous adsorption and stable grasping

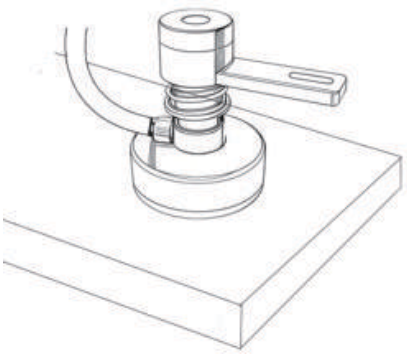
Efficient protection of sensitive materials

Highly breathable adsorption

Durable and easy to maintain with low vacuum requirements

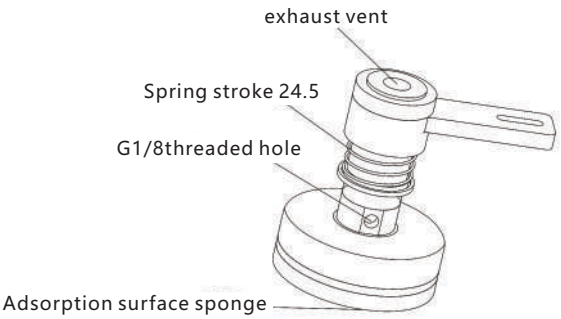
application

- **Packaging industry**: Grab foam boxes, pearl cotton cushioning materials, pulp molded products
- **Electronic manufacturing**: handling porous ceramic components, battery separators, flexible circuit boards (FPCs)
- **Automotive interior**: porous composite materials such as absorbent seat sponge, soundproof cotton, carpet, etc
- **Medical and filtration materials**: medical gauze and air filter handling in sterile environments
- **Furniture industry**: Automated production and sorting of soft pack furniture (such as sofa sponge)



structure

- The vacuum source is available in both flow and vacuum types for customers to choose from
- The adsorption surface has two structures: circular and square
- The spring stroke can reach 24.5mm and can be directly connected to a hose
- Side with D1/8 threaded mouth
- The top is equipped with exhaust holes for easy installation



HMVC SERIES

Sponge suction cup

Cobot Care VAC

Model specifications

CCV-HMVC-128-100-G1/8-WG7

① ② ③ ④ ⑤

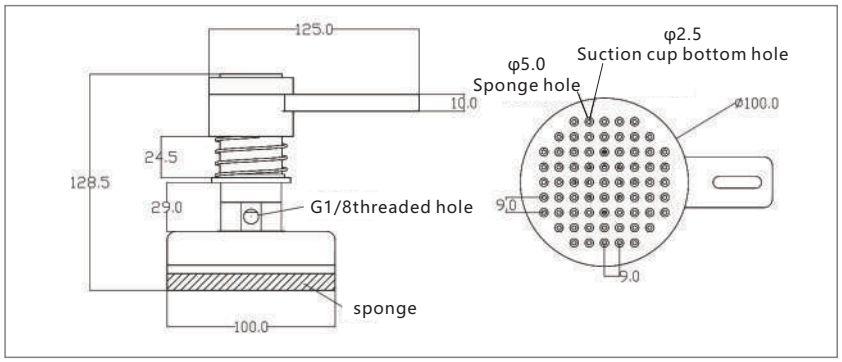
① Product series	② height	③ Disk diameter
HMVC High-flow mark-free vacuum suction cup	128mm (For more sizes, please contact customer service)	100mm

④ Gas supply hole	⑤ Installation position	⑥ Number of generators
G1/8"	WG: Waist groove Width: 7mm	LS1L 1 piece LS2L 2 pieces

performance parameter

Product Model	Rated gas supply pressure bar	Maximum vacuum degree -	Maximum vacuum flow rate NL/min	Air consumption NL/min	Single weight kg	Recommended hose diameter
CCV-HMVC-128-100	6.0	75	180	120	0.65	φ8

Size specifications (mm)



VCIE SERIES

Thin lip composite suction cup

Cobot Care VAC

3C Electronics | new energy | breathability

characteristic

- Multi layer material combination, balancing durability and sealing performance
- Integrated generator+suction cup+muffler/pagoda joint
- Vertical and horizontal installation methods
- The suction cup lip is extremely thin and flexible (usually made of high elasticity silicone or polyurethane),
- Can tightly adhere to irregular surfaces (such as rough, slightly uneven surfaces), reducing air leakage



advantage

High adaptability sealing performance

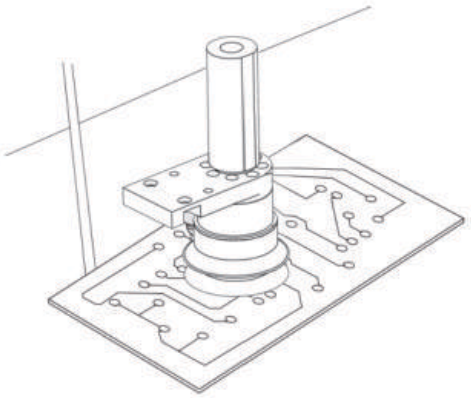
Energy saving and efficient

Strong anti-interference ability

Easy to maintain and have a long lifespan

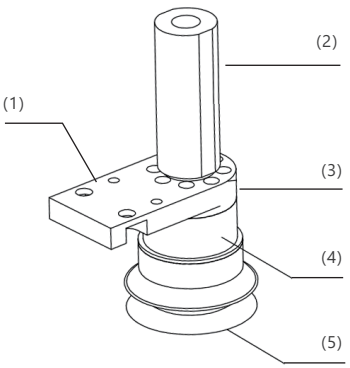
application

- **Industrial automation:**
  Robot grabbing (electronic components, automotive parts, food packagi
  CNC machine plate fixing, vacuum handling system
- **Logistics and warehousing**: Automatic sorting line absorbs irregular items such as cardboard boxes and woven bags
- **Construction and glass industry**: handling large glass and ceramic tiles to meet the installation needs of curtain walls
- **Medical equipment**: surgical instrument fixation, laboratory sample han
- **Home and innovative applications**: suction cup car mount, wall climbing robot, underwater detection equipment



structure

- (1) Install the flange
- (2) Silencer
- (3) Gas supply port
- (4) Vacuum generator
- (5) Adsorption surface



VCIE SERIES

Thin lip composite suction cup

Cobot Care VAC

Model specifications

CCV-VCIE-35-N

① ② ③

① Product series	② Suction nozzle diameter	③ Material of nozzle
VCIE (Vacuum cup withintegrated ejector)	35-ϕ35mm 50-ϕ50mm	N: Rubber S: Silicone gel

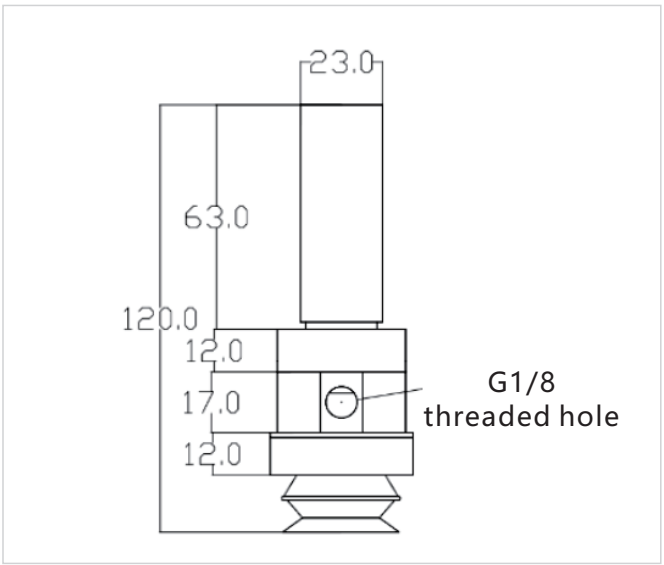
performance parameter

Product model	Supply pressure range (bar)	Rated gas supply pressure (bar)	Maximum vacuum degree (- kPa)	Maximum vacuum flow rate (NL/min)	Air consumption (NL/min)	Working temperature (° C)
VCIE35	1.0~7.0	5	16	680~690	165	0~60
VCIE50	1.0~7.0	5	16	680~690	165	0~60

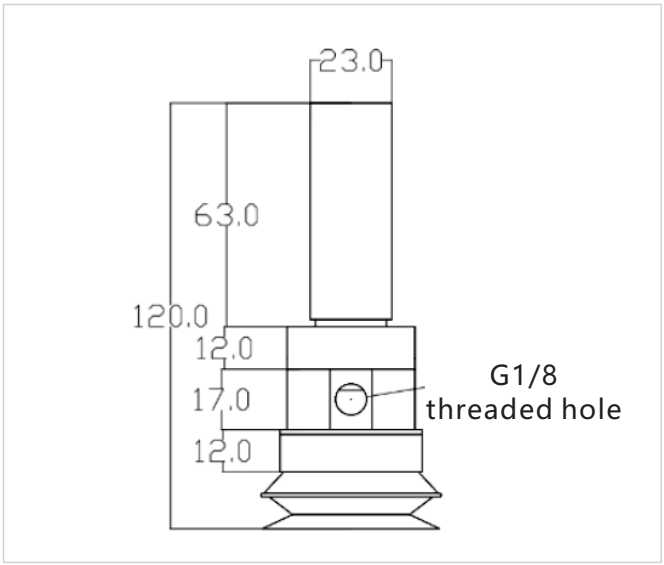
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure (bar)	Air consumption (NL/min)	0	1.5	2.5	3.5	4.5	5.5	6.5	7.5	11	Maximum vacuum degree (- kPa)
SLB30-M10	5.0	165	550	530	470	420	350	300	250	170	100	16
SLB50-M10	5.0	165	550	530	470	420	350	300	250	170	100	16

Measurement time specification (mm)



◇ SLB30



◇ SLB50

FJC SERIES

Contactless suction cup

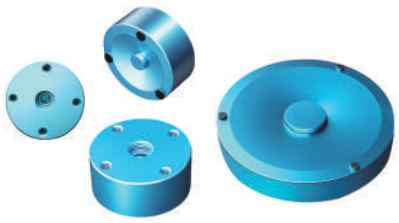
Cobot Care VAC

composite material

breathability

characteristic

- During the adsorption process, the suction cup is suspended on a vacuum cushion
- Stable suspension achieved through airflow control
- Do not inhale air from the workpiece
- Vacuum device manufactured based on the Bernoulli principle



advantage

Protect sensitive surfaces

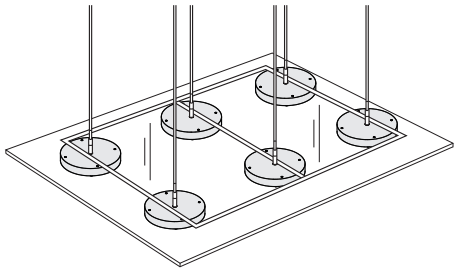
Adapt to complex working conditions

Efficient and energy-saving

Easy to maintain

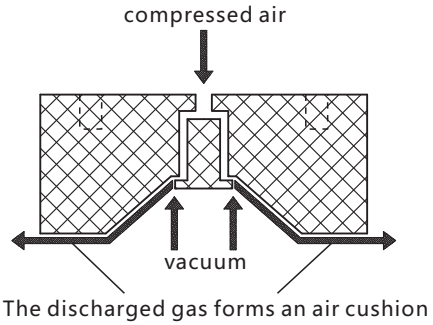
application

- **Semiconductor transportation**: transport wafers and LED chips to avoid dust pollution
- **Electronic manufacturing**: Transfer flexible circuit boards (FPC) and OLED screens to prevent electrostatic damage
- **Medical equipment**: gripping sterile packaging, medical film, in compliance with GMP standards
- **Automotive industry**: Handling high gloss injection molded parts (dashboard, headlights) to avoid surface scratches
- **Packaging logistics**: high-speed sorting of lightweight packaging boxes (such as medicine boxes, cosmetics)
- **New energy lithium:** non-destructive handling of battery electrodes and separators



structure

- Top with 4 threaded holes
- Equipped with compressed air supply ports in both vertical and horizontal directions



FJC SERIES

Contactless suction cup

Cobot Care VAC

Model specifications

CCV-FJC-D20-G1/8'

① ② ③

① Product series	② diameter	③ Inlet hole thread size
FJC	20mm 25mm 30mm 40mm 50mm 60mm 80mm 100mm	Inside: G1/8 " Inside: M5

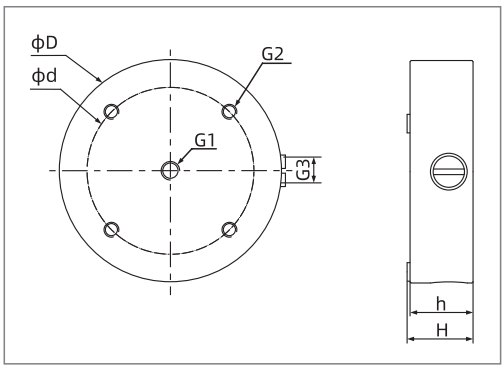
Selection specifications

Model/Size Specification 20	25	30	40	50	60	80	100
CCV-FJC-G1/8	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8
CCV-FJC-M5	M5	M5	M5	M5	M5	M5	M5

performance parameter

Product model	Pull off force N	Gas supply pressure bar	Maximum gas consumption NL/min	Working temperature ℃	Single weight g	Recommended hose diameter mm
FJC20	2	5.0	80	0~60	9.5	6
FJC30	4	5.0	100	0~60	32	8
FJC40	6.5	5.0	130	0~60	51	8
FJC60	13	5.0	200	0~60	116	8
FJC100	46	5.0	350	0~60	252	8
FJC120	89	5.0	420	0~60	365	8

Size specifications (mm)



Model/Size	D	d	H	h	G1	G2	G3
FJC20	20	15	12.8	12	M5×0.8	4-M3×0.5 depth 5	-
FJC30	32	22	17.8	17	M5×0.8	4-M4×0.7 depth 6	M5×0.8
FJC40	40	32	17.8	17	G1/8	4-M4×0.7 depth 6	G1/8
FJC60	60	45	17.8	17	G1/8	4-M4×0.7 depth 6	G1/8
FJC100	100	75	17.8	17	G1/8	4-M4×0.7 depth 6	G1/8
FJC120	120	105	17.8	17	G1/8	4-M4×0.7 depth 6	G1/8

FJC SERIES

Photovoltaic suction cup

Cobot Care VAC

composite material | breathability | new energy

characteristic

- During the adsorption process, the suction cup is suspended on a vacuum cushion
- Stable suspension achieved through airflow control
- Do not inhale air from the workpiece
- Vacuum device manufactured based on the Bernoulli principle

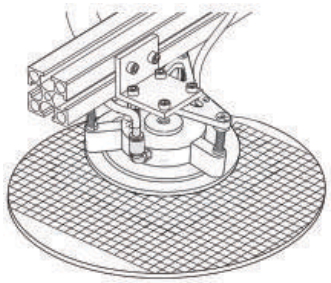


advantage

Protect sensitive surfaces | Adapt to complex working conditions | Efficient and energy-saving | Easy to maintain

application

- **Production line handling**: transportation of silicon wafers, solar cells, and glass cover plates (to avoid contamination by hand contact)
- Component installation: Grasping and positioning of large components in rooftop or ground power stations (single suction cup can support a weight of over 50kg)
- Cleaning and maintenance: Absorb fixed panels for automatic cleaning or inspection (such as drones equipped with suction cups)



structure

- Gas supply port
- Install flange
- Exhaust port
- Vacuum generator
- Release/vacuum detection port
- Adsorption surface

Model specifications

CCV-FJC-D20-G1/8'

① ② ③

① Product series	② Suction cup specifications	③ Inlet end thread
FJC	20mm 22mm 40mm 50mm 60mm 80mm 100mm 120mm	G1/8'

FJC SERIES

Photovoltaic suction cup

Cobot Care VAC

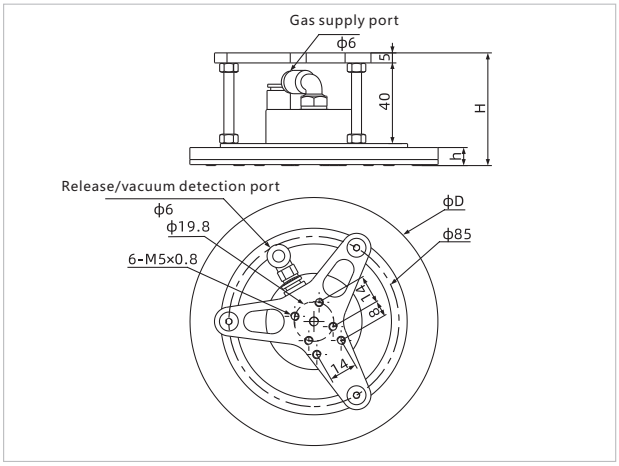
performance parameter

Product Model	Supply pressure range bar	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Working temperature ° C
FJC120 - M15	1.0~7.0	5.0	4.5	370~460	150	0~60
FJC150 - M15	1.0~7.0	5.0	4.5	370~460	160	0~60
FJC180 - M15	1.0~7.0	5.0	4.5	370~460	180	0~60

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	1.5	2.5	3.5	4.5	5.5	6.5	7.5	11	Maximum vacuum degree kPa
FJC120 - M15	5.0	150	440	429	407	385	363	335	308	275	-	4.5
FJC150 - M15	5.0	160	440	429	407	385	363	335	308	275	-	4.5
FJC180 - M15	5.0	180	440	429	407	385	363	335	308	275	-	4.5

Size specifications (mm)



Model/Size	D	H	h	Single weight g
FJC120AE - M15I - F9	124	53.5~57	9.5	343
FJC120FT - M15I - F9	124	56~59	12	375
FJC150AE - M15I - F9	149	53.5~57	9.5	418
FJC150FT - M15I - F9	149	56~59	12	472
FJC180AE - M15I - F9	179	53.5~57	9.5	632
FJC180FT - M15I - F9	179	56~59	12	630

NPSG SERIES

Needle suction cup

Cobot Care VAC


composite material


Fiber textile

characteristic

- Using steel needles for workpiece grasping, with a diameter typically ranging from 0.3 to 2mm, made of stainless steel or wear-resistant ceramics
- The stroke of the steel needle can be adjusted, and the telescopic crossover needle is controlled by a spring or double acting cylinder
- Internally integrated micro airflow channel, connected to vacuum source
- Provide overall support and prevent air leakage (optional elastic sealing layer).



advantage


Non destructive grasping


Efficient breathable adsorption

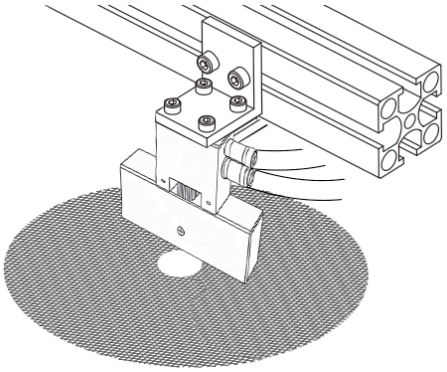

high flexibility


quick response


Short homework cycle

application

- **Electronic manufacturing**: Handling PCB boards, chips, FPC flexible circuit boards to avoid pin deformation
- **Semiconductor**: Non polluting transfer of wafers and LED epitaxial wafers
- **Medical equipment:** grabbing medical films, breathable packaging materia
- **Textile industry:** Absorb non-woven and fiber fabrics to avoid snagging
- **Precision machining**: fixing small metal parts (such as clock gears, miniature bearings)

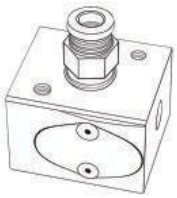


precautions

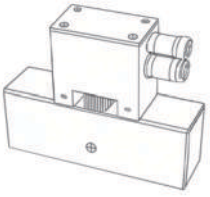
- The bottom of the product is a steel needle structure, please pay attention to safety when taking it out
- When the solenoid valve controls the air circuit, it is necessary to reserve the exhaust function to prevent abnormal temperature during high-frequency operation of the product

structure

- Durable aluminum casing
- Insert 4 steel needles at an angle of 30 °
- The needle is controlled by compressed air



- Durable aluminum casing
- Insert 10 steel needles at an angle of 30 °
- Double acting cylinder drive
- Continuous variable stroke adjustment



NPSG SERIES
Needle suction cup

Cobot Care VAC

Model specifications

CCV-NPSG-T70-30-D0.8

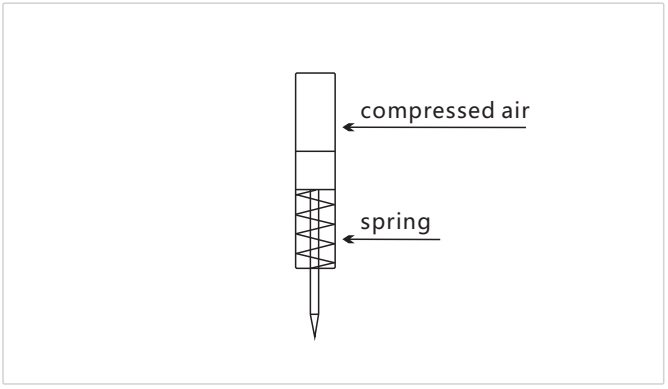
① ② ③ ④

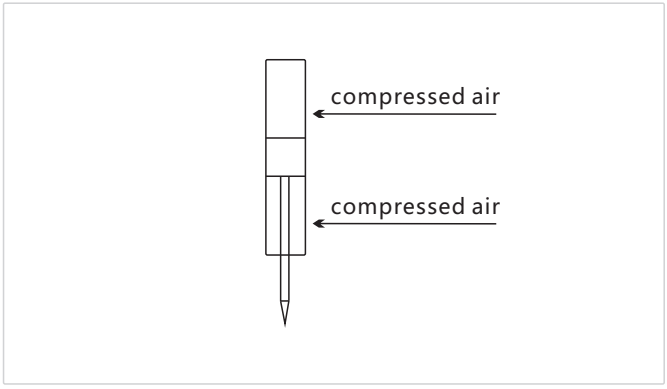
① Product series	② diameter	③ width	④ pin large diameter
NPSG Needle-penetration suction gripper	45mm 70mm 120mm	30mm 20mm	0.8mm

performance parameter

product name	product model	colour	weight	Grasping force	Number of stitches	Extend the length	Vertical length	Pressure Range
CCV-NPSG	T20*45	Gun color	107g	24N	20	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa
CCV-NPSG	T20*70	Gun color	125g	26N	36	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa
CCV-NPSG	20*120	Gun color	185g	29N	60	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa
CCV-NPSG	30*45	Gun color	169g	38N	20	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa
CCV-NPSG	30*70	Gun color	198g	45N	36	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa
CCV-NPSG	30*120	Gun color	263g	50N	60	0.4 - 8MM	0 - 2.7MM adjustable	0.2 - 0.7Mpa

Pneumatic schematic diagram

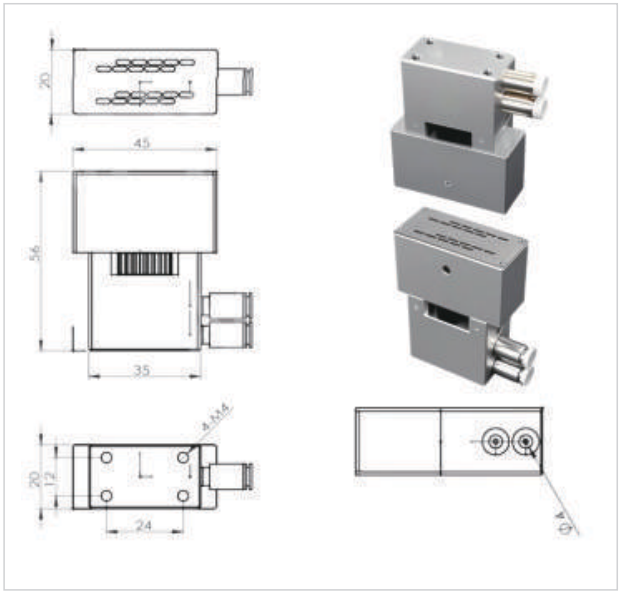




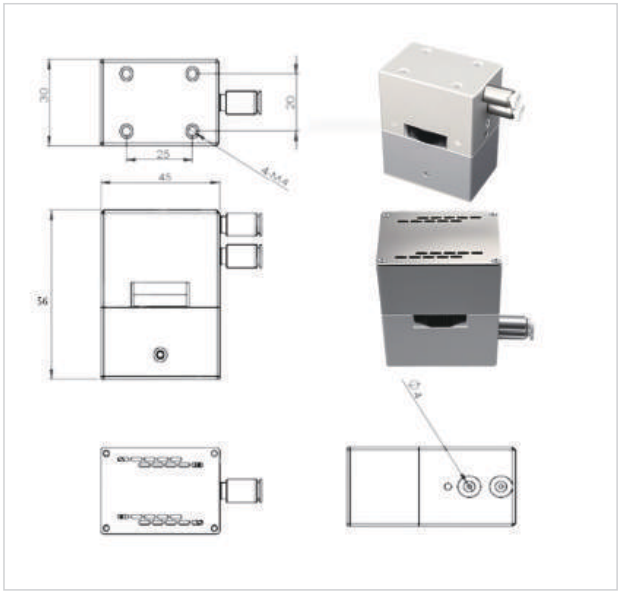
NPSG SERIES
Needle suction cup

Cobot Care VAC

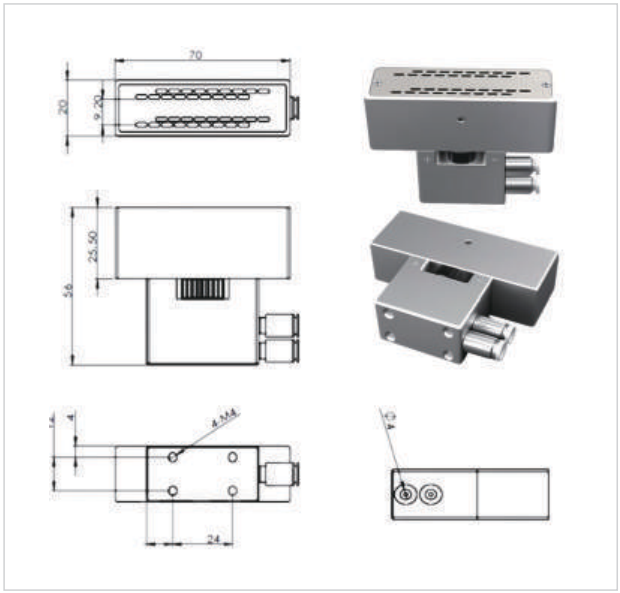
Size specifications (mm)



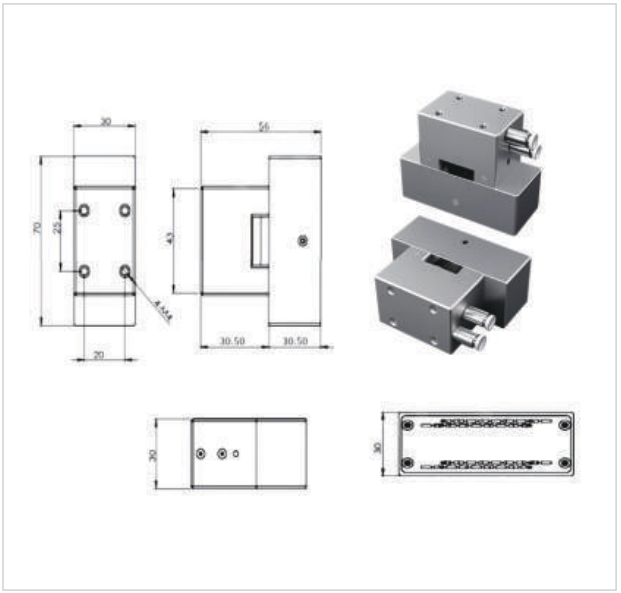
CCV-NPSG-T45-20-D0.8



CCV-NPSG-T45-30-D0.8



CCV-NPSG-T70-20-D0.8



CCV-NPSG-T70-30-D0.8

BRSERIES

Round Sponge Vacuum Suction Cup

Cobot Care VAC


Stone


rough surface

Features

- Made primarily of metal, with a sturdy structure and lightweight design
- Ring-shaped foam



Advantages


Excellent sealing performance

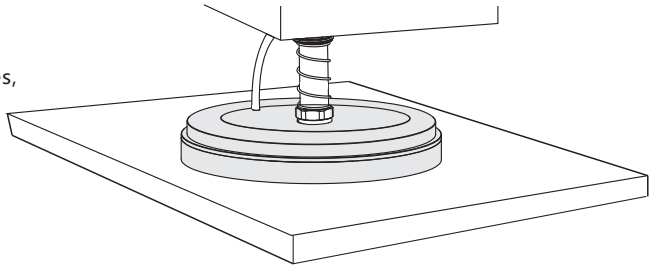

Lightweight yet capable of handling heavy loads


Wear-resistant and durable


Flexible fit

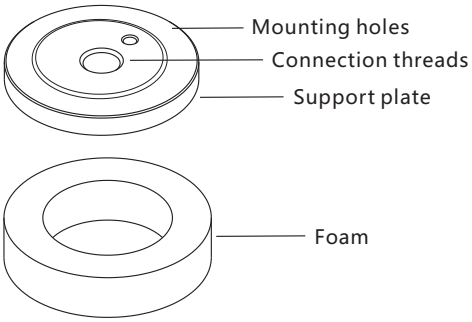
Applications

- Suitable for adhering to fragile objects
- Suitable for adhering to food packaged in plastic
- Suitable for adhering to objects with very rough or uneven surfaces, such as: textured stone slabs, embossed panels, marble slabs, ceramic tiles, cement boards, and perforated metal sheets
- Caution: Do not use in environments containing water or oil
- Recommended for use with a high-flow generator



Structure

- Consists of a metal backing plate and foam; the foam comes with an adhesive backing and can be directly attached to the backing plate,
- The foam is a consumable item and can be ordered separately for replacement,
- Can be equipped with a cone valve and a suction cup swivel mount (universal mount)



Model and Specifications

CCV-BR-160-F3/8

① ② ③

① Product Line	② diameter			③ Mounting threads
BR	50mm	100mm	160mm	F:G1/8External thread F:G3/8External thread

BRSERIES

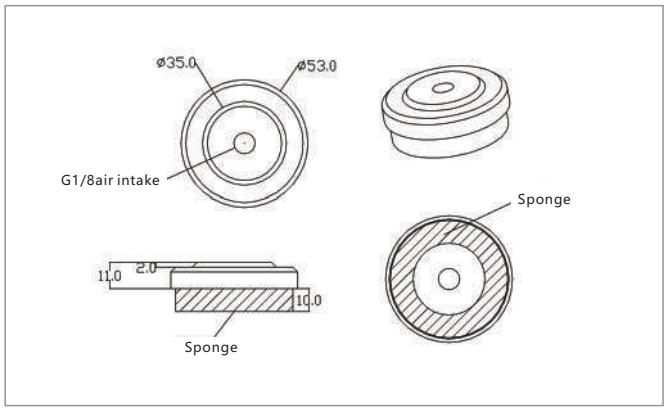
Round Sponge Vacuum Suction Cup

Cobot Care VAC

Maximum transmission capacity

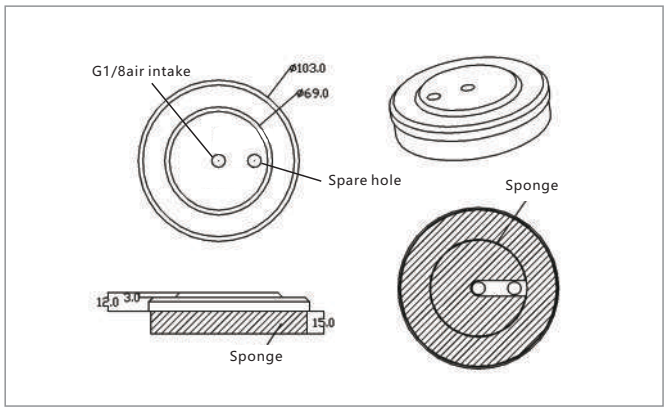
Model	Maximum vertical load capacity (kg)			Maximum horizontal conveying capacity (kg)			Internal capacity (cm²)
	-20KPA	-60KPA	-90KPA	-20KPA	-60KPA	-90KPA	
BR50	3.560	7.52	11.22	1.537	3.245	5.263	11.22
BR100	6.120	15.30	22.44	3.060	7.650	11.22	22.44
BR160	12.75	35.71	46.93	6.375	17.855	23.465	70.00

Dimensions



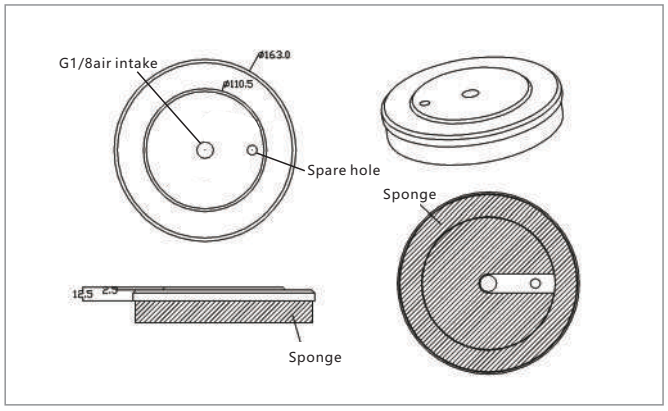
BR50

Model/Size	D	H	F	Weight (g)
BR50	53	23	G1/8	55



BR100

Model/Size	D	H	F	Weight (g)
BR100	103	30	G1/8	216



BR160

Model/Size	D	H	F	Weight (g)
BR160	163	35	G3/8	607

BRSERIES

Round Sponge Vacuum Suction Cup + Support Rod

Cobot Care VAC


Stone


rough surface

Features

- Made primarily of metal, featuring a sturdy structure and lightweight design
- The support rods are made of stainless steel and can be custom-made to fit the actual clearance dimensions of the workpiece
- Equipped with internal springs, hydraulic dampers, or pneumatic cylinders to absorb impact energy



Advantages


Lightweight design


High-efficiency cushioning

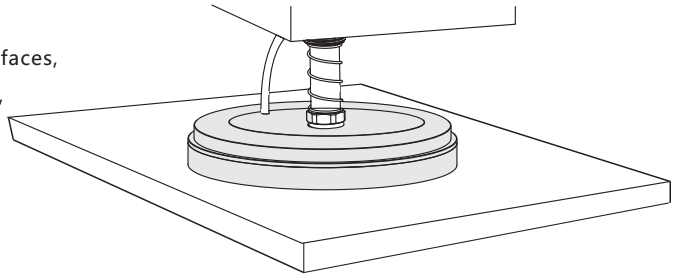

Compact size


Environmental resistance


Excellent sealing performance

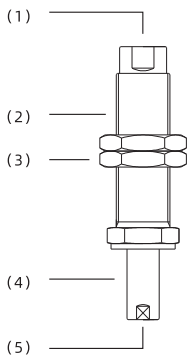
Applications

- Suitable for adhering to fragile objects
- Suitable for adhering to food packaged in plastic
- Suitable for adhering to objects with very rough or uneven surfaces, such as: textured stone slabs, embossed panels, marble slabs, ceramic tiles, cement boards, and perforated metal sheets
- Caution: Do not use in environments containing water or oil
- Recommended for use with a high-flow generator

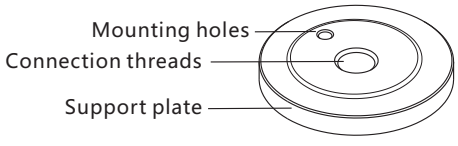


Structure

- (1) Generator connection end
- (2) Guide sleeve
- (3) Mounting nut
- (4) Guide rod
- (5) Suction cup connection end



- Consists of a metal backing plate and foam; the foam comes with an adhesive backing and can be directly attached to the backing plate.
- The foam is a consumable item and can be ordered separately for replacement.



BRSERIES

Round Sponge Vacuum Suction Cup + Support Rod

Cobot Care VAC

Model and Specifications

CCV-ISMR-M16-TS30-TF1/8-RM1/8

① ② ③ ④ ⑤ ⑥ ⑦ ⑩

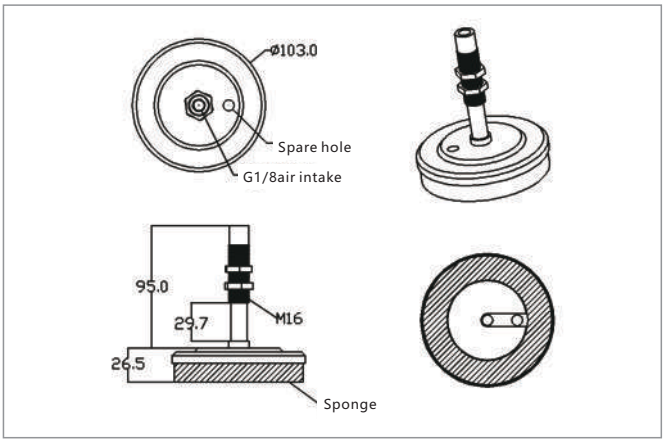
① Product Series	②Mounting Threads	③ Air Inlet Position	④ Buffer Stroke
BR+ISMR (Built-in Spring)	M16 M20	TS: Top Air Inlet YS: Side Air Inlet	30mm

⑤ Thread Location	⑥external threads/internal threads	⑦ Top Thread Size	⑧ Bottom Thread Size
T: Top R: Bottom	M: External threads F: Internal threads	F:G1/8"	M:G1/8" M:G3/8"

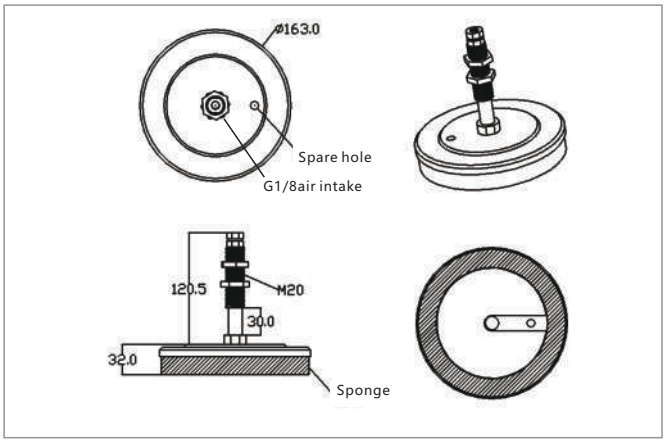
Selection Specifications

Model/Connection Specifications	Inlet Position	Inlet Position	Top Connection Thread	Bottom Connection Thread	Buffer Stroke
BR-ISMR-M16-TS30	Top/side air intake	The cylinder can rotate	F:G1/8	M:G1/8	30
BR-ISMR-M20-TK30	Top/side air intake	The cylinder can rotate	F:G1/8	M:G3/8	30
BR-ISMR-M16-TS30	Top/side air intake	Hexagonal anti-rotation	F:G1/8	M:G1/8	30
BR-ISMR-M20-TK30	Top/side air intake	Hexagonal anti-rotation	F:G1/8	M:G3/8	30

Dimensions



BR-ISMR-M16-TS30 (Suction Cup Compatibility50/100mm)



BR-ISMR-M20-TS30 (Suction Cup Compatibility160mm)

Model/Size	H	J	H	M	G
BR50-M16-TS30	115.5	G1/8	30	M16	G1/8
BR100-M16-TS30	121.5	G1/8	30	M16	G1/8
BR50-M16-TK30	115.5	G1/8	30	M16	G1/8
BR100-M16TK30	121.5	G1/8	30	M16	G1/8

Model/Size	H	J	H	M	G
ISMR-M20-TS30	157.5	-	50	M24	G3/8
ISMR-M20-TK30	157.5	-	50	M24	G3/8
ISMR-M20-TS30	157.5	G1/8	50	M24	G3/8
ISMR-M20-TK30	157.5	G1/8	50	M24	G3/8

vacuum generator

vacuum generator VTMASERIES

- Maximum vacuum degree: -80KPA
- Maximum vacuum flow rate: 300NL/min



3C electronics | metal plate | packaging

Mini vacuum generator VTMSERIES

- Maximum vacuum degree: -85KPA
- Maximum vacuum flow rate: 302NL/min



metal plate | injection molding | packaging

Multi-stage vacuum generator VTMBSERIES

- Maximum vacuum degree: -95kPa
- Maximum vacuum flow rate: 1650NL/min



metal plate | timber | packaging | composite material

Conveyor type vacuum generator CVCSSERIES

- Maximum vacuum degree: -84kPa
- Maximum vacuum flow rate: 3390NL/min



biopharmaceutical | food industry | packaging

Mini combination vacuum generator ABM/ABXSERIES

- Maximum vacuum degree: -80kPa
- Maximum vacuum flow rate: 384NL/min



3C electronics | new energy | breathability

Basic vacuum generator AZHSERIES

- Maximum vacuum degree: -88kPa
- Maximum vacuum flow rate: 85NL/min



General

Basic vacuum generator AZUSERIES

- Maximum vacuum degree: -84kPa
- Maximum vacuum flow rate: 126NL/min



3C electronics

Multi-stage vacuum generator AZLSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: sponge



metal plate | metal plate | injection molding

Integrated vacuum generator JCSERIES

- Maximum vacuum degree: -91kPa
- Maximum vacuum flow rate: 68NL/min



3C electronics | General | injection molding

Basic vacuum generator CVSERIES

- Maximum vacuum degree: -90KPA
- Maximum vacuum flow rate: 350NL/min





General

Equipped with a destructive vacuum generator VYSERIES

- Maximum vacuum degree::-88KPA
- Maximum vacuum flow rate:12.5NL/min





3C electronics



injection molding

Multi-stage vacuum generator VTMDSERIES

- Maximum vacuum degree: -95kPa
- Maximum vacuum flow rate: 1650NL/min





metal plate



timber



packaging



composite material

VTMA series

Vacuum generator

Cobot Care VAC

3C Electronics | Metal plate | package

characteristic

- Fast suction speed, high vacuum degree, low air consumption
- Built in vacuum tube structure
- Compact size, simple structure, card slot installation structure
- 8 vacuum ports with G1/4 threads

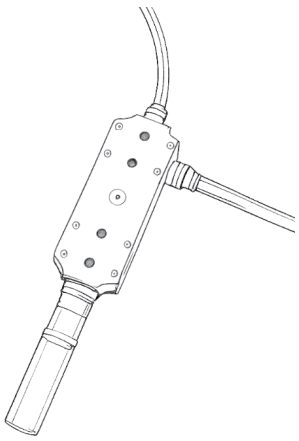


advantage

Step by Step Boosting Low gas consumption	quick response Strong resistance to volatility	large flow Pressure compatibility	intelligent control Integrated	long-life Low maintenance

application

- Heavy duty handling: Vacuum lifting equipment for automotive sheet metal and metal chassis
- Porous material processing: automatic grabbing of fiberboard and foam packaging
- High speed production line: electronic component mounting, lithium battery pole piece transportation
- Clean environment: medical packaging, semiconductor wafer handling (without oil contamination risk)



structure

- The interior of the shell can be freely combined with vacuum tubes of different performance
- The gas supply port is directly inserted into the middle 8 hose, and the vacuum port has G1/8 internal threads
- External muffler

Model specifications

CCV-VTMA-H8-R

① ② ③

① Product series	② Number of diversion holes	③ colour
VTMA	H8:8pieces	R: Red B: Black

VTMA series
Vacuum generator

Cobot Care VAC

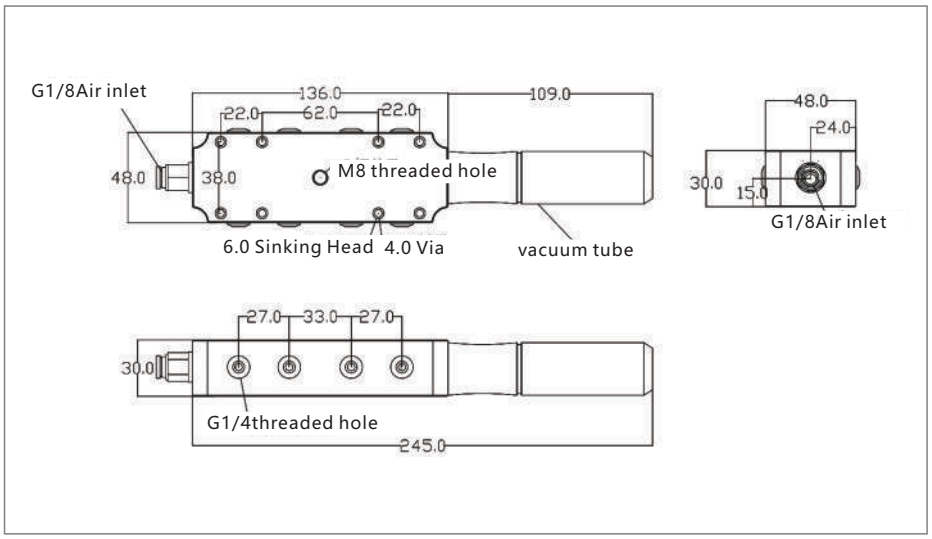
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure (bar)	Air consumption (NL/min)	0	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMA-H8-R	4.0	120	350	152	110	64	50	26.7	11.5	-	-	-	60
	5.0	125	370	185	125	90	50	36.2	27.3	13.9	-	-	70
	6.0	130	390	210	135	100	65	35.1	30.3	18.3	-	-	75
	4.5	120	350	175	120	80	44	32.7	24.5	17.8	11.6	3. 2	91
	5.0	125	360	190	125	95	65	36.0	26.0	17.6	10.8	2. 8	95
	6.0	135	380	220	130	105	90	54.0	26.0	17.8	9.3	2. 2	94

Extraction time (s/L) at different vacuum levels (- kPa)

Product Model	Gas supply pressure (bar)	Air consumption (NL/min)	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMA-H8-R	4.0	120	0.03	0.08	0.15	0.26	0.44	11.5	-	-	-	60
	5.0	125	0.03	0.07	0.13	0.23	0.38	27.3	1.07	-	-	70
	6.0	130	0.03	0.05	0.10	0.18	0.36	30.3	0.87	-	-	75
	4.5	120	0.03	0.07	0.13	0.23	0.38	24.5	0.97	1.50	3.25	91
	5.0	125	0.03	0.07	0.14	0.21	0.37	26.0	0.99	1.46	3.23	95
	6.0	135	0.03	0.05	0.10	0.16	0.27	26.0	0.86	1.45	3.92	94

Size specifications (mm)



VTM series

Mini vacuum generator

Cobot Care VAC

Metal plate | Injection molding | package

characteristic

- The size is only 20-50mm (length) × 10-30mm (width), and the weight is only 20-100g, suitable for installation at the end of the robotic arm (EOAT), small fixtures, or narrow spaces
- Save equipment layout space, especially suitable for SCARA robots and desktop automation equipment
- Can quickly establish vacuum (vacuum degree up to -50~-80kPa) within 50-200ms, meeting the needs of high-speed sorting, precision assembly and other scenarios
- Can integrate vacuum switch, muffler, throttle valve, support plug and play, easy to connect to PLC or robot control system
- Pure pneumatic structure, no motor or vulnerable parts, long-term maintenance free, with a lifespan of millions of cycles



advantage

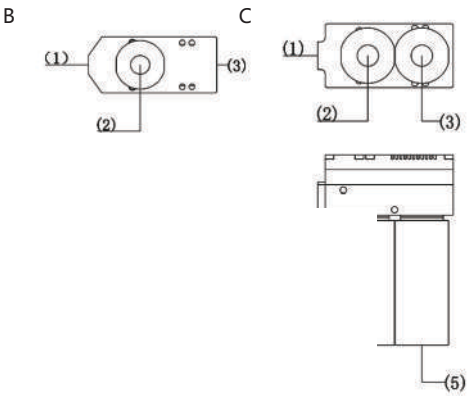
Suitable for miniaturized devices | High precision adsorption control | Low noise and lightweight | Energy saving and efficient | Compatible with multiple suction devices

application

industry	Application Cases	Adaptation requirements
Electronic Manufacturing	SMT surface mount machine component grabbing FPC flexible circuit handling	High precision anti-static
medical automation	Sorting of pill packaging test tubes	Pollution free and silent
precision machinery	Clock gear assembly, optical lens adsorption	Stable gripping of small workpieces
Food packaging	High speed sorting of small packaging bags (such as seasonings)	Hygiene and rapid response

structure

- (1) Gas supply port
- (2) Vacuum port
- (3) Exhaust port
- (4) Vacuum filter
- (5) Silencer



VTM series

Mini vacuum generator

Cobot Care VAC

Model specifications

CCV-VTM-30-B

① ② ③

① Product series	② specifications	③ Silencer position
VTM Universal Type	10 20 30 40 50	B/C (See Appendix 1)

Appendix 1 of Air Port Specifications

Silencer position	Gas supply port	vacuum port	exhaust port	Suitable for generators (VTM series)	
B	G1/8	G3/8	内置消音器	VTM10、20、30、40、50	
C	G1/8	G3/8	外置消音器	VTM10、20、30、40、50	

Selection Specification VTM

Model/Specification	A		B		C	
VTM10	VTM10 - A		VTM10 - B		VTM10 - C	
VTM20	VTM20 - A	-	VTM20 - B		VTM20 - C	
VTM30	-	-	VTM30 - B		VTM30 - C	
VTM40			VTM40 - B		VTM40 - C	
VTM50			VTM50 - B		VTM50 - C	

Performance Parameters VTM

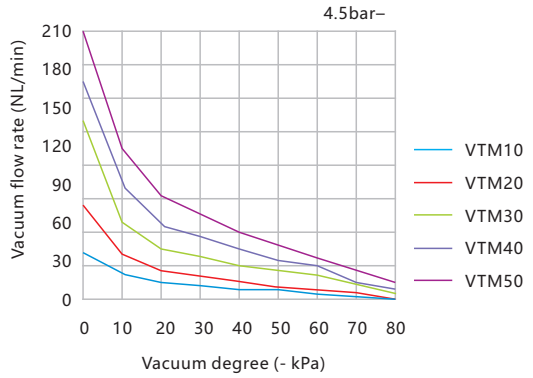
Product model	Supply pressure range bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Recommended hose diameter mm, air supply port P	Recommended hose diameter mm, vacuum port V
VTM10	4.5 - 6.0	85	35 - 37	12 - 20	50 - 65	-20 - 80	φ6	φ8
VTM20	4.5 - 6.0	85	70 - 75	28 - 42	55 - 68	-20 - 80	φ6	φ10
VTM30	4.5 - 6.0	85	141 - 150	55 - 85	60 - 68	-20 - 80	φ8	φ12
VTM40	4.5 - 6.0	85	175 - 220	87 - 125	60 - 68	-20 - 80	φ10	φ12
VTM40	4.5 - 6.0	85	275- 336	137 - 186	76 - 82	-20 - 80	φ10	φ12

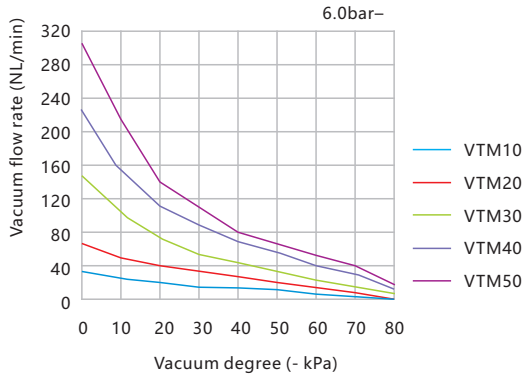
VTM series
Mini vacuum generator

Cobot Care VAC

Vacuum flow rate (NL/min) of VTM series with different vacuum degrees (- kPa)

Product model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
VTM10	4.5	12	35.0	20.5	12.0	10.5	8.5	6.5	4.5	2.5	0.8	85
VTM20	4.5	28	70.0	40.5	25.0	21.0	18.0	14.0	9.5	5.0	1.3	85
VTM30	4.5	55	141.0	77.0	45.0	39.5	29.5	25.0	17.5	12.0	3.0	85
VTM40	4.5	87	175.0	105.0	70.0	63.0	53.0	40.0	26.0	14.0	6.5	85
VTM50	4.5	128	210.0	105.0	136.0	95.0	86.0	59.0	38.0	21.0	12.0	85
VTM10	6.0	20	37.0	25.0	15.5	12.0	8.0	6.0	4.0	2.7	0.6	85
VTM20	6.0	42	75.0	55.0	27.0	22.0	18.0	12.0	9.0	5.0	2.0	85
VTM30	6.0	85	150.0	100.0	55.0	38.0	30.0	24.0	16.0	11.0	3.2	85
VTM40	6.0	125	220.0	150.0	81.0	65.0	50.0	38.0	27.0	18.0	5.0	85
VTM50	6.0	180	302.0	215.0	113.0	98.0	83.0	56.0	41.0	27.0	7.9	85





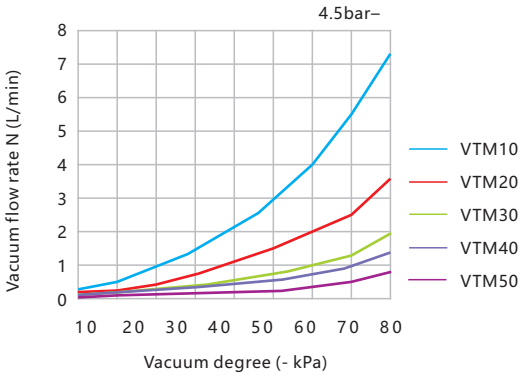
Extraction time (s/L) of VTM series with different vacuum degrees (- kPa)

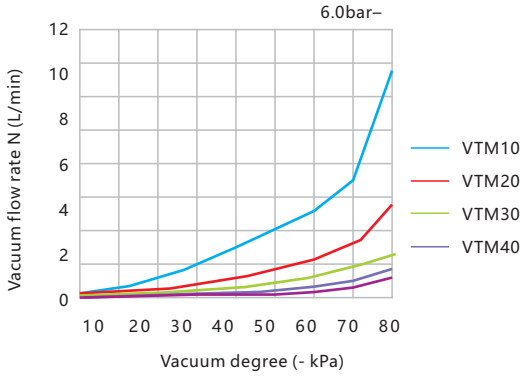
Product model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
VTM10	4.5	12	0.11	0.42	0.95	1.66	2.50	3.65	5.25	7.89	85
VTM20	4.5	28	0.08	0.20	0.44	0.80	1.24	1.80	2.55	3.80	85
VTM30	4.5	55	0.04	0.12	0.23	0.41	0.65	0.93	1.33	2.03	85
VTM40	4.5	87	0.03	0.09	0.16	0.27	0.43	0.66	0.95	1.43	85
VTM50	4.5	134	0.01	0.02	0.07	0.15.	0.35	0.42	0.52	0.81	85
VTM10	6.0	20	0.13	0.51	1.15	1.93	2.87	4.09	5.84	10.46	85
VTM20	6.0	42	0.03	0.23	0.53	0.92	1.37	1.95	2.77	4.62	85
VTM30	6.0	85	0.02	0.15	0.28	0.46	0.71	1.02	1.48	2.55	85
VTM40	6.0	125	0.02	0.08	0.14	0.31	0.49	0.69	1.02	1.75	85
VTM50	6.0	142	0.01	0.04	0.84	0.15	0.24	0.32	0.87	1.02	85

VTM series
Mini vacuum generator

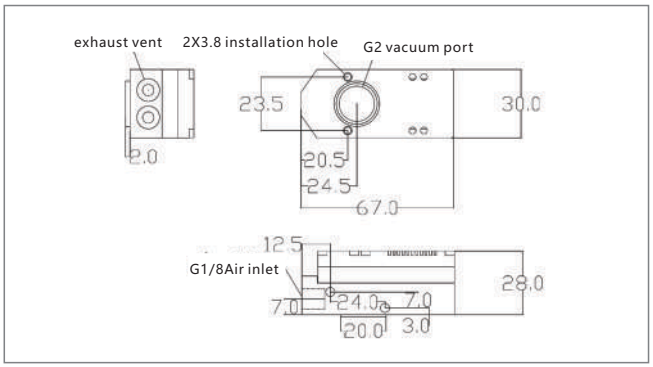
Cobot Care VAC

Model specifications

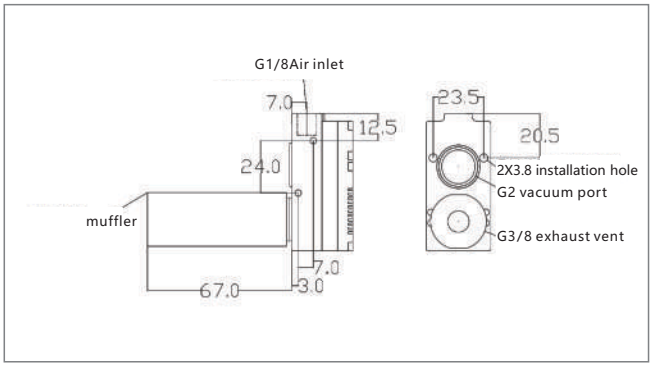




Size specifications (mm)



Model/Size	G1	G2	L	Single weight g
VTM-10 - B	G1/8	G3/8	20.7	64
VTM-20 - B	G1/8	G3/8	20.7	64
VTM-30 - B	G1/8	G3/8	28	77
VTM-40 - B	G1/8	G3/8	35	89
VTM-50 - B	G1/8	G3/8	43	96



Model/Size	G1	G2	L	Single weight g
VTM-10 - C	G1/8	G3/8	20.7	84
VTM-20 - C	G1/8	G3/8	20.7	87
VTM-30 - C	G1/8	G3/8	28	100
VTM-40 - C	G1/8	G3/8	35	112
VTM-50 - C	G1/8	G3/8	42	128

VTMB series

Multi-stage vacuum generator

Cobot Care VAC



Metal plate wood package composite material

characteristic

- Multi stage nozzle increases pressure step by step, resulting in a larger extraction flow rate
- Optimize the airflow path, reduce compressed air consumption, and save 20% to 40% energy compared to single-stage generators
- The airflow passes through multi-stage buffering, and the operating noise is lower than that of a single-stage generator (<70dB)
- Pure pneumatic structure, no motor or vulnerable parts, long-term maintenance free, with a lifespan of millions of cycles



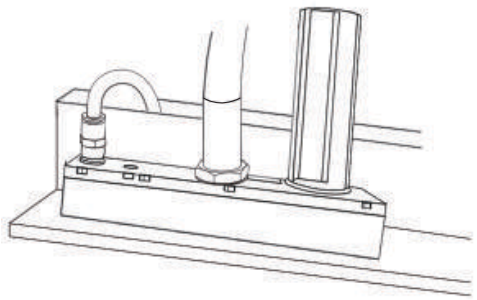
advantage



Strong adaptability Energy Saving Easy integration long-life

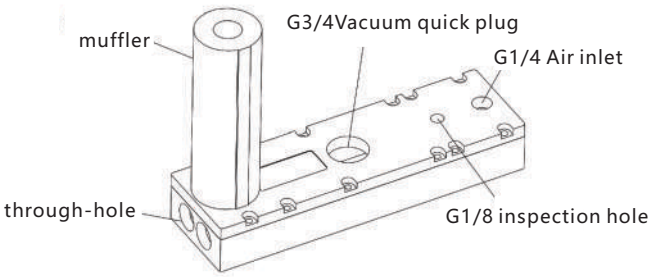
application

- Industrial automation: robotic arm grasping (metal parts, plastic parts, glass), automated packaging, CNC loading and unloading.
- Electronic manufacturing: SMT surface mount machine, PCB board handling, precision component assembly.
- Logistics sorting: Automated sorting of express packages, cardboard boxes, and bagged items.
- Medical equipment: laboratory sample collection, drug packaging, sterile environment handling.
- Automotive manufacturing: body sheet metal handling, interior parts assembly, automated tire grabbing.



structure

- The interior of the shell can be freely combined with vacuum tubes of different performance
- The gas supply port is directly inserted into the middle 8 hose, and the vacuum port has G1/8 internal threads
- External muffler



VTMB series

Multi-stage vacuum generator

Cobot Care VAC

Model specifications

CCV-VTMB-100L

① ② ③

① Product series	② Number of vacuum chambers	③ Vacuum form
VTMB	100:1 piece 200:2 pieces	H: High vacuum L: Large traffic

Selection specifications

Model/Specification	Number of vacuum chambers	Vacuum form
CCV-VTMB-100	1	L
CCV-VTMB-150	1	L
CCV-VTMB-200	1	L

Product model

Product Model	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Single weight g	Vacuum chamber volume cm3	Recommended hose diameter mm, air supply port P	Recommended hose diameter mm, vacuum port V
CCV-VTMB-100-L	0.5	-90	720	260	63~68	-10~80	630	125	φ10	φ32
CCV-VTMB-150-L	0.6	-90	1080	390	63~68	-10~80	830	220	φ12	φ32
CCV-VTMB-200-L	0.6	-90	1440	520	63~68	-10~80	830	220	φ12	φ32

VTMB series

Multi-stage vacuum generator

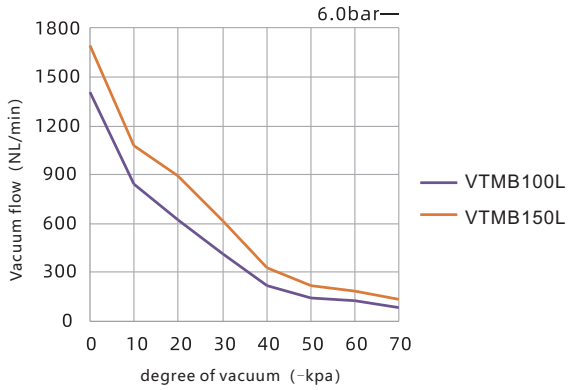
Cobot Care VAC

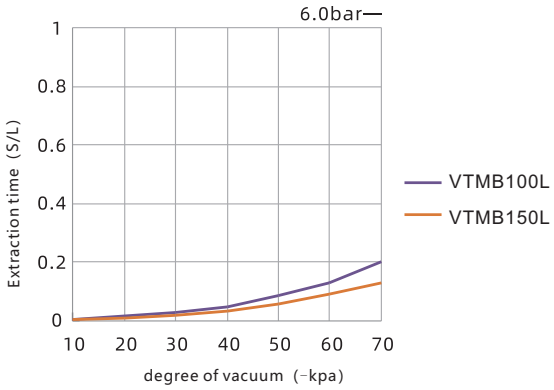
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
CCV-VTMB-100-L	6.0	520	1410	840	624	408	216	144	120	84	75
CCV-VTMB-150-L	6.0	780	1690	1074	888	612	324	216	180	132	75

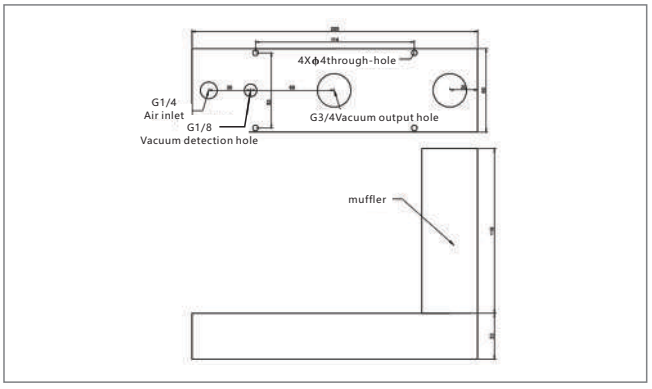
Extraction time (s/L) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
CCV-VTMB-100-L	6.0	520	0.005	0.013	0.025	0.045	0.083	0.130	0.200	75
CCV-VTMB-150-L	6.0	780	0.004	0.010	0.018	0.030	0.055	0.090	0.130	75

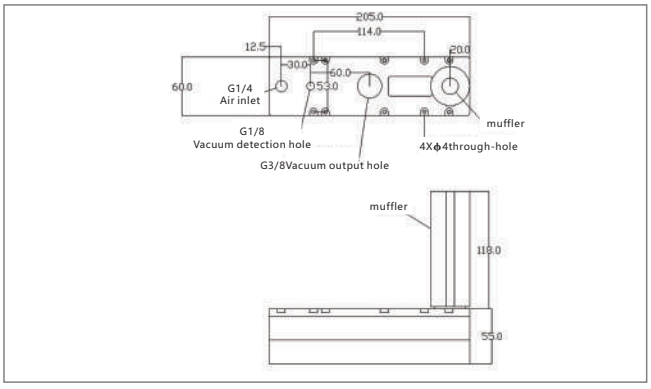




Size specifications (mm)



VTMB-100



VTMB-200

CVCS series

Conveyor type vacuum generator

Cobot Care VAC

biopharmaceuticals | Food industry | package

characteristic

- Special vacuum generator with a straight through structure and extremely high vacuum flow rate
- Different diameter specifications, the maximum diameter can reach 38mm, the vacuum degree can reach -60~-90kPa, and the pumping flow rate is 50~500L/min
- Wear resistant and corrosion-resistant, using stainless steel, polyurethane or ceramic coatings to extend service life
- Cyclone separator or filter: Separate particles from the airflow to ensure that the vacuum generator is not contaminated
- Intelligent control, intermittent operation or low flow standby, reducing energy consumption

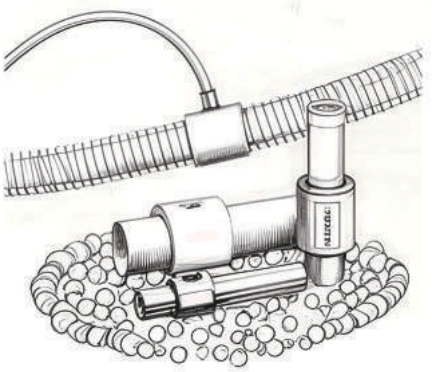


advantage

Dust free and environmentally friendly | Efficient transportation | Flexible Layout | Low maintenance cost | Multi material compatibility

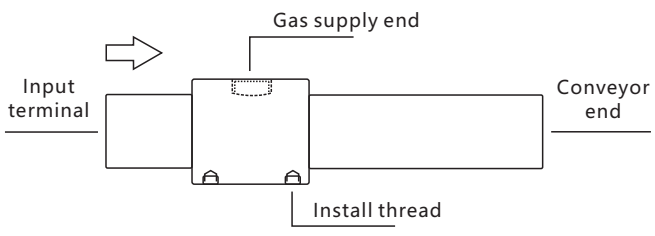
application

- Transporting loose materials such as textiles and paper
- Transport grains such as wheat and corn
- Convey and transport powder particles such as laundry detergent and plastic pellets
- Remove cutting chips generated during mechanical processing
- Extract non corrosive wastewater and exhaust gas generated during industrial production processes



structure

- Straight through structure, capable of continuously absorbing and transporting different types of materials
- Comes with installation threaded holes
- The ACPF3-3 specification ports are connected by threads, while the rest are connected by external steel wire hoses



CVCS series

Conveyor type vacuum generator

Cobot Care VAC

Model specifications

CCV-CVCS-L120-24-FG1/8

① ② ③ ④

① Product series	② length	③ Outer diameter of interface	④ Inlet hole thread
CVCS (Central Vacuum Conveying System)	120mm	24mm	within:G1/8"
	(For more sizes, please contact customer service)		

performance parameter

Product model	Nozzle diameter mm	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min (2.8bar)	Air consumption NL/min (5.5 bar)	Working temperature	Aluminum alloy single weight g	Stainless steel single weight g
CVCS	12.5	6.0	35.0	870	395	680	-20~80	170	505

Air consumption at different vacuum levels

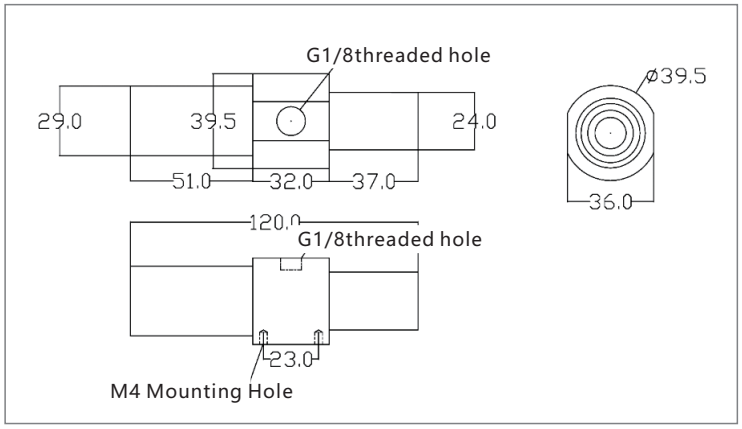
Product model	4.99 16.9	9.98 33.8	14.97 50.70	19.93 67.50	24.92 84.40
CVCS120	113	170	235	275	340
CVCS375	175	325	481	594	820
CVCS500	340	623	792	934	1274
CVCS750	651	872	1245	1783	2547

CVCS series

Conveyor type vacuum generator

Cobot Care VAC

Size specifications (mm)



Model/Size	A	B	C	D	E	F	G	H	I	J	K
CVCS	6.5	18.5	32	28	89	19	25	18	19.5	M4×0.7	G1/8

ABM/ABX SERIES

Mini combination vacuum generator

Cobot Care VAC

3C Electronics | new energy | breathability

characteristic

- Multi stage nozzle design
- Small size, light weight, compact structure, easy installation
- It can be operated with a single pneumatic control valve, and each vacuum circuit can be controlled by a separate ABM/ABX without affecting the operation of other circuits



advantage

Low gas consumption and large vacuum

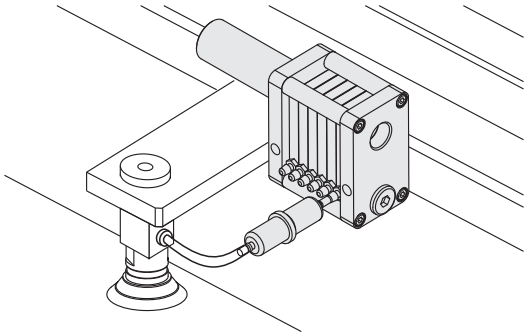
Low weight and small space

Control each circuit separately

Meet different vacuum flow rates

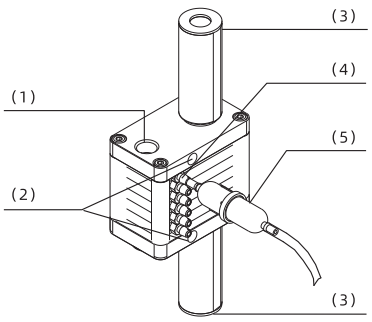
application

- A universal vacuum generator widely used in various vacuum systems
- Suitable for handling metal plates, packaging machinery, injection molding, and industrial robot technology fields



structure

- (1) Gas supply port
- (2) Installation hole
- (3) Silencer
- (4) Vacuum port
- (5) Vacuum filter



ABM/ABX SERIES

Mini combination vacuum generator

Cobot Care VAC

Model specifications

ABM 5 × 5 - 4 - F
① ② ③ ④ ⑤

① Product series	② Specifications	③ Number of composite boards
ABM Universal Type (-85kPa) ABX high vacuum type (-92kPa)	5 10	2 3 16

④ Inner diameter of vacuum port connecting pipe	⑤ Seal material
4 - ϕ4mm	Blank - default specification, nitrile rubber F-Fluororubber E-EPDM rubber

Selection specifications

Model/Specification	5	10
ABM□×2-4	ABM5×2-4	ABM10×2-4
ABM□×3-4	ABM5×3-4	ABM10×3-4
ABM□×4-4	ABM5×4-4	ABM10×4-4
ABM□×5-4	ABM5×5-4	ABM10×5-4
ABM□×6-4	ABM5×6-4	ABM10×6-4
ABM□×7-4	ABM5×7-4	ABM10×7-4
ABM□×8-4	ABM5×8-4	ABM10×8-4
ABM□×9-4	ABM5×9-4	ABM10×9-4
ABM□×10-4	ABM5×10-4	ABM10×10-4
ABM□×11-4	ABM5×11-4	ABM10×11-4
ABM□×12-4	ABM5×12-4	ABM10×12-4
ABM□×13-4	ABM5×13-4	ABM10×13-4
ABM□×14-4	ABM5×14-4	ABM10×14-4
ABM□×15-4	ABM5×15-4	ABM10×15-4
ABM□×16-4	ABM5×16-4	ABM10×16-4

Model/Specification	5	10
ABX□×2-4	ABX5×2-4	ABX10×2-4
ABX□×3-4	ABX5×3-4	ABX10×3-4
ABX□×4-4	ABX5×4-4	ABX10×4-4
ABX□×5-4	ABX5×5-4	ABX10×5-4
ABX□×6-4	ABX5×6-4	ABX10×6-4
ABX□×7-4	ABX5×7-4	ABX10×7-4
ABX□×8-4	ABX5×8-4	ABX10×8-4
ABX□×9-4	ABX5×9-4	ABX5×9-4
ABX□×10-4	ABX5×10-4	ABX5×10-4
ABX□×11-4	ABX5×11-4	ABX5×11-4
ABX□×12-4	ABX5×12-4	ABX5×12-4
ABX□×13-4	ABX5×13-4	-
ABX□×14-4	ABX5×14-4	-
ABX□×15-4	ABX5×15-4	-
ABX□×16-4	ABX5×16-4	-

ABM/ABX SERIES

Mini combination vacuum generator

Cobot Care VAC

performance parameter

Product model	Supply pressure range bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Single weight g	Recommended hose diameter mmweight g Gas supply port P	Vacuum port V	Exhaust port E
ABM5×2-4	4.5~6.0	85	25×2	29~41	50~60	-20~80	67	ϕ6	ϕ6	G3/8×1
ABM5×3-4	4.5~6.0	85	25×3	44~64	50~60	-20~80	80	ϕ6	ϕ6	G3/8×1
ABM5×4-4	4.5~6.0	85	25×4	61~85	50~60	-20~80	247	ϕ8	ϕ6	G3/8×1
ABM5×5-4	4.5~6.0	85	25×5	71~104	60~65	-20~80	255	ϕ8	ϕ6	G3/8×1
ABM5×6-4	4.5~6.0	85	25×6	89~125	60~65	-20~80	281	ϕ8	ϕ6	G3/8×1
ABM5×7-4	4.5~6.0	85	25×7	104~145	60~65	-20~80	299	ϕ8	ϕ6	G3/8×1
ABM5×8-4	4.5~6.0	85	25×8	120~168	60~65	-20~80	317	ϕ10	ϕ6	G3/8×1
ABM5×9-4	4.5~6.0	85	25×9	132~190	60~65	-20~80	335	ϕ10	ϕ6	G3/8×1
ABM5×10-4	4.5~6.0	85	25×10	148~211	60~65	-20~80	353	ϕ10	ϕ6	G3/8×1
ABM5×11-4	4.5~6.0	85	25×11	165~232	60~65	-20~80	371	ϕ10	ϕ6	G3/8×1
ABM5×12-4	4.5~6.0	85	25×12	180~252	60~65	-20~80	389	ϕ10	ϕ6	G3/8×2
ABM5×13-4	4.5~6.0	85	25×13	195~275	60~65	-20~80	417	ϕ10	ϕ6	G3/8×2
ABM5×14-4	4.5~6.0	85	25×14	208~293	60~65	-20~80	435	ϕ10	ϕ6	G3/8×2
ABM5×15-4	4.5~6.0	85	25×15	225~316	60~65	-20~80	453	ϕ12	ϕ6	G3/8×2
ABM5×16-4	4.5~6.0	85	25×16	241~335	60~65	-20~80	471	ϕ12	ϕ6	G3/8×2
ABM10×2-4	4.5~6.0	85	32×2	61~85	55~60	-20~80	67	ϕ8	ϕ6	G3/8×1
ABM10×3-4	4.5~6.0	85	32×3	91~125	60~65	-20~80	80	ϕ8	ϕ6	G3/8×1
ABM10×4-4	4.5~6.0	85	32×4	121~167	60~65	-20~80	247	ϕ10	ϕ6	G3/8×1
ABM10×5-4	4.5~6.0	85	32×5	151~212	60~65	-20~80	255	ϕ10	ϕ6	G3/8×1
ABM10×6-4	4.5~6.0	85	32×6	185~255	60~65	-20~80	281	ϕ10	ϕ6	G3/8×2
ABM10×7-4	4.5~6.0	85	32×7	211~295	60~65	-20~80	299	ϕ10	ϕ6	G3/8×2
ABM10×8-4	4.5~6.0	85	32×8	241~335	60~65	-20~80	327	ϕ10	ϕ6	G3/8×2
ABM10×9-4	4.5~6.0	85	32×9	271~376	60~65	-20~80	345	ϕ12	ϕ6	G3/8×2
ABM10×10-4	4.5~6.0	85	32×10	301~421	60~65	-20~80	363	ϕ12	ϕ6	G3/8×2
ABM10×11-4	4.5~6.0	85	32×11	332~463	60~65	-20~80	381	ϕ12	ϕ6	G3/8×2
ABM10×12-4	4.5~6.0	85	32×12	361~505	60~65	-20~80	399	ϕ12	ϕ6	G3/8×2

◇ Note: The maximum gas supply pressure of the product is 7.0 bar

Vacuum flow rate (NL/min) of ABX series with different vacuum degrees (- kPa)

Product model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
ABM5×1	6.0	20	25.0	15.0	12.5	11.0	10.0	7.5	5.5	2.0	0.6	-	85
ABM10×1	6.0	42	32.0	28.0	24.0	22.0	18.0	15.0	11.0	5.0	1.4	-	85

Extraction time (s/L) of ABX series with different vacuum degrees (- kPa)

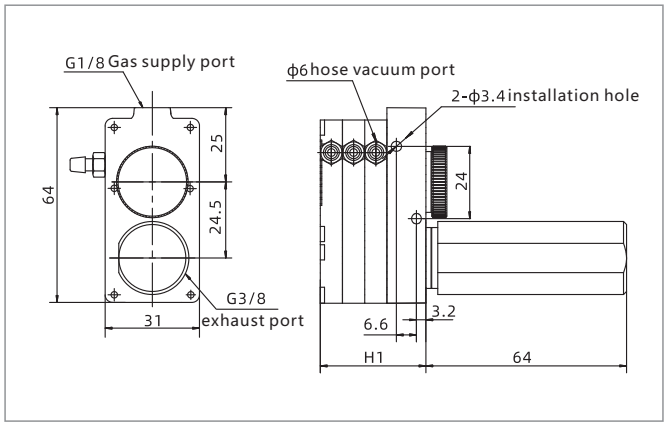
Product model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
ABM5×1	6.0	20	0.20	0.59	1.10	1.58	2.40	3.52	5.30	10.30	-	85
ABM10×1	6.0	42	0.12	0.28	0.60	0.81	1.18	1.82	2.65	5.21	-	85

ABM/ABX SERIES

Mini combination vacuum generator

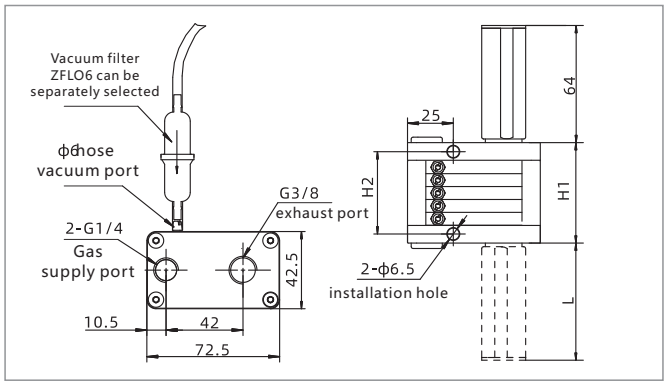
Cobot Care VAC

Size specifications (mm)



ABM/ABX□×2-4 ABM/ABX□×3-4

Model/Size	H1	H2	L
ABM/ABX5×2-4	28	-	-
ABM/ABX5×3-4	36	-	-
ABM/ABX5×4-4	50.4	40.5	-
ABM/ABX5×5-4	58	48	-
ABM/ABX5×6-4	65.16	55.5	-
ABM/ABX5×7-4	73.2	63	-
ABM/ABX5×8-4	80.8	70	-
ABM/ABX5×9-4	88.4	77.5	-
ABM/ABX5×10-4	96	85	-
ABM/ABX5×11-4	103.6	92.5	-
ABM/ABX5×12-4	111.2	100	64
ABM/ABX5×13-4	118.8	107.5	64
ABM/ABX5×14-4	126.4	115	64
ABM/ABX5×15-4	134	122.5	64
ABM/ABX5×16-4	141.6	130	64



ABM/ABX□× (4-16)-4

Model/Size	H1	H2	L
ABM/ABX10×2-4	28	-	-
ABM/ABX10×3-4	36	-	-
ABM/ABX10×4-4	50.4	40.4	-
ABM/ABX10×5-4	58	48	-
ABM/ABX10×6-4	65.6	55.6	-
ABM/ABX10×7-4	73.2	63.2	-
ABM/ABX10×8-4	80.8	70.8	-
ABM/ABX10×9-4	88.4	78.4	-
ABM/ABX10×10-4	96	86	-
ABM/ABX10×11-4	103.6	93.6	-
ABM/ABX10×12-4	111.2	101.2	64

Size specifications (mm)

name	model
vacuum filter	ZFL06
muffler	ZSA-G3M

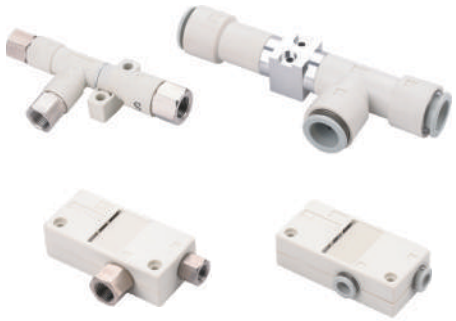
AZH SERIES

Basic vacuum generator

general

characteristic

◇ Basic generator, made of plastic as the main material
◇ High vacuum and high flow types with different calibers
◇There are two types of structures: single unit and box type (with built-in muffler)
◇There are two types of port connection specifications: threaded connection and quick plug connector

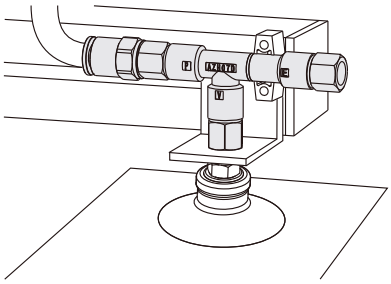


advantage

Small size and light weight
Can meet various working conditions
Built in muffler
Choose any connection method
Simple monomer structure

application

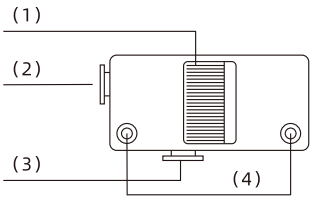
◇ A versatile vacuum generator commonly used in various vacuum systems
◇ Suitable for various handling operations, such as automobiles, metal sheets, woodworking, food, packaging, etc
◇ There are two different forms of high vacuum and high flow, which are used in different situations



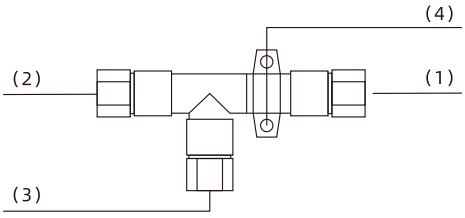
structure

◇ (1) Exhaust port
(2) Gas supply port
(3) Vacuum port
(4) Installation hole

B-盒型



D-单体型



AZH SERIES

Basic vacuum generator

Cobot Care VAC

Model specifications

CCV-AZH0-7-B-S-06-06

① ② ③ ④ ⑤ ⑥

CCV-AZH0-7-D-S-01-01-01

① ② ③ ④ ⑤ ⑥

① Product series	② Nozzle Diameter	③ Appearance specifications	④ Performance specifications	④ Specification of gas supply port	⑤ Vacuum port specifications	⑥ Exhaust port specifications
AZH	05-中0.5mm 07-中0.7mm 10-中1.0mm 13-ϕ1.3mm 15-中1.5mm 18-中1.8mm 20-中2.0mm	B-box type D-haplotype	S-high vacuum type(-88kPa) L-high flow type (-48kPa)	06-ϕ6/08-ϕ8 10-中10/12-中12 Quick plug connector 01-RC1/8/02-RC1/4 03-RC3/8 internal thread	06-中6/10-中10 12-中12/16-中16 Quick plug connector 01-RC1/8 /02-RC1/4 03-RC3/8 /04-RC1/2 internal thread	06-ϕ6/08-中8 10-中10/12-中12 16-中16 Quick plug connector 01-RC1/8 /02-RC1/4 03-RC3/8 / 04-RC1/2 internal thread

Selection Specification - Box Type

Model/Appearance Specification BS		BL	
AZH05BS-06-06	AZH05BS-01-01	AZH05BL-06-06	AZH05BL-01-01
AZH07BS-06-06	AZH07BS-01-01	AZH07BL-06-06	AZH07BL-01-01
AZH10BS-06-06	AZH10BS-01-01	AZH10BL-06-06	AZH10BL-01-01
AZH13BS-08-10	AZH13BS-01-02	AZH13BL-08-10	AZH13BL-01-02

Selection Specification - Single Type

Model/Appearance Specification DS		DL	
AZH05DS-06-06-06	AZH05BS-01-01-01	AZH05DL-06-06-06	AZH05DL-01-01-01
AZH07BS-06-06-06	AZH07BS-01-01-01	AZH07DL-06-06-06	AZH07DL-01-01-01
AZH10BS-06-06-08	AZH10BS-01-01-01	AZH10DL-06-06-08	AZH10DL-01-01-01
AZH13BS-08-10-10	AZH13BS-01-02-02	AZH13DL-08-10-10	AZH13DL-01-02-02
AZH15BS-10-10-12	AZH15BS-02-03-03	AZH15DL-10-12-12	AZH15DL-02-03-03
AZH18BS-12-12-12	AZH13BS-03-03-03	AZH18DL-02-12-12	AZH18DL-03-03-03
AZH20BS-12-16-16	AZH20BS-03-04-04	AZH20DL-12-16-16	AZH20DL-03-04-04

performance parameter

Product Model	Rated gas supply pressure bar	Maximum vacuum degree kPas	Maximum vacuum degree - kPaL	Maximum vacuum flow rate S	Flow rateNL/min.L	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Single weight g	Gas supply portS	vacuum portV	exhaust portE
AZH05B	4.5	88	48	5	9	13.5	68	5 - 50	28	φ6	φ6	-
AZH07B	4.5	88	48	12	22	23.5	68	5 - 50	28	φ6	φ6	-
AZH10B	4.5	88	48	24	34	46.0	72	5 - 50	33	φ6	φ6	-
AZH13B	4.5	88	48	40	75	78.0	72	5 - 50	66	φ8	φ10	-

AZH SERIES

Basic vacuum generator

Cobot Care VAC

performance parameter

Product Model	Rated gas supply pressure bar	Maximum vacuum degree kPas	Maximum vacuum degree - kPaL	Maximum vacuum flow rate S	Flow rate NL/min. L	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Single weight g	Gas supply portS	vacuum portV	exhaust portE
AZH05D	4.5	88	48	5	9	13.5	75	5 - 50	11	φ6	φ6	-
AZH07D	4.5	88	48	12	22	23.5	75	5 - 50	12	φ6	φ6	-
AZH10D	4.5	88	48	24	34	46.0	68	5 - 50	16	φ6	φ8	-
AZH13D	4.5	88	48	40	75	78.0	68	5 - 50	27	φ10	φ10	-
AZH15D	4.5	88	53	60	80	97.0	72	5 - 50	43	φ12	φ12	-
AZH18D	4.5	88	53	70	110	150.0	72	5 - 50	55	φ12	φ12	-
AZH20D	4.5	88	53	85	140	185.0	75	5 - 50	95	φ16	φ16	-

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Maximum vacuum degree -kPa
AZH05S	4.5	13.5	5.0	4.5	4.1	3.8	3.3	2.3	1.6	0.9	0.3	88
AZH07S	4.5	23.5	12.0	11.0	10.0	9.0	8.0	7.0	5.5	2.1	0.8	88
AZH10S	4.5	46.0	24.0	23.0	20.5	17.5	13.0	11.5	9.5	7.0	2.5	88
AZH13S	4.5	78.0	40.0	35.0	32.5	28.5	23.0	19.5	13.0	9.0	4.5	88
AZH15S	4.5	97.0	60.0	52.5	45.5	38.0	28.5	20.5	15.5	11.5	5.0	88
AZH18S	4.5	150.0	70.0	62.0	52.0	45.0	38.0	26.0	22.0	16.5	8.5	88
AZH20S	4.5	185.0	85.0	76.0	67.0	58.0	47.5	38.0	33.5	19.0	12.0	88

Extraction time (s/L) at different vacuum levels (- kPa)

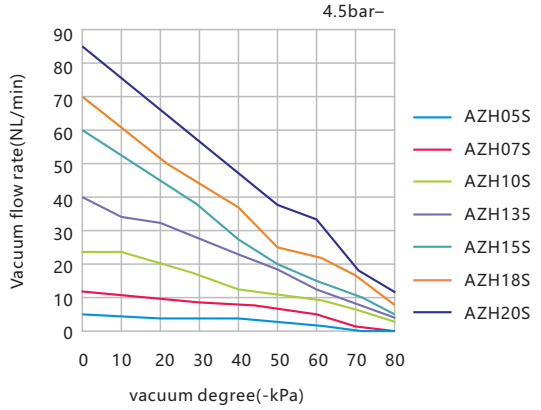
Product Model	air supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	Maximum vacuum degree -kPa
AZH05S	4.5	13.5	0.89	1.70	3.20	5.00	7.80	12.00	19.00	88
AZH07S	4.5	23.5	0.37	1.00	1.90	3.00	5.40	6.70	15.00	88
AZH10S	4.5	46.0	0.25	0.60	1.25	2.00	2.90	4.60	7.30	88
AZH13S	4.5	78.0	0.10	0.27	0.53	1.00	1.75	4.20	7.30	88
AZH15S	4.5	97.0	0.04	0.21	0.35	0.63	1.23	4.10	6.5	88
AZH18S	4.5	150.0	0.02	0.15	0.29	0.46	0.78	1.38	3.50	88
AZH20S	4.5	185.0	0.02	0.12	0.21	0.34	0.55	0.85	1.58	88

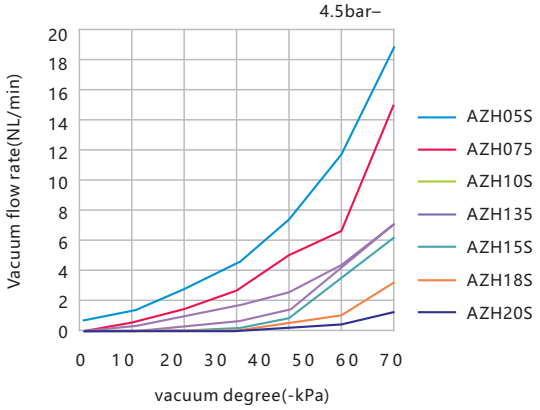
AZH SERIES

Basic vacuum generator

Cobot Care VAC

Extraction time (s/L) at different vacuum levels (- kPa)





Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	air supply pressure bar	Air consumption NL/min	0	10	20	30	40	45	Maximum vacuum degree -kPa
AZH05L	4.5	13.5	9.0	8.0	7.0	6.0	3.0	1.9	48
AZH07L	4.5	23.5	22.0	21.0	20.5	15.5	10.5	6.8	48
AZH10L	4.5	46.0	34.0	32.0	26.0	19.0	12.0	8.0	48
AZH13L	4.5	78.0	75.0	72.0	65.0	43.0	19.0	9.0	48
AZH15L	4.5	97.0	80.0	72.0	60.0	45.0	36.5	16.0	53
AZH18L	4.5	150.0	110.0	105.0	95.0	80.0	55.0	30.0	53
AZH20L	4.5	185.0	140.0	130.0	120.0	100.0	80.0	62.0	53

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

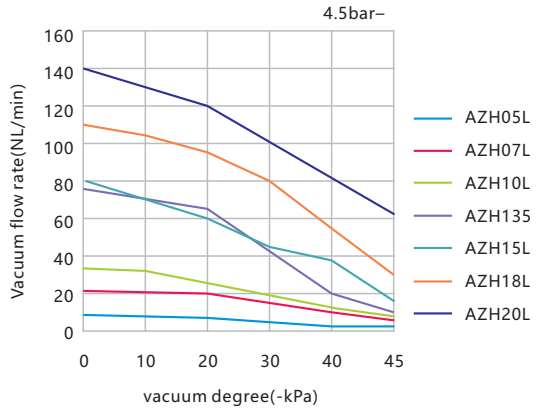
Product model	air supply pressure bar	Air consumption NL/min	10	20	30	40	50	Maximum vacuum degree -kPa
AZH05L	4.5	13.5	0.49	1.50	2.90	5.10	7.20	48
AZH07L	4.5	23.5	0.28	0.75	1.50	2.50	3.50	48
AZH10L	4.5	46.0	0.14	0.40	0.81	1.40	1.80	48
AZH13L	4.5	78.0	0.04	0.12	0.24	0.62	2.40	48
AZH15L	4.5	97.0	0.03	0.15	0.23	0.40	0.92	53
AZH18L	4.5	150.0	0.02	0.10	0.18	0.32	0.67	53
AZH20L	4.5	185.0	0.01	0.08	0.14	0.20	0.30	53

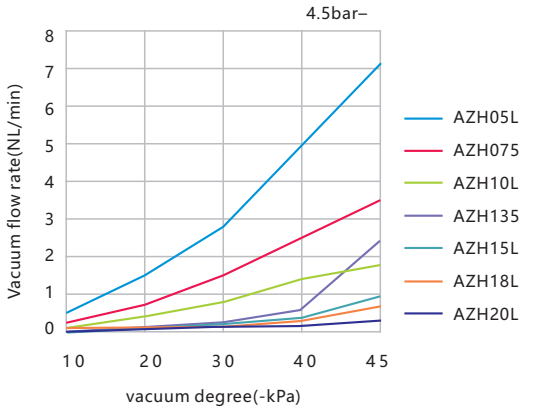
AZH SERIES

Basic vacuum generator

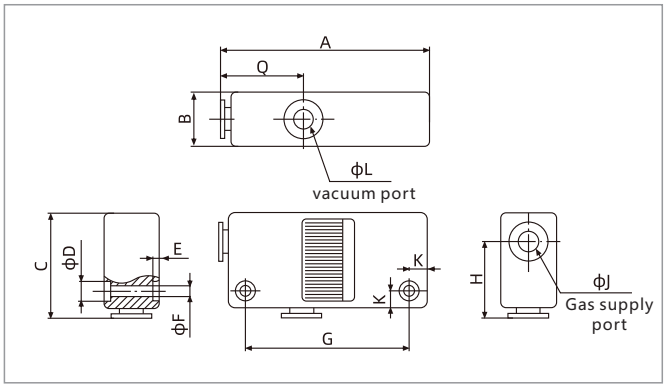
Cobot Care VAC

Extraction time (L/L) at different vacuum levels (- kPa)

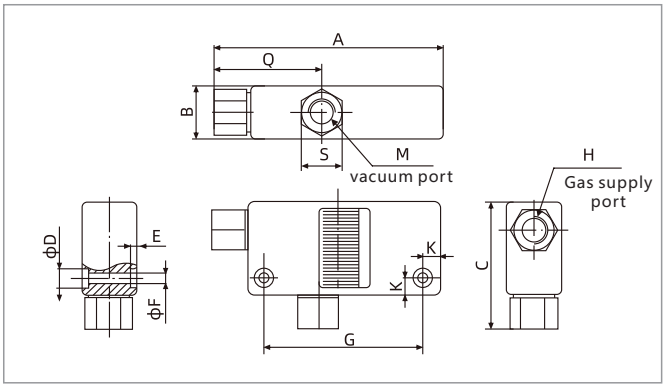




Specification (mm)



AZH-B box type quick connector



AZH-B box type internal thread connection

Model/Size	A	B	C	D	E	F	G	H	Q	L	K	J
AZH05B-06-06	60	16	31	5.8	2	3.2	47	22	24	6	5	6
AZH07B-06-06	60	16	31	5.8	2	3.2	47	22	24	6	5	6
AZH10B-06-06	63	18	32	5.8	2	3.2	50	23	26	6	5	6
AZH13B-08-10	78	23	38.5	7.5	3	4.2	61	27.5	28	10	7	8

AZH-B box type quick connector

Model/Size	A	B	C	D	E	F	G	H	Q	L	K	S
AZH05B-01-01	68	16	39	5.8	2	3.2	47	RC1/8	37.5	RC1/8	5	12
AZH07B-01-01	68	16	39	5.8	2	3.2	47	RC1/8	37.5	RC1/8	5	12
AZH10B-01-01	71	18	40	5.8	2	3.2	50	RC1/8	37.5	RC1/8	5	12
AZH13B-01-02	86.5	23	50	7.5	3	4.2	61	RC1/8	37.5	RC1/4	7	14

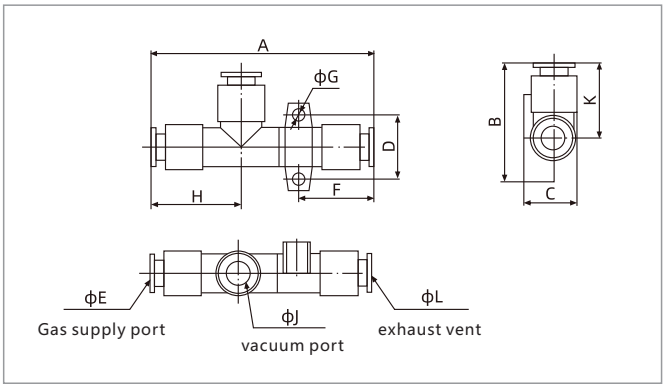
AZH-B box type internal thread connection

AZH SERIES

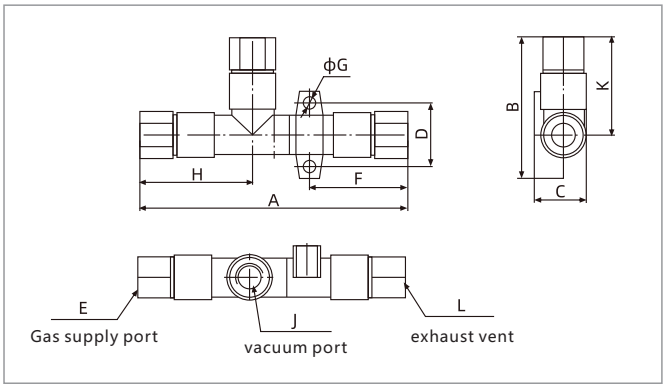
Basic vacuum generator

Cobot Care VAC

Specification (mm)



AZH-D single type quick connector



AZH-D monolithic internal thread connection

Model/Size	A	B	C	D	E	F	G	H	L	K	J
AZH05DS-06-06-06	58.5	34.0	14.2	17.0	6	21.0	3.2	24.0	6	22.0	6
AZH07DS-06-06-06	61.0	34.0	14.2	17.0	6	22.0	3.2	24.0	6	22.0	6
AZH10DS-06-06-08	66.0	37.0	17.2	20.0	6	24.5	4.2	26.0	8	23.0	6
AZH10DL-08-06-08	70.0	37.0	17.2	20.0	6	24.5	4.2	26.0	8	23.0	6
AZH13DS-08-10-10	74.0	42.5	20.0	22.0	8	27.0	4.2	28.0	10	27.5	10
AZH13DL-08-10-10	79.5	42.5	20.0	22.0	8	27.0	4.2	28.0	10	27.5	10
AZH15DS-10-12-12	93.3	47.0	22.5	27.0	10	32.8	4.2	31.5	12	29.5	12
AZH18DS-12-12-12	114.0	41.0	21.0	10.0	12	50.0	3.5	35.5	12	30.5	12
AZH20DS-12-16-16	124.6	46.0	27.0	12.0	12	54.3	3.5	38.5	16	32.7	16

AZH-D single type quick connector

Model/Size	A	B	C	D	E	F	G	H	L	K	J
AZH05DS-01-01-01	73.5	41.5	14.2	17.0	Rc1/8	28.5	3.2	31.5	Rc1/8	29.5	Rc1/8
AZH07DS-01-01-01	76.0	41.5	14.2	17.0	Rc1/8	29.5	3.2	31.5	Rc1/8	29.5	Rc1/8
AZH10DS-01-01-01	82.0	44.5	17.2	20.0	Rc1/8	33.0	4.2	33.5	Rc1/8	30.5	Rc1/8
AZH10DL-01-01-01	86.0	44.5	17.2	20.0	Rc1/8	33.0	4.2	33.5	Rc1/8	30.5	Rc1/8
AZH13DS-01-02-02	94.5	54.0	20.0	22.0	Rc1/8	38.5	4.2	36.5	Rc1/4	39.0	Rc1/4
AZH13DL-01-02-02	99.5	54.0	20.0	22.0	Rc1/8	38.5	4.2	36.5	Rc1/4	39.0	Rc1/4
AZH15DS-02-03-03	116.5	58.5	22.5	27.0	Rc1/4	44.5	4.2	43.0	Rc3/8	41.0	Rc3/8
AZH18DS-03-03-03	133.0	52.5	21.0	10.0	Rc3/8	57.5	3.5	47.0	Rc3/8	42.0	Rc3/8
AZH20DS-03-04-04	151.0	61.0	27.0	12.0	Rc3/8	69.3	3.5	50.0	Rc1/2	47.7	Rc1/2

AZH-D monolithic internal thread connection

AZU SERIES

Basic vacuum generator

Cobot Care VAC

3C electronics

feature

- Axial connection method
- Slender plastic shell
- Two specifications: vacuum type and flow type



advantage

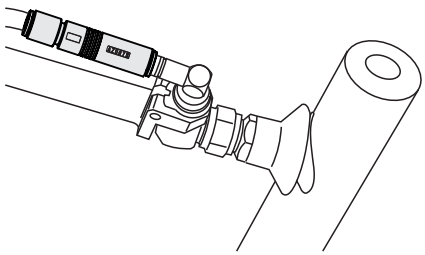
Directly installed on the hose

Suitable for installation in narrow spaces

Easy to connect, no need for additional installation accessories

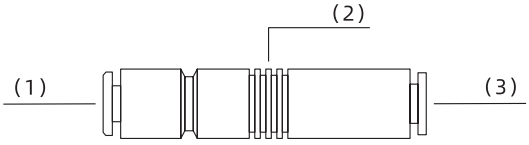
application

- Linear vacuum generator can be directly connected to PU hose
- Suitable for handling systems with limited spatial location
- Suitable for handling electronic componentsstructure



structure

- (1) Gas supply port
  (2) Exhaust port
  (3) Vacuum port



AZHSERIES

Basic vacuum generator

Cobot Care VAC

Model

CCV-AZU-05-S

① ② ③

① Product series	② Nozzle diameter	③ Performance specifications
AZU	05-φ0.5mm	S-high vacuum type (-85kPa)
	07-φ0.7mm	L-high flow type (-48kPa)

Selection specifications

Model/nozzle diameter	05	07
AZU05S	AZU05S	AZU07S
AZU07L	AZU05L	AZU07L

performance parameters

Product Model	Nozzle diameter Mm	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Noise dB (A)	Working temperature ℃	Single weight g	Recommended hose diameter mm	
									Gas supply port P	Vacuum port V
AZU05S	0.5	4.5	85	7	9	68	5~60	6.5	ϕ6	ϕ6
AZU07S	0.7	4.5	85	12	19	68	5~60	7.0	ϕ6	ϕ6
AZU05L	0.5	4.5	48	12	9	70	5~60	6.5	ϕ6	ϕ6
AZU07L	0.7	4.5	48	21	19	70	5~60	7.0	ϕ6	ϕ6

◇ Note: The maximum operating pressure is 7.0 bar, and the standard operating pressure is 4.5 bar

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	48	50	60	70	80	Maximum vacuum degree
AZU05S	4.5	9	7.0	6.0	5.0	4.0	3.5	-	2.5	1.8	1.0	0.4	85
AZU07S	4.5	19	12.0	9.5	8.5	7.2	6.0	-	5.5	4.0	2.0	0.4	85
AZU05L	4.5	9	12.0	10.0	8.0	5.5	3.0	1.0	-	-	-	-	48
AZU07L	4.5	19	21.0	18.5	15.5	11.5	8.0	1.5	-	-	-	-	48

Extraction time (s/L) at different vacuum levels (- kPa)

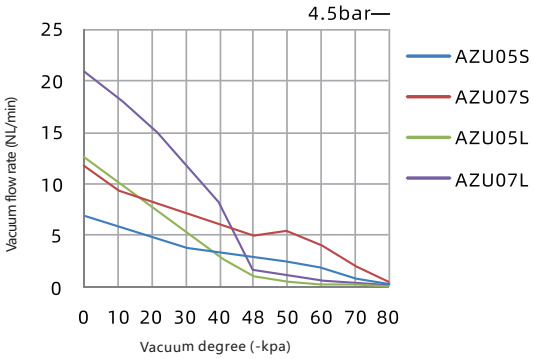
Product Model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	45	50	60	Maximum vacuum degree
AZU05S	4.5	9	0.90	2.6	5.2	10.0	-	22.5	-	85
AZU07S	4.5	19	0.53	1.4	2.7	5.0	-	8.7	18	85
AZU05L	4.5	9	0.60	1.5	2.9	8.0	14.0	-	-	48
AZU07L	4.5	19	0.34	0.9	2.0	7.5	13.0	-	-	48

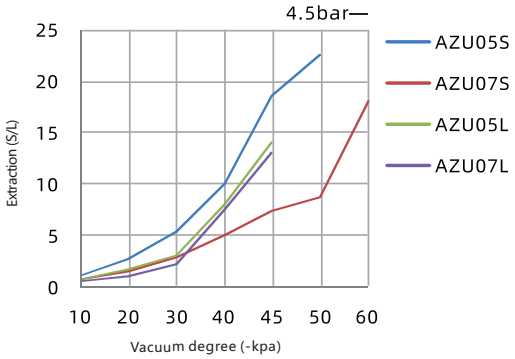
AZU SERIES

Basic vacuum generator

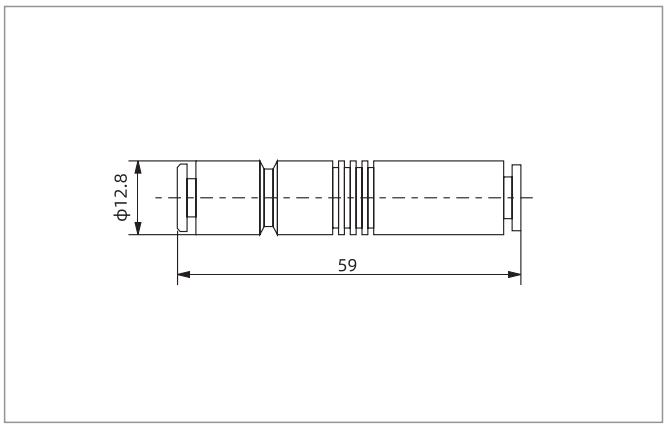
Cobot Care VAC

Model

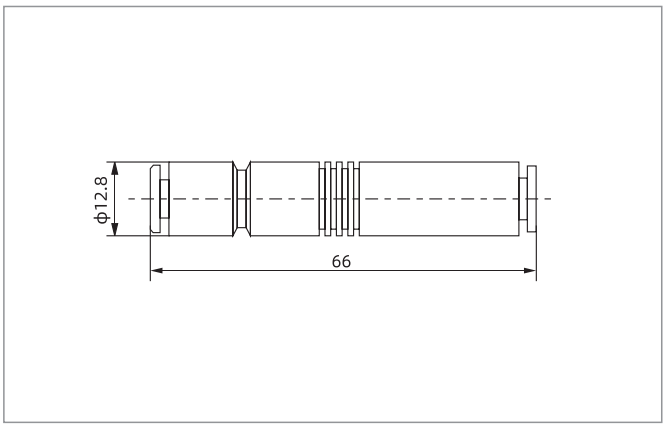




Size specifications (mm)



AZU05



AZU07

AZL SERIES

multi-stage vacuum generator

Cobot Care VAC

metal platepackaging Injection molding

feature

- Multi level structural design
- Can be equipped with solenoid valve control and pressure switch
- Built in vacuum filter and muffler
- Equipped with vertical and lateral mounting holes



advantage

Save gas consumption

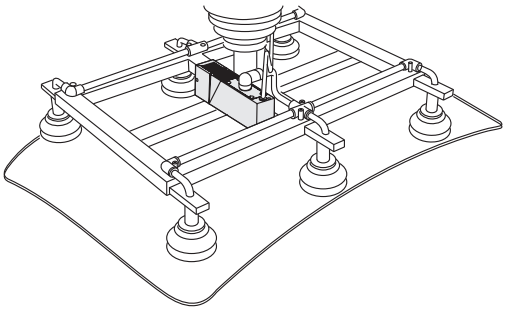
Save space and reduce costs

Reduce product noise

Free choice of installation method

application

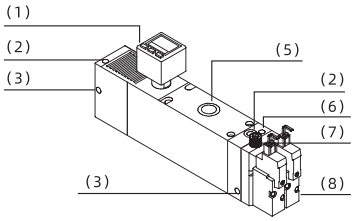
- Multi level vacuum generator suitable for handling cardboard boxes, metal sheet metal, and plastic products
- Used for working conditions that require a large vacuum flow rate, fast pumping speed, and low gas consumption



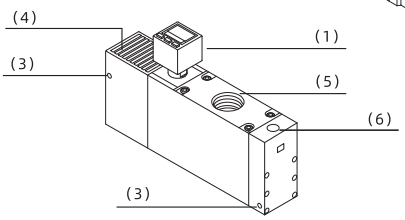
structure

- ◇ (1) Pressure switch
- ◇ (2) Vertical installation hole
- ◇ (3) Lateral installation hole
- ◇ (4) exhaust vent
- ◇ (5) Vacuum port
- ◇ (6) Gas supply port
- ◇ (7) Vacuum relief valve
- ◇ (8) Vacuum supply valve

AZL112



AZL212



AZL SERIES

multi-stage vacuum generator

Cobot Care VAC

Model

CCV-AZL-112-A-DCN

① ② ③ ④

① Product series	② Nozzle diameter	③ Control valve specifications	④ Specification of digital pressure switch for vacuum
AZL	112 - 1×ϕ1.2mm 212 - 2×ϕ1.2mm	Blank - No vacuum supply valve, vacuum release valve A - Equipped with vacuum supply valve and vacuum release valve	Blank - default specification, no external vacuum port NP - Reserved external vacuum port RC1/8 internal taper thread,No vacuum switch DCN connected pressure switch (-100.0~100.0kPa)2NPN+V(1-5V) DCP connected pressure switch (-100.0~100.0kPa) 2PNP+V(1-5V)

Model and Specifications - AZL112 Series

Model/Control Valve Specification Blank - without control valve	A - Equipped with vacuum supply valve and vacuum release valve
AZL112	AZL112-A
AZL112-NP	AZL112-A-NP
AZL112-DCN	AZL112-A-DCN
AZL112-DCP	AZL112-A-DCP

Model and Specifications - AZL212 Series

Model/Control Valve Specification Blank - without control valve	A - Equipped with vacuum supply valve and vacuum release valve
AZL212	-
AZL212-NP	-
AZL212-DCN	-
AZL212-DCP	-

performance parameters

Product Model	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption NL/min	Noise dB (A)	Operating Temperature	Recommended hose diameter mm	
							Gas supply port P	Vacuum port V
AZL112	4.0	84	100	63	70	5~50	ϕ6	ϕ12
AZL212	4.0	84	200	126	77	5~50	ϕ8	ϕ12

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Maximum vacuum degree
AZL112	4.0	63	100.0	65.0	26.0	20.0	18.5	13.0	8.0	5.0	2.8	84
AZL212	4.0	126	200.0	150.0	52.0	40.0	30.0	25.0	15.0	8.0	3.0	84

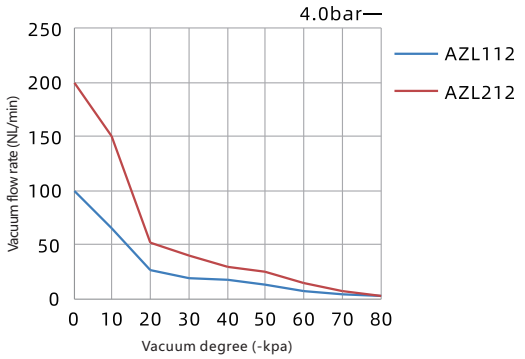
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

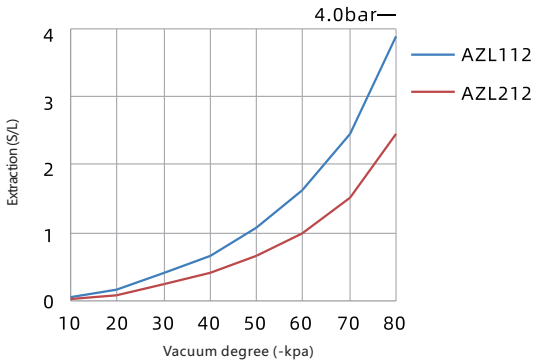
Product Model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Maximum vacuum degree
AZL112	4.0	63	0.05	0.17	0.40	0.67	1.07	1.63	2.46	3.9	84
AZL212	4.0	126	0.02	0.08	0.25	0.42	0.65	0.98	1.52	2.46	84

AZL SERIES

multi-stage vacuum generator

Cobot Care VAC



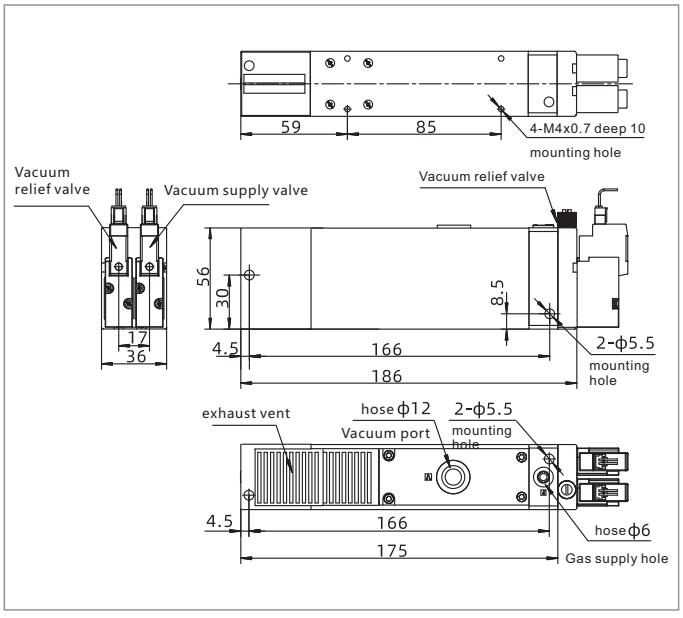


Performance Parameters - Control Valve

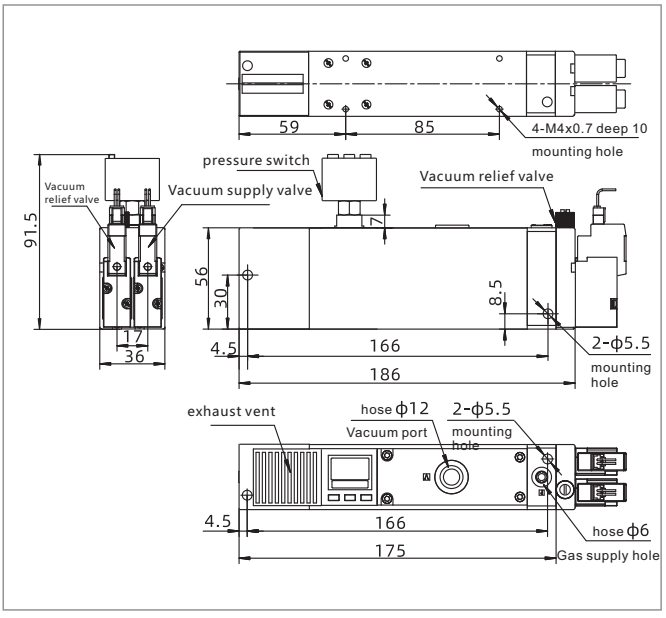
function	Internal pilot NC (normally closed)
Use pressure	2.0~5.0bar
rangerated pressure	24V
Environment and fluid temperature	5~50℃
Response time (0.5MPa)	Below 25ms
Maximum operating frequency	5HZ
manual operation	Push and rotate locking screwdriver operation

Pilot exhaust mode	Individual exhaust type
Give oil	centralized exhaust type
Installation posture	No need
Resistance to impact/vibration	freedom
Protect the structure	150/30m/s^2
Wire lead out method	dustproof
	Socket type, wire length 0.3m

Size specifications (mm)



AZL112-A



AZL112-A-DCN AZL112-A-DCP

JC SERIES

Integrated vacuum generator

Cobot Care VAC

3C electronics | packaging | injection molding

feature

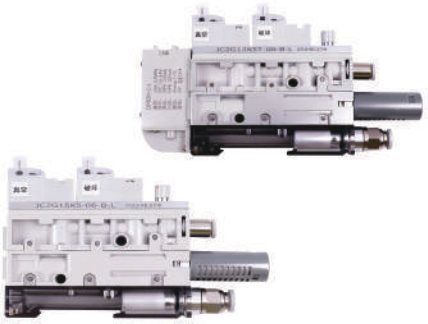
◇ Multi stage nozzle design

Gas supply valve NO specification

Miniaturization, lightweight volume 85cm

Transparent filter cover

Single L-shaped bracket, integrated DIN rail installation, centralized gas supply



advantage

Save gas consumption

Save space and reduce costs

Reduce product noise

Free choice of installation method

application

◇ Integrated vacuum generator for handling airtight and slightly breathable workpieces

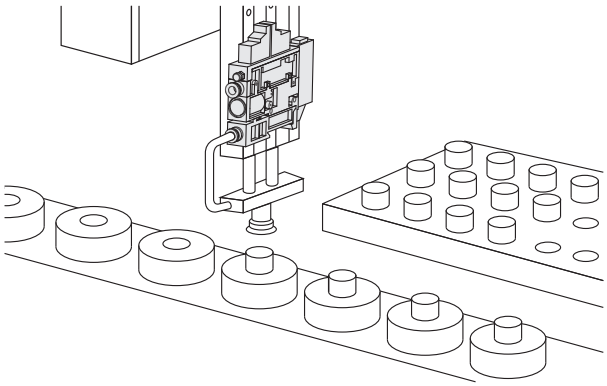
◇ Vacuum generation and monitoring in automation systems

◇ Used for robot handling applications and linear axes

◇ Short cycle time picking and placing applications

◇ Used for systems that require high dynamic gripping of workpieces and have limited space

◇ Usually used for fully automated small parts handling



structure

◇ (1) Vacuum supply valve

(2) Vacuum release valve

(3) Vacuum pressure switch

(4) Vacuum release regulating valve

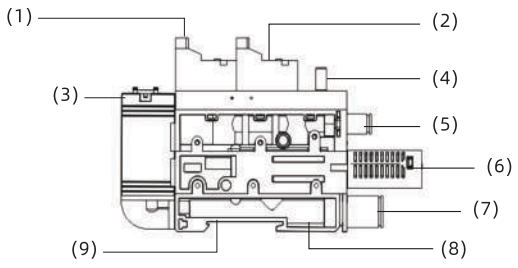
(5) Positive pressure gas supply port

(6) Silencer

(7) Vacuum port

(8) Vacuum filter

(9) DIN rail installation



JCSERIES

Integrated vacuum generator

Cobot Care VAC

Model

Single unit vacuum generator+with valve+with vacuum pressure gauge

CCV-JC-2A-10-K-5-N-06-B-L-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Product Series	②Main exhaust form	③ Nozzle diameter	④ Combination of supply valve and destructive valve	⑤ Rated voltage (supply valve, breaker valve)
JC	A unit - built-in muffler exhaust	05-φ0.5	K-supply valve N.C breaker	5-DC24V
	B Unit - Ventilation and Exhaust	07-φ0.7	valve JN. C	6-DC12V
	G-Unit - External Muffler Exhaust	10-φ1.0	J-Supply valve N.C.	
		12-φ1.2		
		15-φ1.5		

⑥ Vacuum pressure switch, pressure sensor (Dp92)	⑦ Vacuum (V) port	⑧ Optional intake connector
N-pressure sensor-100~1001 NPN output valve meter collinear control	04-φ4	A-φ4
P-pressure sensor-100~1001 PNP output valve gauge collinear control	06-φ6	B-φ6
T-pressure sensor-100~100 2-channel NPN output+analog output 1-5V	08-φ8	C-φ8
E-pressure sensor-100~100 2-channel PNP output+analog output 1-5V		
K-pressure sensor-100~100 energy-saving and pressure maintaining model		
Blank - No pressure gauge		

⑨ Optional accessories	⑩ Quantity of Selected Sets
L-Single unit installation bracket (bolts, nuts) included in the package W-with check valve (please install a rupture valve or atmospheric inlet valve in the middle of the vacuum piping)	Container quantity -2 units, 3 units, 4 units, 5 units, 6 units, 7 units, 8 units, 9 units, and 10 units

Technical Specification Sheet

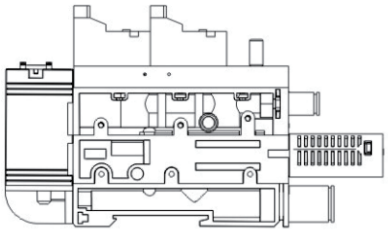
series	nozzle diameter L/min	Vacuum flow L/min	Reaching vacuum levelkpa	air consumption L/min	Operating temperature	Using fluids	Use pressure range Mpa
JC2-05	0.5	6	-88	12	0-60°C (Do not freeze)	Oil free compressed air	0. 5Mpa
JC2-07	0.7	29	-88	24			
JC2-10	1.0	44	-88	40			
JC2-12	1.2	61	-88	68			
JC2-15	1.5	67	-88	90			

Product installation method

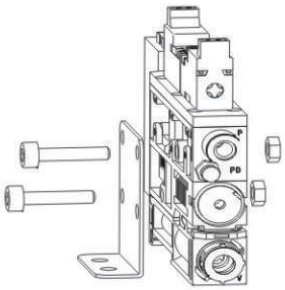
Products with individual specifications can be installed on the wall with a diameter of 2 * 4.5 holes on the side of the main body, or on DIN rails.

- When fixed on the DIN rail, please press the release lever to unlock the filter housing assembly
- When installing the main body on the DIN rail, clamp it onto the DIN rail in the direction of (q)
- Install the main body on the DIN rail in the direction of (w)
- Push the filter housing component in the direction of (e) until it locks.

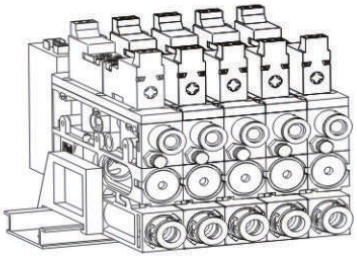
Please use limit mounting components to clamp the main body onto the DIN rail from both sides.



Installation of individual bracket

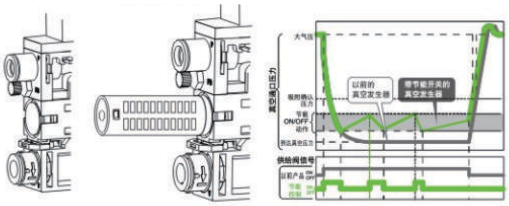


Multiple DIN rail insta



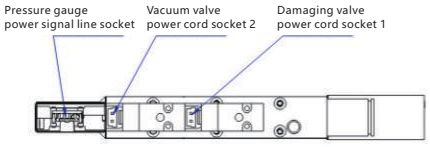
Exhaust (EXH) port

External silencing exhaust



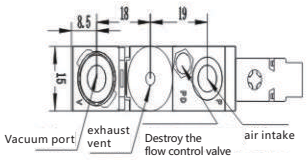
External high muffler with pressure switch (energy-saving function)

Overall dimensions

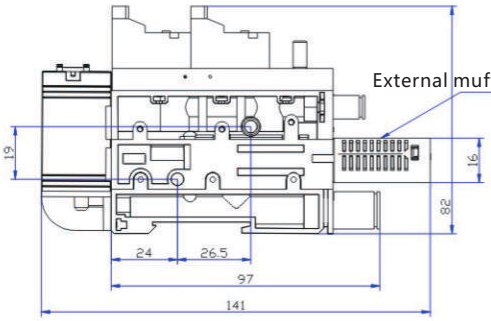


P port type		
metric dimensions	06	ϕ6
	08	ϕ8

P port type		
metric dimensions	06	ϕ6

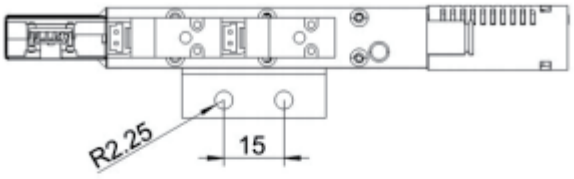




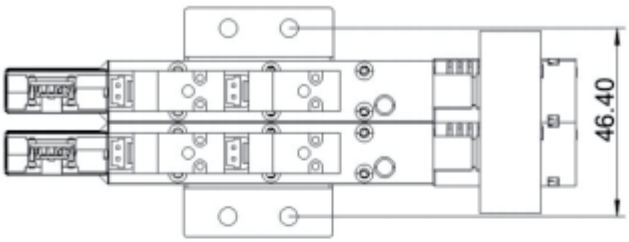


1 When using a muffler for exhaust, exhaust from the grooves on both sides (please make sure to open one side).
2 In the case of two-way exhaust, exhaust through the quick change connector.
3 The exhaust of the pilot pressure and vacuum generator is centralized exhaust.
4 Please refer to the "External Dimensions" for the dimensions during the installation of the 4 brackets
5 nozzle diameters of 12 and 15 with exhaust ports.
6 Please refer to the instruction manual for the model and maintenance of the shell components of the high noise reduction muffler,

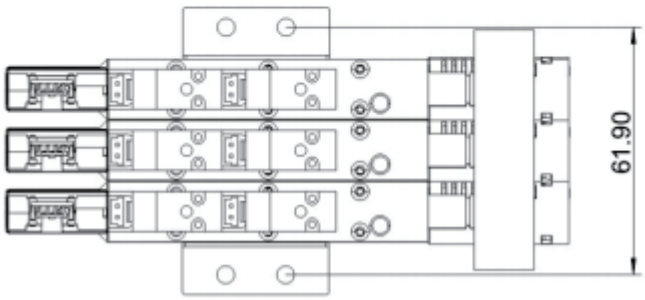
Overall dimensions



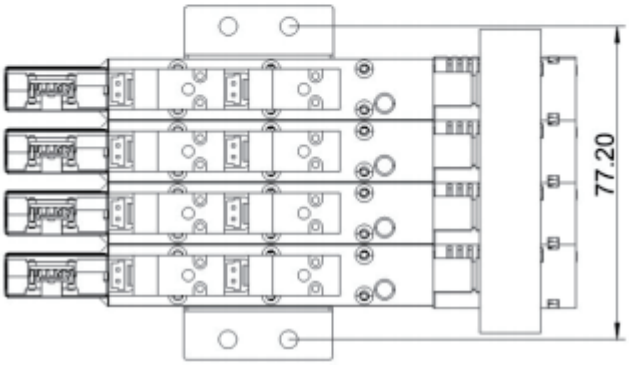
(1 person)



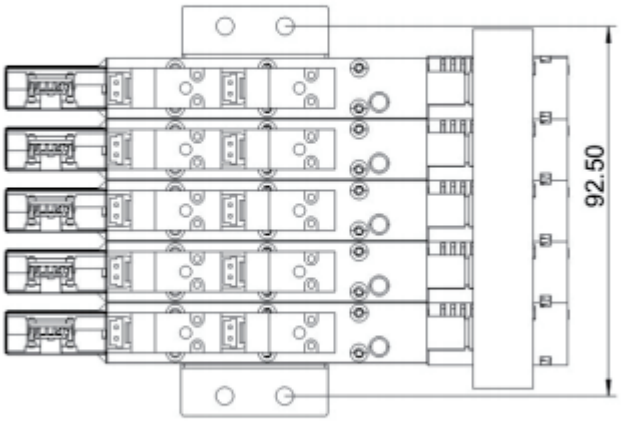
(2 person)



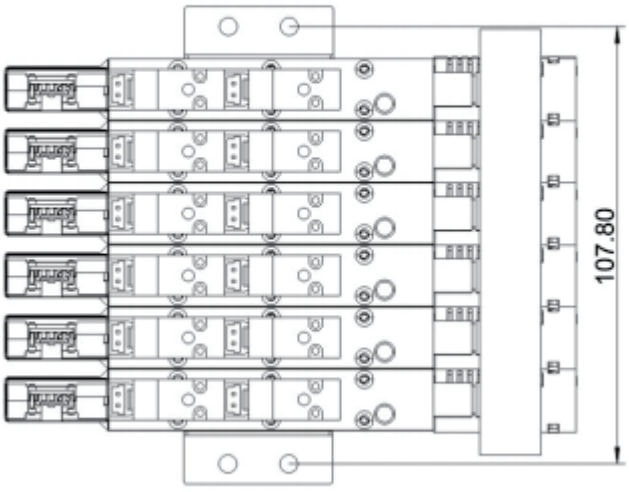
(3 person)



(4 person)

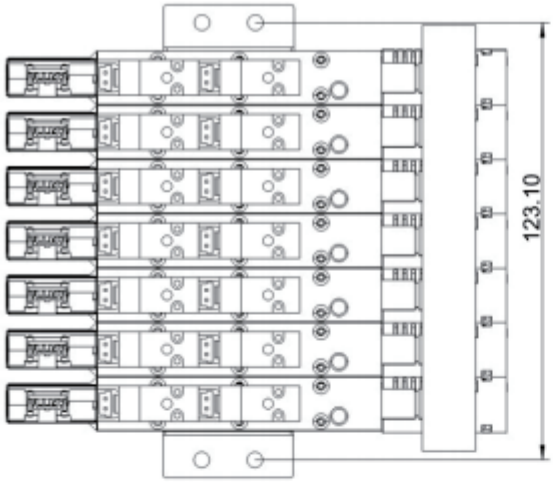


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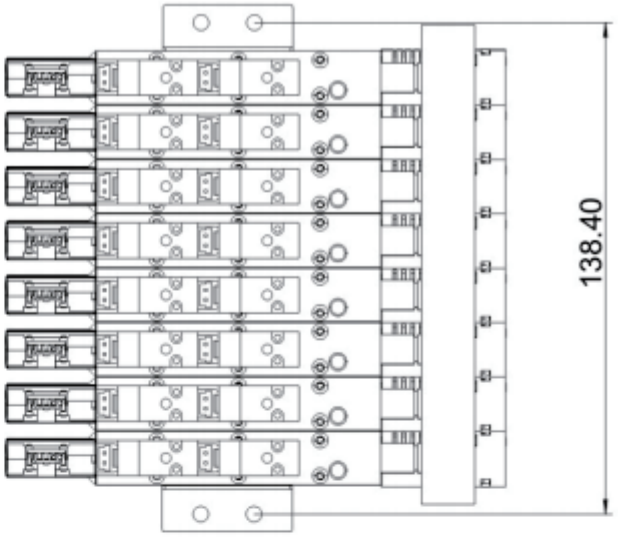


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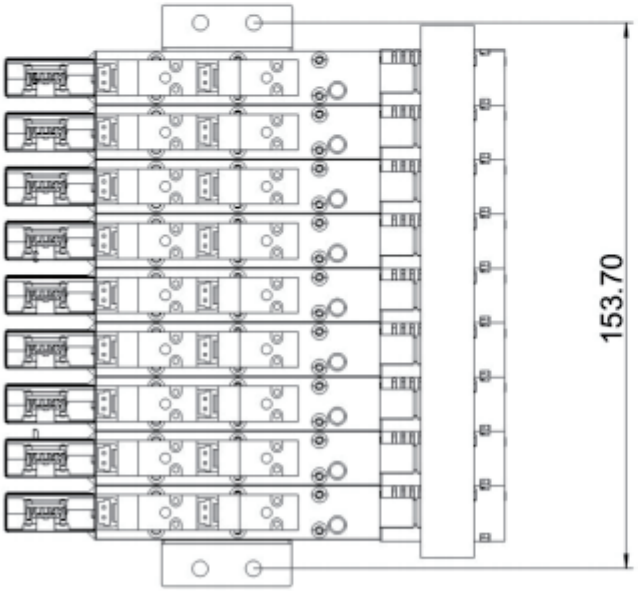
Overall dimensions



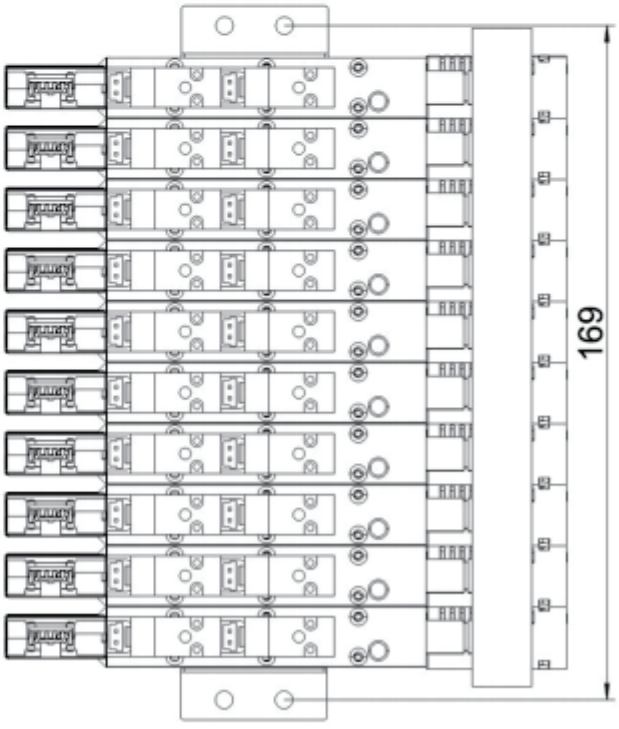
(7 person)



(8 person)



(9 person)



(10 person)

CVSERIES

Basic vacuum generator

Cobot Care VAC

biopharmaceutical 3C electronics packaging

feature

- The CV vacuum generator series has a small volume, simple design structure, and a wide range of configurations. The product has fixed holes that can be matched with mufflers to produce low noise and more reliable performance. It is easy and simple to install
- The CV vacuum generator series can be equipped with a vacuum pressure switch for greater energy efficiency, fast vacuum reaction speed, high vacuum degree, large vacuum flow rate, and stable performance.

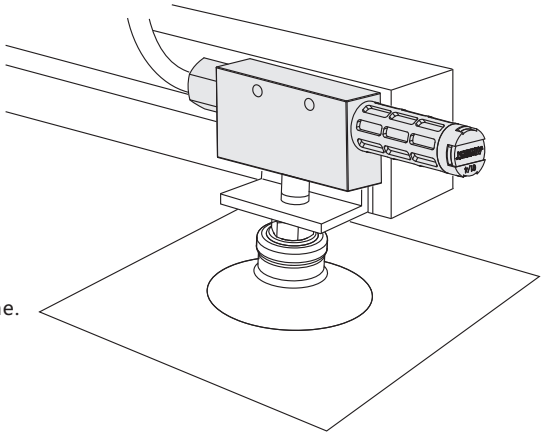


advantage

compact structure | Fast response | Easy maintenance | highly integrated | Multiple specifications available

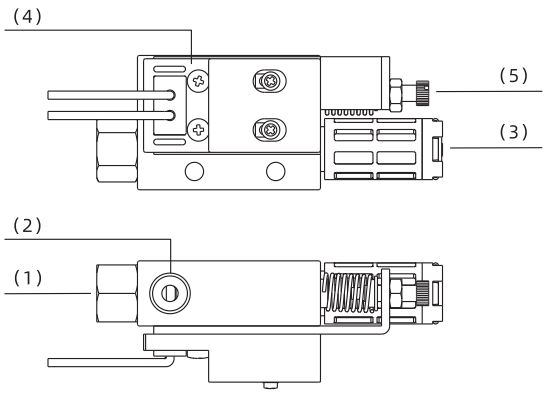
application

- **Electronic manufacturing industry:** handling and installing chips, PCB boards, display screens, mobile phone casings, etc.
- **Packaging and Logistics:** Grab bagged, boxed, and bottled items for packing and palletizing.
- **Automotive components:** Install interior parts, dashboard, small glass, etc.
- **Medical equipment:** Capture medication bottles, reagent tubes, medical consumables, etc. in a clean environment.
- **Plastic processing:** Remove plastic parts from the injection molding machine.
- **Printing and paper processing:** separation, transportation, and positioning of single sheets or films.



structure

- (1) Gas supply port
  (2) Vacuum port
  (3) Silencer
  (4) Pressure switch
  (5) Adjust the nut



CVSERIES

Basic vacuum generator

Cobot Care VAC

Model representation method

CCV-CV-10-H-S-CK

① ② ③ ④ ⑤

① Series code	② Nozzle diameter	③ Reaching vacuum level	④Gas supply pressure	⑤ Omron vacuum detection switch
CV	05-φ0.5 10-φ1.0 15-φ1.5 20-φ2.0 25-φ2.5	H-90kpa L -50kpa	S-0.5mpa	CK with adjustable micro switch

Vacuum detection technology parameters

project	Ck type setting value adjustment parameters
set the scope	-20kpa ~-70kpa
Default value during shipment	-60kpa
Action accuracy	±5.3
Corresponding difference	4 ~ 15kpa
Switching voltage (rated current)	AC110V:5A,AC220V:3A,DC24V:0.2A
Temperature range for use	(0-60C)Cannot be used in frozen conditions

Technical Specification Sheet

series	nozzle diametermm	Vacuum flow	Reaching vacuum levelkpa	air consumption L/min	Operating temperature	Using fluids	Use pressure rangeMpa
CV-05HS	0.5	7	-85	13	0-60°C (Don't freeze)	Oil free compressed air	0.5Mpa
CV-05LS		10	-58				
CV-10HS	1.0	27	-91	44			
CV-10LS		36	-58				
CV-15HS	1.5	63	-91	100			
CV-15LS		95	-58				
CV-20HS	2.0	110	-91	180			
CV-20LS		170	-58				
CV-25HS	2.5	160	-88	265			
CV-25LS		250	-58				

CVSERIES

Basic vacuum generator

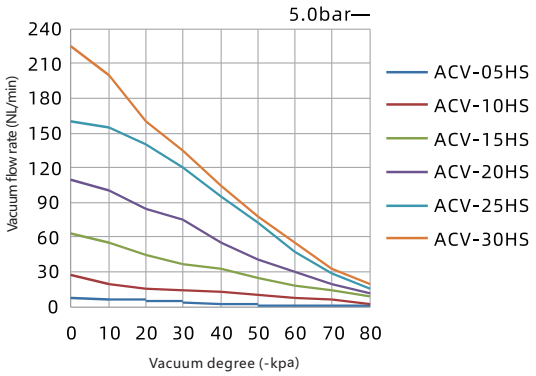
Cobot Care VAC

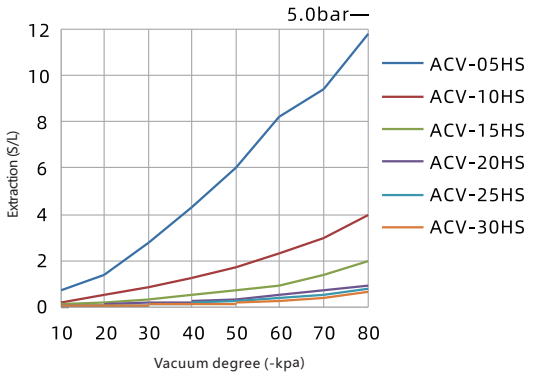
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
CV-05HS	5.0	13	7.0	5.5	4.2	3.0	1.5	0.8	0.5	0.2	0.05	87
CV-10HS	5.0	44	27.0	19.0	16.0	14.5	13.0	10.5	8.0	6.5	2.50	90
CV-15HS	5.0	100	63.0	55.0	44.0	37.0	32.5	25.0	18.0	14.0	9.00	90
CV-20HS	5.0	180	110.0	100.0	85.0	75.0	55.0	40.5	30.0	20.0	12.00	90
CV-25HS	5.0	265	160.0	155.0	140.0	120.0	95.0	72.0	47.0	28.0	15.00	90
CV-30HS	5.0	385	225.0	200.0	160.0	135.0	105.0	78.0	55.0	33.0	19.00	90

Extraction time (s/L) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
CV-05HS	5.0	13	0.68	1.38	2.77	4.32	6.02	8.25	9.44	11.82	87
CV-10HS	5.0	44	0.20	0.49	0.82	1.25	1.74	2.32	2.95	4.00	90
CV-15HS	5.0	100	0.08	0.19	0.32	0.48	0.69	0.92	1.38	1.95	90
CV-20HS	5.0	180	0.04	0.10	0.17	0.23	0.34	0.49	0.71	0.92	90
CV-25HS	5.0	265	0.03	0.07	0.11	0.17	0.24	0.35	0.49	0.75	90
CV-30HS	5.0	385	0.03	0.06	0.09	0.14	0.20	0.27	0.41	0.63	90





CVSERIES

Basic vacuum generator

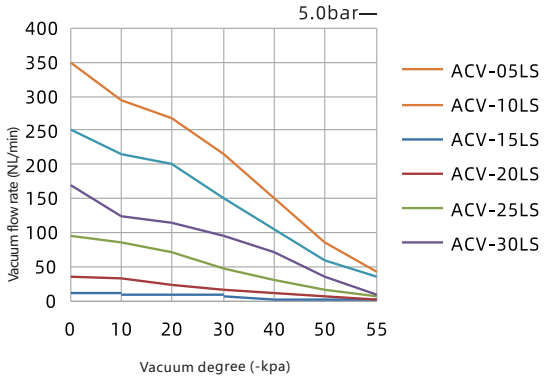
Cobot Care VAC

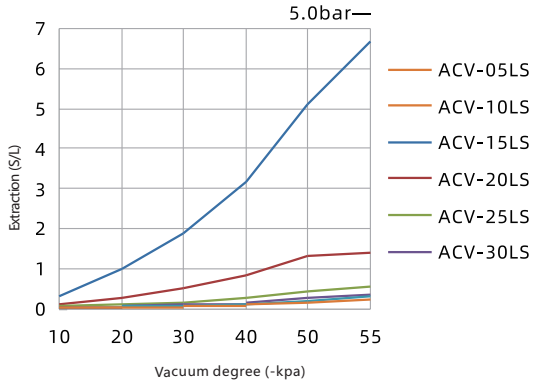
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	55	Maximum vacuum degree - kPa
ACV-05LS	5.0	13	10.0	9.0	8.0	6.5	2.5	1.8	0.7	57
ACV-10LS	5.0	44	36.0	31.5	23.5	16.5	10.0	6.5	2.5	57
ACV-15LS	5.0	100	95.0	85.0	70.0	47.5	30.5	15.5	5.5	57
ACV-20LS	5.0	180	170.0	125.0	115.0	95.0	70.0	35.5	7.5	57
ACV-25LS	5.0	265	250.0	215.0	200.0	150.0	105.0	60.0	36.0	57
ACV-30LS	5.0	385	350.0	295.0	267.0	215.0	150.0	85.0	41.0	57

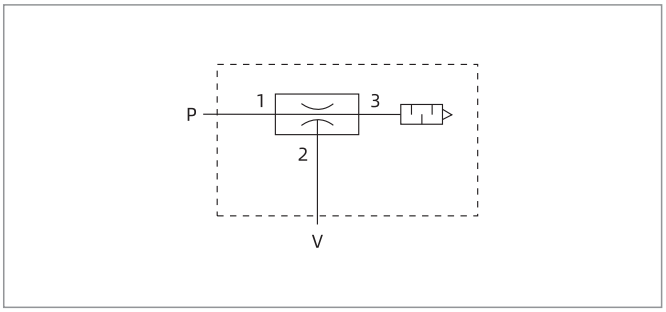
Extraction time (s/L) at different vacuum levels (- kPa)

Product Model	Gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	55	Maximum vacuum degree - kPa
ACV-05LS	5.0	13	0.31	0.98	1.89	3.17	5.12	6.70	57
ACV-10LS	5.0	44	0.12	0.28	0.51	0.83	1.32	1.40	57
ACV-15LS	5.0	100	0.45	0.10	0.15	0.26	0.42	0.56	57
ACV-20LS	5.0	180	0.03	0.06	0.11	0.14	0.25	0.34	57
ACV-25LS	5.0	265	0.02	0.05	0.08	0.12	0.18	0.30	57
ACV-30LS	5.0	385	0.02	0.04	0.06	0.09	0.13	0.22	57

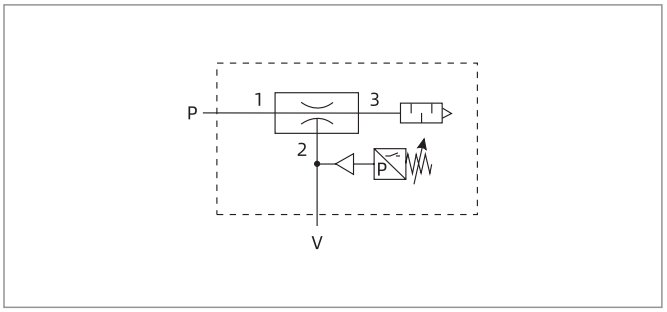




Principle of gas path



CV standard type



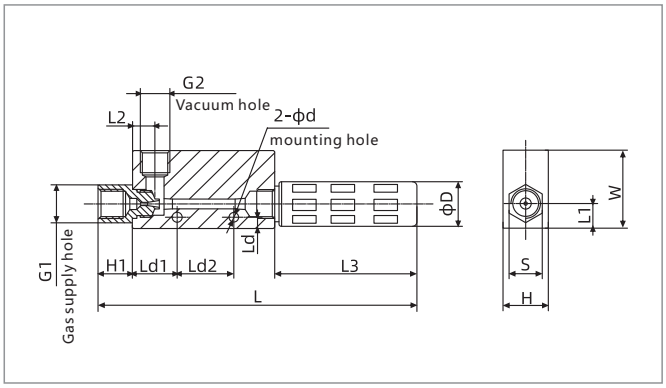
CV-CK with pressure switch

CVSERIES

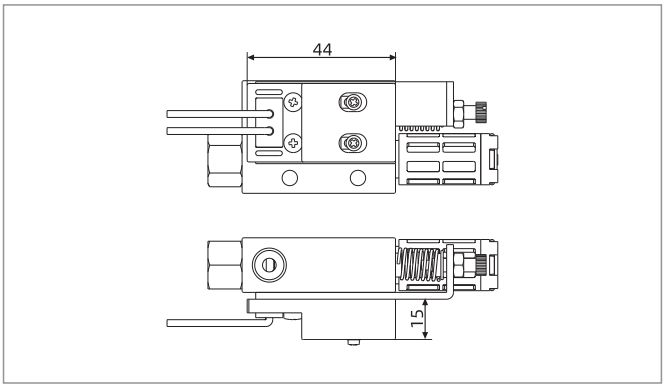
Basic vacuum generator

Cobot Care VAC

Size specifications (MM)



CV standard type



CV-CK with adjustable pressure switch

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	silencer
CV-05	45	33	16	10	8	20	14	4.5	φ4.5	PT1/8	35	PT1/8	35	15	14	90	PT1/8
CV-10	45	33	16	10	8	2o	14	4.5	φ4.5	PT1/8	35	PT1/8	35	15	14	90	PT1/8
CV-15	63	35	20	11	10	25	20	5	φ4.5	PT1/4	44	PT1/4	44	19	17	122	PT1/4
CV-20	85	40	27	15	13	32	28	7	φ6	PT3/8	71	PT1/4	71	22	22	163	PT3/8
CV-25	100	60	40	20	16	50	20	5.5	φ6	PT1/2	95	PT3/8	95	40	27	213	PT3/4
CV-30	118	60	40	20	20	50	33	5.5	φ6	PT3/4	95	PT1/2	95	40	30	233	PT3/4

VYSERIES

Equipped with a destructive vacuum generator

Cobot Care VAC

3C electronics

injection molding

feature

- Small size and light weight. Used in workplaces where installation location and weight are limited
- Two specifications: high vacuum type and high flow type
- Comes with vacuum breaking function, no need for separate external control, can quickly release the product
- Vacuum filter optional
- Installation bracket is optional



advantage

Efficient and Stable

High pressure resistance without air leakage

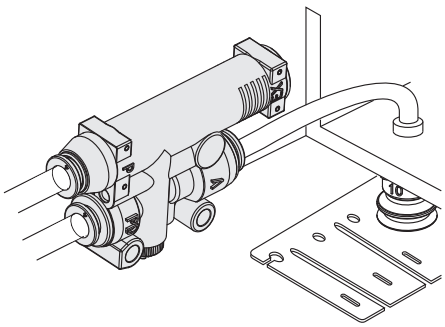
compact size

highly integrated

Multiple specifications available

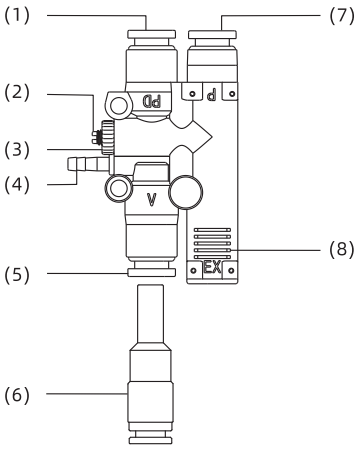
application

- **Electronic manufacturing industry**: handling and installing chips, PCB boards, display screens, mobile phone casings, etc.
- **Packaging and Logistics**: Grab bagged, boxed, and bottled items for packing and palletizing.
- **Automotive components**: Install interior parts, dashboard, small glass, etc.
- **Medical equipment**: Capture medication bottles, reagent tubes, medical consumables, etc. in a clean environment.
- **Plastic processing**: Remove plastic parts from the injection molding machine.



structure

- ◇ (1) Release port
- ◇ (2) Vacuum release regulating valve
- ◇ (3) Lock nut
- ◇ (4) vacuum detection port
- ◇ (5) Vacuum port
- ◇ (6) Vacuum filter
- ◇ (7) Gas supply port
- ◇ (8) Exhaust port



VYSERIES

Equipped with a destructive vacuum generator

Cobot Care VAC

Model representation method

CCV-VY-H-05-4-4-4-J-*

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Product Series	② Vacuum generating tube	③ Nozzle aperture	④ vacuum port
VY	H: High vacuum type -90Kpa L: High flow type -66Kpa E: High vacuum low-pressuregas supply type-90Kpa.0.35MPa	05:0.5mm 07:0.7mm	4:4cm intubation 6: Cm intubation

⑤ Gas supply port	⑥ Destruction of mouth	⑦ exhaust vent	⑧ bracket
4:4cm intubation 6: Cm intubation	4:4cm intubation 6: Cm intubation	Unmarked: muffler exhaust J: Port/centralized exhaust F: Muffler exhaust+PVYF vacuum filter JF: Port/Centralized Exhaust+ PVYF Vacuum Filter	No mark: No bracket B: With bracket

performance parameters

Product Model	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Maximum blowing flow rate NL/min	Air consumption NL/min	Noise dB(A)	Single weight g	Recommended hose diameter mm	
								Gas supply port P	Vacuum port V
VY05H	5.0	88	7.0	40	11	75	19	ϕ4	ϕ4
VY07H	5.0	88	12.5	40	22	75	20	ϕ6	ϕ6
VY05L	5.0	58	12.0	40	11	70	19	ϕ4	ϕ4
VY07L	5.0	58	20.0	40	22	70	20	ϕ6	ϕ6

◇ Note: The maximum gas supply pressure of the product is 6.0 bar

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

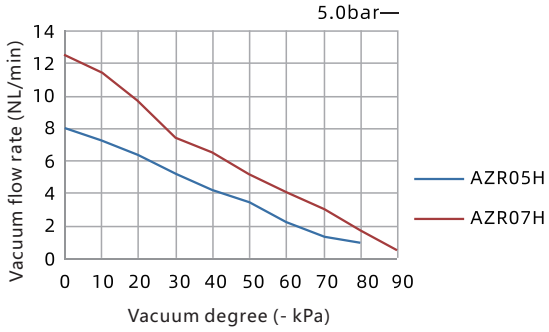
Product Model	Rated gas supply pressure bar	Air consumption NL/min	0	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
VY05H	5.0	11	8.0	7.3	6.3	5.2	4.2	3.4	2.2	1.4	1.0	88
VY07H	5.0	22	12.5	11.5	9.7	7.4	6.5	5.2	4.1	3.0	1.7	88
VY05L	5.0	11	12.5	10.5	8.7	6.9	5.0	2.9	1.0	-	-	58
VY07L	5.0	22	22.0	19.1	14.5	9.4	7.2	4.3	1.0	-	-	58

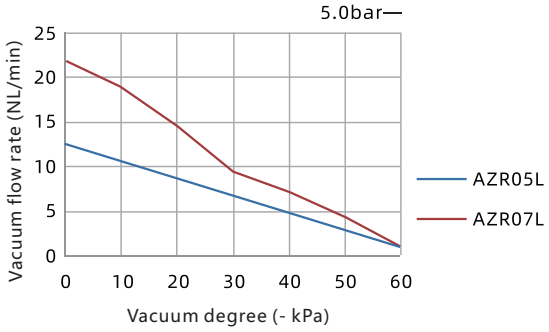
VYSERIES

Equipped with a destructive vacuum generator

Cobot Care VAC

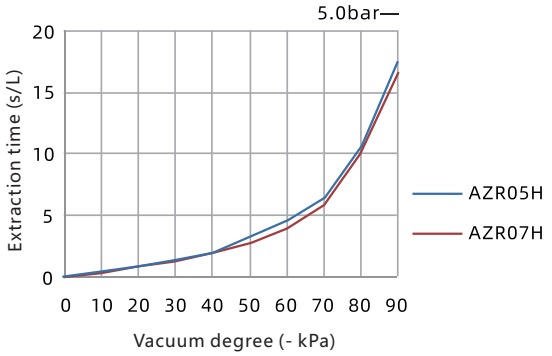
Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

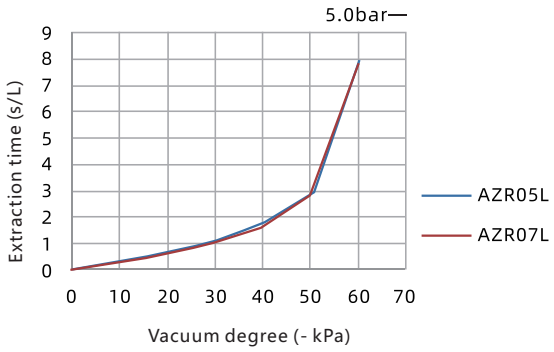




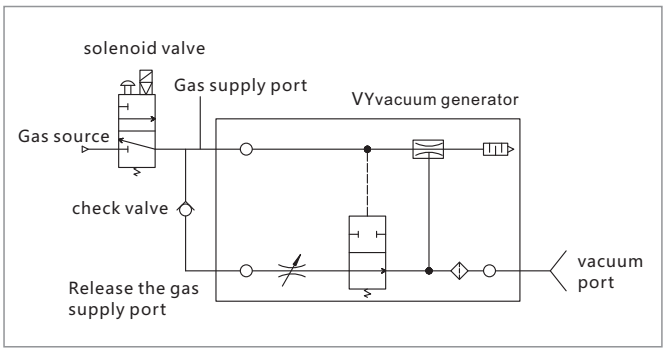
Extraction time (s/L) at different vacuum levels (- kPa)

Product Model	Rated gas supply pressure bar	Air consumption NL/min	10	20	30	40	50	60	70	80	Maximum vacuum degree - kPa
VY05H	5.0	11	0.42	0.83	1.30	1.92	3.2	4.5	6.3	10.5	88
VY07H	5.0	22	0.34	0.75	1.22	1.87	2.7	3.8	5.7	9.9	88
VY05L	5.0	11	0.32	0.64	1.06	1.73	2.9	8.2	-	-	58
VY07L	5.0	22	0.23	0.53	0.93	1.53	2.8	7.8	-	-	58





pneumatic circuit diagram



Principle and precautions of vacuum release

◇ 1. The solenoid valve is closed, the gas supply is stopped, and the release valve is opened. The residual positive pressure gas in the gas path between the one-way valve and the release port flows into the vacuum circuit to release the vacuum,

◇ 2. Adjust the vacuum release time by changing the length of the pipeline between the one-way valve and the release gas supply port, and adjusting the volume of residual positive pressure gas.

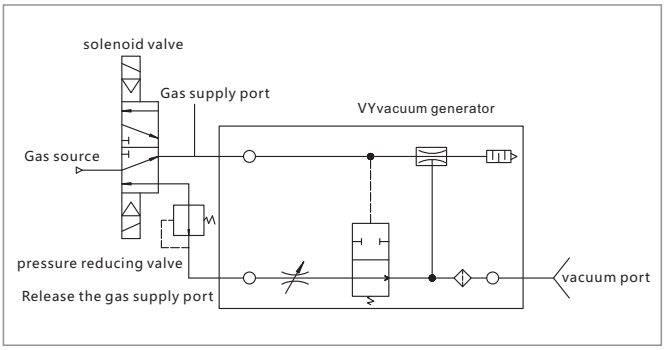
◇ 3. This vacuum release method releases a small flow rate,

VYSERIES

Equipped with a destructive vacuum generator

Cobot Care VAC

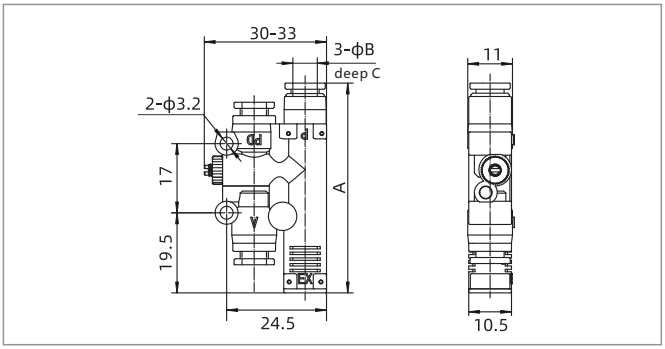
Model representation method



Vacuum release principle and precautions:

◇ 1. The solenoid valve closes the gas supply port, opens the release gas supply port, and the positive pressure gas flows directly into the vacuum circuit to release the vacuum.
◇ 2. The vacuum release time can be adjusted by controlling the supply time of the solenoid valve,
◇ 3. The gas supply pressure can be adjusted and released through a pressure reducing valve to avoid blowing away the workpiece due to excessive pressure.
◇ 4. The release of gas supply pressure shall not exceed the gas supply pressure of the vacuum generator.
◇ 5. This vacuum release method allows for free adjustment of flow rate and pressure as needed

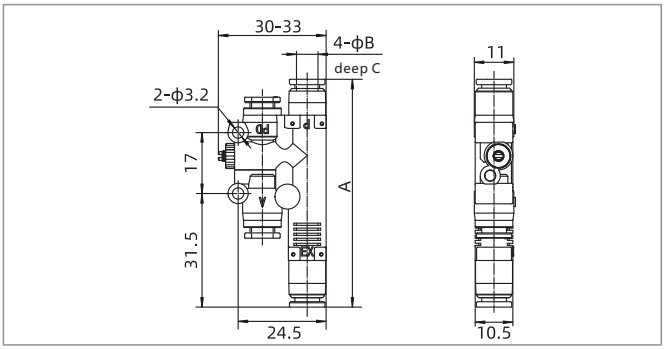
Size specifications (mm)



VY**

Model/Size	A	B	C
VY05H	49.5	4	10
VY05L	49.5	4	10
VY07H	51.5	6	12.5
VY07L	51.5	6	12.5

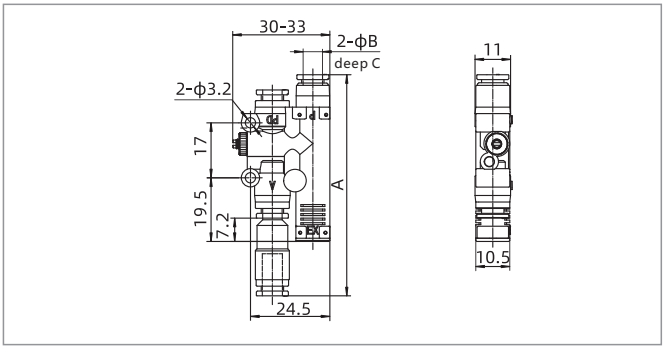
◇ Note: C is the depth at which the tube can be inserted



VY**-J

Model/Size	A	B	C
VY05H-J	61.5	4	10
VY05L-J	61.5	4	10
VY07H-J	63.5	6	12.5
VY07L-J	63.5	6	12.5

◇ Note: C is the depth at which the tube can be inserted



VY**-F

Model/Size	A	B	C
VY05H-H	65.5	4	10
VY05L-H	65.5	4	10
VY07H-H	68.8	6	12.5
VY07L-H	68.8	6	12.5

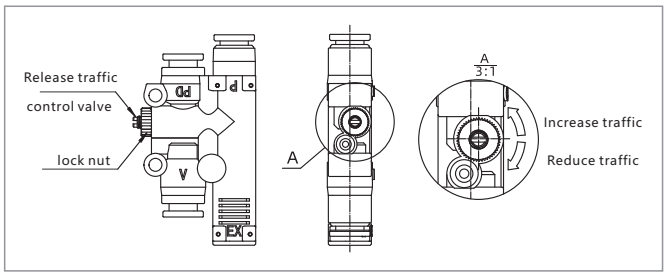
◇ Note: C is the depth at which the tube can be inserted

VYSERIES

Equipped with a destructive vacuum generator

Cobot Care VAC

Release Function Diagram



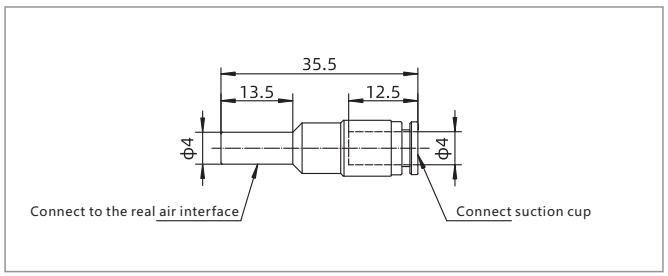
Vacuum release flow regulation:

◇ 1. Rotate the release flow control valve clockwise to reduce the release flow rate; Rotate the release flow control valve counterclockwise to increase the release flow rate.

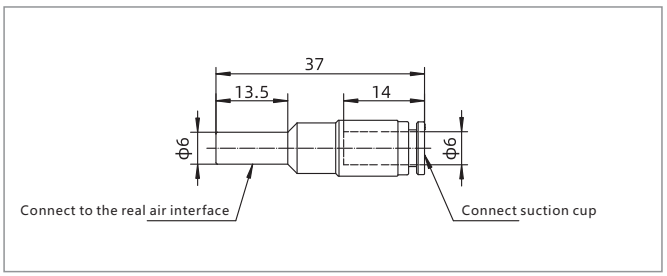
◇ 2.After the adjustment is completed, the locking nut should be tightened clockwise to fix the position of the regulating valve

3. The regulating valve has limited positions in both front and back. If it cannot be turned clockwise or counterclockwise, it indicates that it has been turned to the limit position.

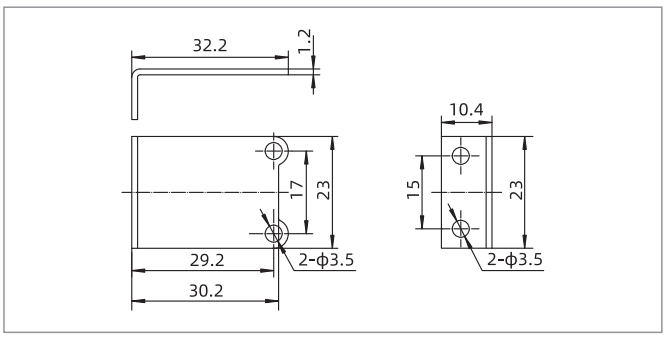
Maintenance component selection size specifications (mm)



04 Filter



04 Filter



mounting bracket

name	model	Suitable for generators
Vacuum filter	04	VY05H、VY05L
Vacuum filter	06	VY07H、VY07L
mounting bracket	B	VY05H、VY05L、VY07H、VY07L

VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC

metal plate packaging timber composite material

characteristic

- Multi stage nozzle series, gradually reducing pressure and increasing speed, maximizing suction efficiency
- Large vacuum and high flow rate
- Modular combination, can stack modules according to traffic flow, and flexibly match requirements
- There are various specifications for gas supply and vacuum ports
- Can be equipped with energy-saving control device
- Engineering plastic/aluminum alloy shell, resistant to impact and corrosion



advantage

Fast pumping with low cost

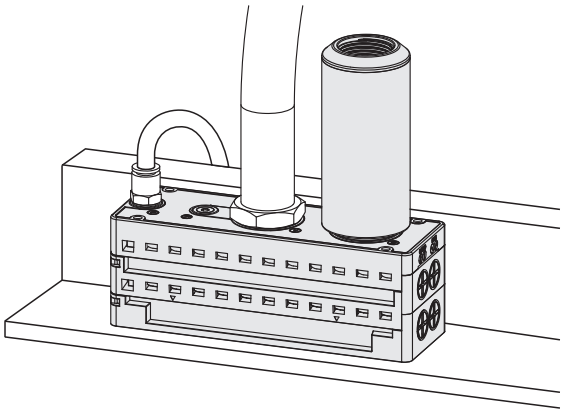
High flow and high vacuum

Compact size

Low consumption of compressed air

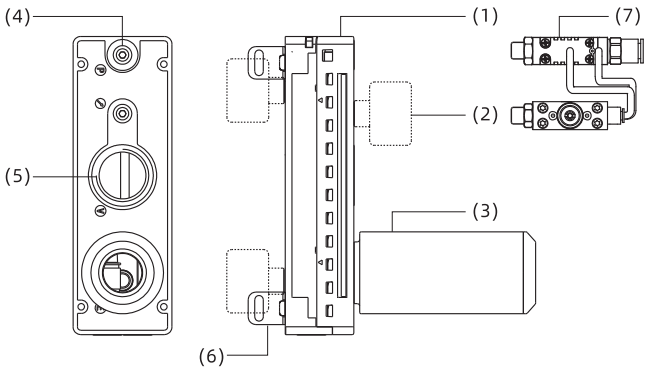
application

- Automated handling (3C/automotive/home appliances)
- Packaging industry (food/pharmaceutical/daily chemical)
- Printing/papermaking/textile
- Electronic/semiconductor chips
- Logistics/Warehousing/E-commerce
- Other



structure

- (1) Main body
- (2) Pressure gauge
- (3) Silencer
- (4) Gas supply port
- (5) Vacuum port
- (6) L-shaped installation bracket
- (7) ES energy-saving system



VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC

Specification and model representation

CCV-VTMD-25-L-AA-V-ES

① ② ③ ④ ⑤ ⑥

① Product Series	② specification	③ performance
VTMD	25 50 75 100 125 150	H-Vacuum type (-95kPa) L-flow type (-75kPa)

④ Connection board specifications	⑤ Selection of check valve	⑥ control device
AA BA CA DB CC	Blank - Default Specification No check valve V-belt check valve	Blank - Default Specification No control device ES Energy saving System

◇ Note: When using - V check valve or - ES energy-saving system, the vacuum port should be matched with a filter for use

Appendix of Connection Plate Specifications

Connection board specifications	Gas supply port (1)	Vacuum port (2)	exhaust vent (3)	Suitable generator models
AA	G1/8	G3/4	G1"	VTMD25、50
BA	NPSF1/8	G3/4	G1"	VTMD25、50
CA	G1/4	G3/4	G1"	VTMD25、50、75、100
DB	NPT1/4	NPT3/4	G1"	VTMD25、50、75、100
CC	G1/4	G1"	G1"	VTMD25、50、75、100、125、150

Selection Specification - L (Flow Type)

Model	25	50	75	100	125	150
VTMDL-AA	VTMD25L-AA	VTMD50L-AA	-	-	-	-
VTMDL-AA-V	VTMD25L-AA-V	VTMD50L-AA-V	-	-	-	-
VTMDL-AA-V-ES	VTMD25L-AA-V-ES	VTMD50L-AA-V-ES	-	-	-	-
VTMDL-BA	VTMD25L-BA	VTMD50L-BA	-	-	-	-
VTMDL-BA-V	VTMD25L-BA-V	VTMD50L-BA-V	-	-	-	-
VTMDL-CA	VTMD25L-CA	VTMD50L-CA	VTMD75L-CA	VTMD100L-CA	-	-
VTMDL-CA-V	VTMD25L-CA-V	VTMD50L-CA-V	VTMD75L-CA-V	VTMD100L-CA-V	-	-
VTMDL-CA-V-ES	-	-	VTMD75L-CA-V-ES	VTMD100L-CA-V-ES	-	-
VTMDL-DB	VTMD25L-DB	VTMD50L-DB	VTMD75L-DB	VTMD100L-DB	-	-
VTMDL-DB-V	VTMD25L-DB-V	VTMD50L-DB-V	VTMD75L-DB-V	VTMD100L-DB-V	-	-
VTMDL-CC	VTMD25L-CC	VTMD50L-CC	VTMD75L-CC	VTMD100L-CC	VTMD125L-CC	VTMD150L-CC
VTMDL-CC-V	VTMD25L-CC-V	VTMD50L-CC-V	VTMD75L-CC-V	VTMD100L-CC-V	VTMD125L-CC-V	VTMD150L-CC-V
VTMDL-CC-V-ES	VTMD25L-CC-V-ES	VTMD50L-CC-V-ES	VTMD75L-CC-V-ES	VTMD100L-CC-V-ES	VTMD125L-CC-V-ES	VTMD150L-CC-V-ES

VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC

Selection specification - H (vacuum type)

Model	25	50	75	100	125	150
VTMDH-AA	VTMD25H-AA	VTMD50H-AA	-	-	-	-
VTMDH-AA-V	VTMD25H-AA-V	VTMD50H-AA-V	-	-	-	-
VTMDH-AA-V-ES	VTMD25H-AA-V-ES	VTMD50H-AA-V-ES	-	-	-	-
VTMDH-BA	VTMD25H-BA	VTMD50H-BA	-	-	-	-
VTMDH-BA-V	VTMD25H-BA-V	VTMD50H-BA-V	-	-	-	-
VTMDH-CA	VTMD25H-CA	VTMD50H-CA	VTMD75H-CA	VTMD100H-CA	-	-
VTMDH-CA-V	VTMD25H-CA-V	VTMD50H-CA-V	VTMD75H-CA-V	VTMD100H-CA-V	-	-
VTMDH-CA-V-ES	-	-	VTMD75H-CA-V-ES	VTMD100H-CA-V-ES	-	-
VTMDH-DB	VTMD25H-DB	VTMD50H-DB	VTMD75H-DB	VTMD100H-DB	-	-
VTMDH-DB-V	VTMD25H-DB-V	VTMD50H-DB-V	VTMD75H-DB-V	VTMD100H-DB-V	-	-
VTMDH-CC	VTMD25H-CC	VTMD50H-CC	VTMD75H-CC	VTMD100H-CC	VTMD125H-CC	VTMD150H-CC
VTMDH-CC-V	VTMD25H-CC-V	VTMD50H-CC-V	VTMD75H-CC-V	VTMD100H-CC-V	VTMD125H-CC-V	VTMD150H-CC-V
VTMDH-CC-V-ES	VTMD25H-CC-V-ES	VTMD50H-CC-V-ES	VTMD75H-CC-V-ES	VTMD100H-CC-V-ES	VTMD125H-CC-V-ES	VTMD150H-CC-V-ES

performance parameters

Product model	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption : NL/min	Noise dB (A)	Working temperature ° C	Single weight G	Vacuum chamber volume cm^3	Recommended hose diameter mm	
									Gas supply port P	Vacuum port V
VTMD25L	6.0	75	360	130	63~68	-10~80	430	140	ϕ8	ϕ25
VTMD50L	6.0	75	710	260	63~68	-10~80	435	140	ϕ8	ϕ25
VTMD75L	6.0	75	1,050	390	63~68	-10~80	625	245	ϕ10	ϕ32
VTMD100L	6.0	75	1,410	520	63~68	-10~80	630	245	ϕ10	ϕ32
VTMD125L	6.0	75	1,500	650	63~68	-10~80	825	352	ϕ12	ϕ32
VTMD150L	6.0	75	1,690	780	63~68	-10~80	830	352	ϕ12	ϕ32
VTMD25H	5.0	95	354	135	63~68	-10~80	430	140	ϕ8	ϕ25
VTMD50H	5.0	95	700	270	63~68	-10~80	435	140	ϕ8	ϕ25
VTMD75H	5.0	95	980	405	63~68	-10~80	625	245	ϕ10	ϕ32
VTMD100H	5.0	95	1,380	540	63~68	-10~80	630	245	ϕ10	ϕ32
VTMD125H	5.0	95	1,480	675	63~68	-10~80	825	352	ϕ12	ϕ32
VTMD150H	5.0	95	1,650	810	63~68	-10~80	830	352	ϕ12	ϕ32

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	0	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
VTMD25L	6.0	130	360	210	156	102	54	36	30	21	75
VTMD50L	6.0	260	710	420	312	204	108	72	60	42	75
VTMD75L	6.0	390	1,050	630	468	306	162	108	90	66	75
VTMD100L	6.0	520	1,410	840	624	408	216	144	120	84	75
VTMD125L	6.0	650	1,500	948	744	510	270	180	150	126	75
VTMD150L	6.0	780	1,690	1,074	888	612	324	216	180	132	75

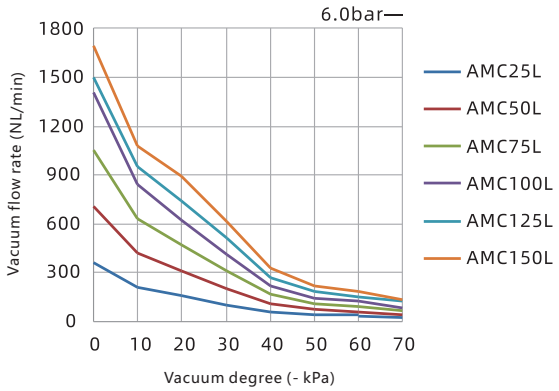
VTMDSERIES

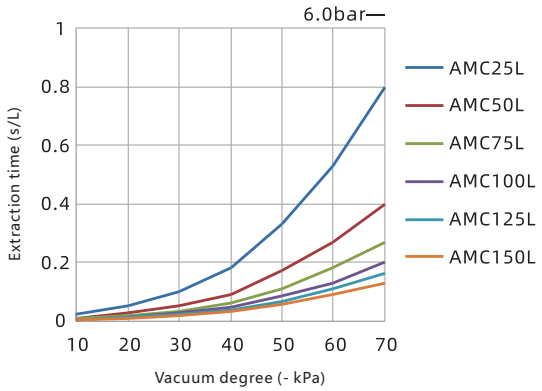
Multi-stage vacuum generator

Cobot Care VAC

Extraction time (s/L) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
VTMD25L	6.0	130	0.020	0.050	0.100	0.180	0.330	0.530	0.800	75
VTMD50L	6.0	260	0.010	0.025	0.050	0.090	0.170	0.270	0.400	75
VTMD75L	6.0	390	0.007	0.017	0.033	0.060	0.110	0.180	0.270	75
VTMD100L	6.0	520	0.005	0.013	0.025	0.045	0.083	0.130	0.200	75
VTMD125L	6.0	650	0.005	0.012	0.022	0.036	0.066	0.110	0.160	75
VTMD150L	6.0	780	0.004	0.010	0.018	0.030	0.055	0.090	0.130	75





Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	0	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMD25H	5.0	135	354	180	120	78	43.8	34.8	25.8	19.2	10.8	1.8	95
VTMD50H	5.0	270	700	360	240	156	87.6	69.6	51.6	38.4	21.6	3.6	95
VTMD75H	5.0	405	980	540	360	234	131.4	104.4	77.4	57.6	32.4	5.4	95
VTMD100H	5.0	540	1,380	720	480	312	175.2	139.2	103.2	76.8	43.2	7.2	95
VTMD125H	5.0	675	1,480	810	570	390	219.0	174.0	129.0	96.0	54.0	9.0	95
VTMD150H	5.0	810	1,650	918	684	468	262.8	206.4	154.8	115.2	64.8	10.8	95

Extraction time (s/L) at different vacuum levels (- kPa)

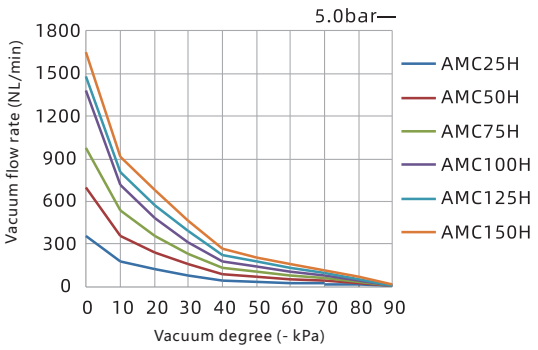
Product model	Gas supply pressure bar	Air consump-tionNL/min	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMD25H	5.0	135	0.022	0.062	0.120	0.220	0.37	0.57	0.84	1.20	2.20	95
VTMD50H	5.0	270	0.011	0.031	0.060	0.110	0.19	0.29	0.42	0.60	1.10	95
VTMD75H	5.0	405	0.007	0.021	0.040	0.070	0.12	0.19	0.28	0.40	0.73	95
VTMD100H	5.0	540	0.006	0.016	0.030	0.055	0.09	0.14	0.21	0.30	0.55	95
VTMD125H	5.0	675	0.005	0.014	0.026	0.044	0.07	0.11	0.17	0.24	0.44	95
VTMD150H	5.0	810	0.005	0.012	0.022	0.040	0.06	0.10	0.14	0.20	0.37	95

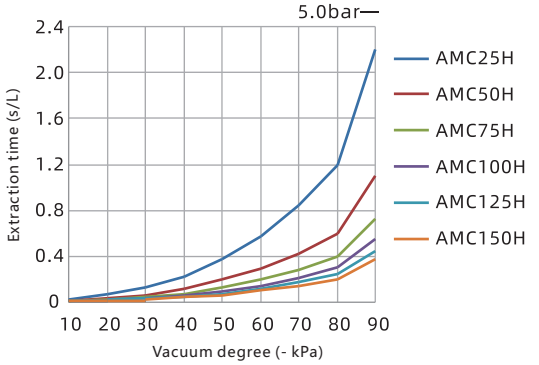
VTMDSERIES

Multi-stage vacuum generator

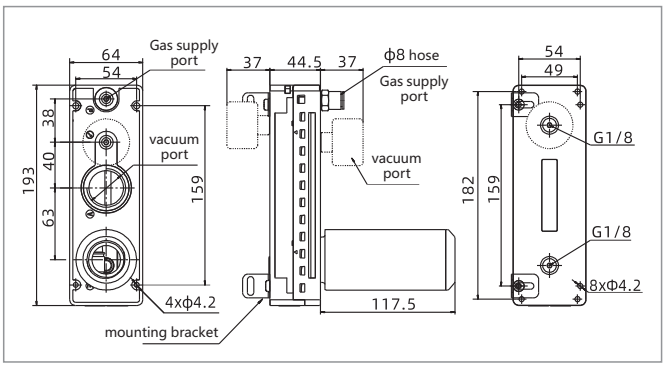
Cobot Care VAC

Extraction time (s/L) at different vacuum levels (- kPa)

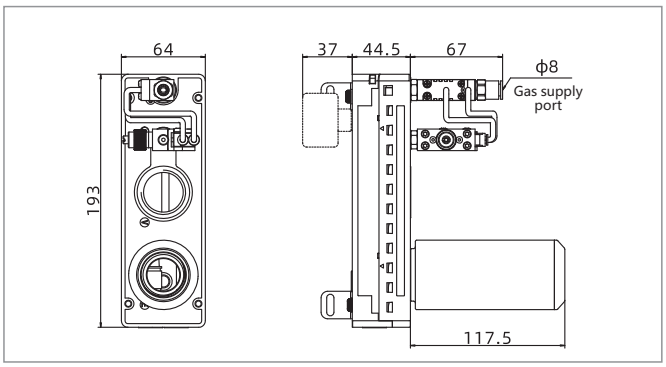




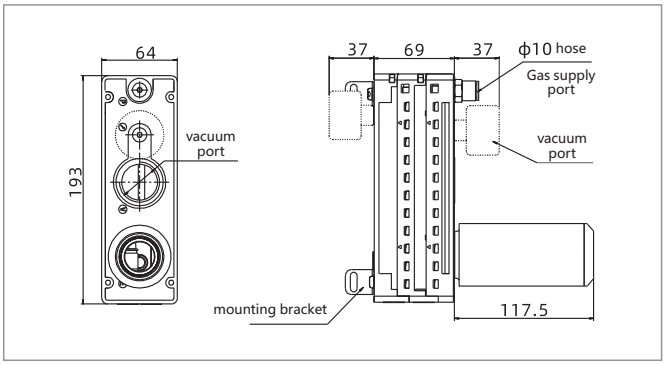
Size specifications (mm)



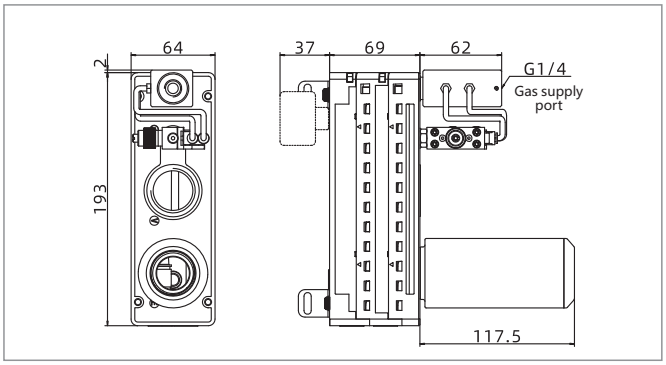
VTMD25-50



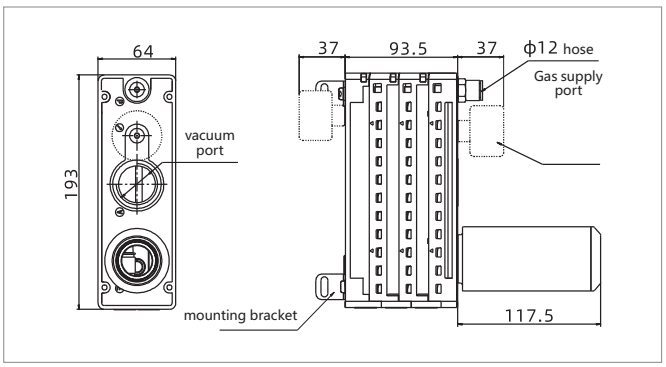
VTMD25□-□-V-ES VTMD50□-□-V-ES



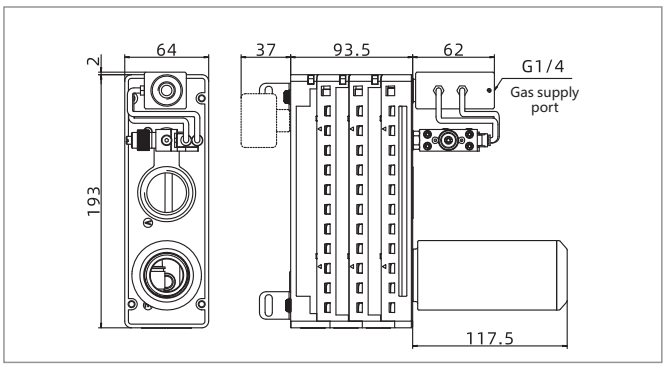
VTMD75-100



VTMD75□-□-V-ES VTMD100□-□-V-ES



VTMD125-150



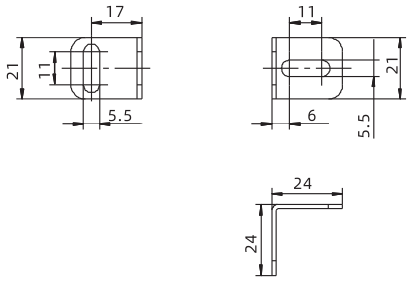
VTMD125□-□-V-ES VTMD150□-□-V-ES

VTMDSERIES

Multi-stage vacuum generator

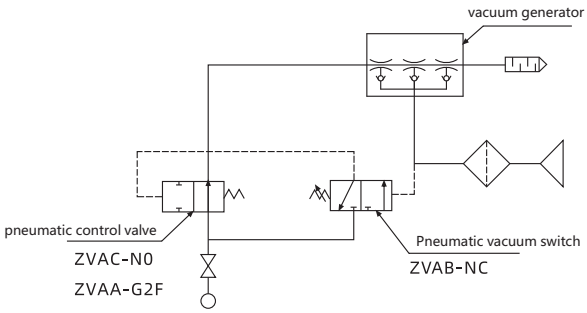
Cobot Care VAC

Size specifications (mm)



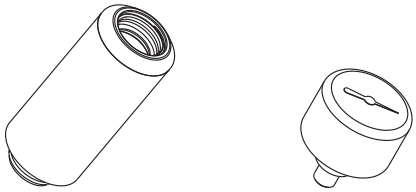
L-shaped installation bracket

pneumatic circuit diagram



ES energy-saving system

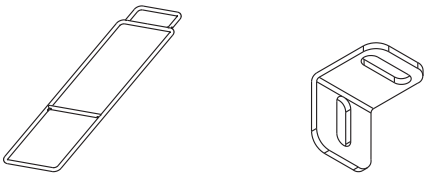
Accessory selection specifications



silencer

vacuum gauge

Install the attachment



sealing element

L-shaped installation bracket

Install the attachment

name	model	remark
silencer	ZSA-G8M	-
vacuum gauge	ZPMR-V	-
sealing ring	AMC50-R6	AMC25、50/1只，AMC75、100/2只，
Install accessory package	AMC50-R (2 brackets+4 screws+1 8-pin quick connector)	AMC125、150/3只 AMC25、50-AA
Install accessory package	AMC100-R (2 brackets+4 screws+1 medium 10 quick connector)	AMC25、50、75、100-CA / AMC25、
Install accessory package	AMC150-R (2 brackets+4 screws+1 mid-range 12 quick connector)	50、75、100-CC AMC125、150-CC

◇ Note: The connection board specifications are BA and DB, and the installation accessory package includes 2 L-shaped brackets and 4 screws.

buffer rod

Lightweight and compact buffer support rod ISMRSERIES

- Connection thread: M16 M20
- Buffer travel: 30-50mm



3C electronics

Lightweight and compact buffer support rod ISMRSERIES

- Connection thread: M10x1.0
- Vacuum thread size: M5x0.8



3C electronics

Shrinkable buffer support rod ISMRSERIES

- Connection thread: M10
- Buffer stroke: 10-20mm



3C electronics

VCIE SERIES

Lightweight and compact buffer support rod

Cobot Care VAC

3C Electronics

characteristic

- Equipped with built-in springs, hydraulic dampers, or pneumatic cylinders for absorbing impact energy
- Made of aluminum alloy, carbon fiber, or high-strength engineering plastics, achieving both lightweight and rigidity
- Equipped with standard threads, quick-release connectors, or universal joints, it adapts to different equipment installation requirements
- Some models support manual adjustment of length or damping force



advantage

Lightweight design

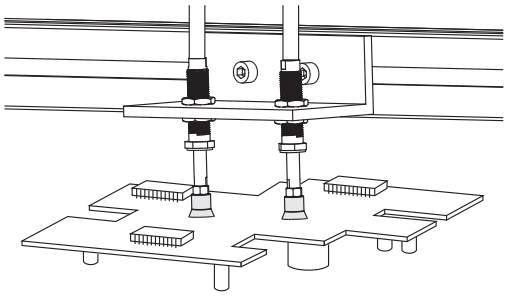
Efficient buffering

compact size

environment resistance

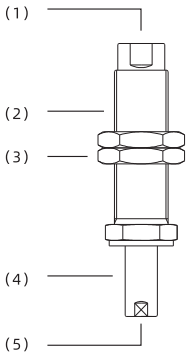
application

- **In the field of robotics:**:
  Collaborative robot (Cobot) joint protection to prevent overload impact
  AGV/AMR shock absorber struts, cushioning road bumps
- **Automation equipment**:
  Vibration isolation for precision positioning platforms (such as optical instruments)
  Emergency stop buffer for conveyor belt sorting mechanism
- **Consumer electronics**: shock absorption for drone landing gear, stabilizing rod for camera gimbal
- **Special scenarios**: medical equipment robotic arm, space microgravity environment buffer device



structure

- (1) Generator connection terminal
- (2) Guide sleeve
- (3) Install nut
- (4) Guide rod
- (5) Suction cup connection end



VCIE SERIES

Lightweight and compact buffer support rod

Cobot Care VAC

Model specifications

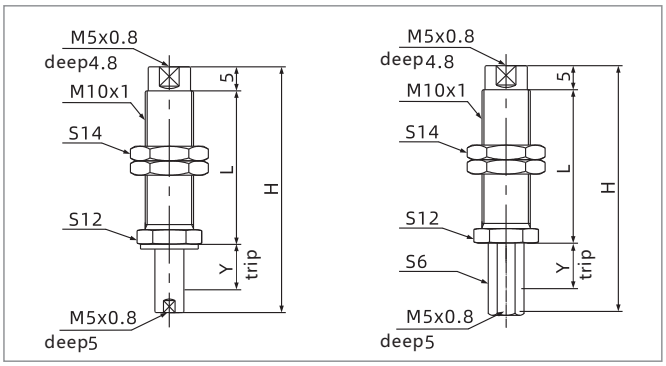
CCV-ISMR-M16-TS30-TF1/8-RM1/8

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Product series	② Install thread	③ Air intake position	④ cushion stroke	⑤ Screw tooth position
ISMR (built-in spring)	M16	TS: Top intake YS: Side intake	30mm 50mm	T. Top R: Tail end

⑥ External/Internal Teeth	⑦ thread size	⑧ positions of screw teeth	⑥ External/Internal Teeth	⑦ thread size
M: External teeth F: Internal teeth	G1/8"	T: Top R: Tail end	M: External teeth F: Internal teeth	G1/8"

Size specifications (mm)



Model/Size	H	L	Y	F1 N	F2 N
CCV-ISMR-M16	51	31.8	10	1.0	1.4
CCV-ISMR-M16	61	36.8	15	1.0	1.4
CCV-ISMR-M16	71	41.8	20	1.0	1.4

Note:
1. "F1" represents the spring force of 0 stroke, "F2" represents the spring force of half stroke.
2. The locking torque of M10 nut is 2.5~3.5N. m. Please operate within the specified torque range.

PSPL SERIES

Shrinkable buffer support rod

Cobot Care VAC

3C Electronics

characteristic

- Spring embedded buffer support rod, with very low elasticity
- Small size, light weight
- The guide rod adopts special surface treatment
- Guide sleeve with built-in resin lining
- Design of Internal Shrinkage Structure



advantage

Avoid pollution

Small space fast moving yard

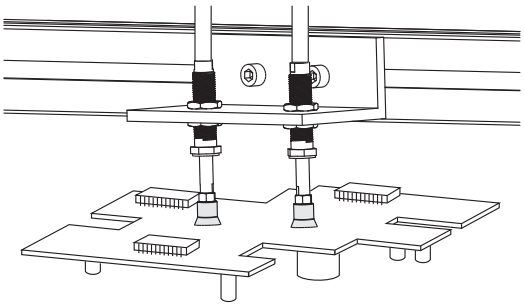
Corrosion and wear resistance

Reduce dust emissions

No lateral load

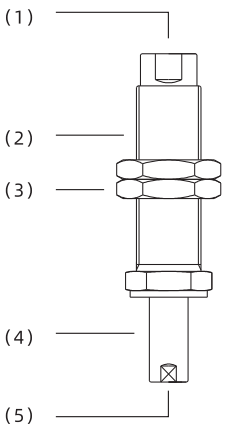
application

- Suitable for the electronics industry
- Suitable for handling lightweight and small workpieces that require flexible contact
- Suitable for handling workpieces with height differences on site
- Suitable for dust-free working conditions



structure

- (1) Generator connection end
- (2) Guide sleeve
- (3) Install the nut
- (4) Guide rod
- (5) Suction cup connection end



PSPLSERIES

Shrinkable buffer support rod

Cobot Care VAC

Model specifications

CCV-PSPL-I-10-R-M5F-M10

① ② ③ ④ ⑤ ⑥

① Product series	②Buffer form	③ cushion stroke
PSPL	1. Built in spring	3 10 15 20

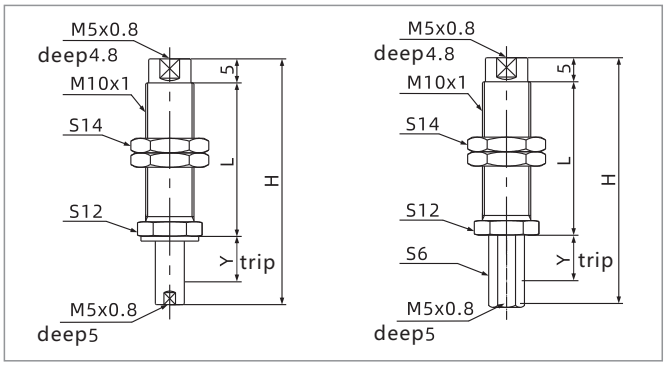
④ Buffer method	⑤Vacuum port connection method	⑥ Installation specifications
Blank - vertically rotatable R-Vertical non rotatable	M5F-M5x0.8 internal thread	M10-M10x1

Selection specifications

Model/Buffer Travel	3	10	15	20
PSPL-I□M5F-M10	PSPL-I3M5F-M10	PSPL-I10M5F-M10	PSPL-I15M5F-M10	PSPL-I20M5F-M10
PSPL-I□RM5F-M10	-	PSPL-I10RM5F-M10	PSPL-I15RM5F-M10	PSPL-I20RM5F-M10

Note: It is recommended that the actual working compression stroke of the buffer support rod should not exceed 50% of its maximum compression stroke

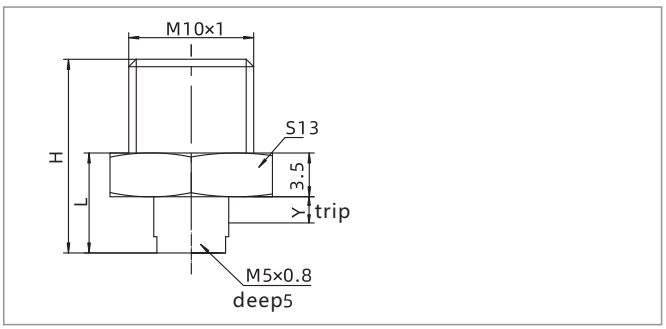
尺寸规格



PSPL-I□M5F-M10　　PSPL-I□RM5F-M10

Model/Size	H	L	Y	F1 N	F2 N
PSPL-I10(R)M5F-M10	51	31.8	10	1.0	1.4
PSPL-I15(R)M5F-M10	61	36.8	15	1.0	1.4
PSPL-I20(R)M5F-M10	71	41.8	20	1.0	1.4

Note: 1. "F1" represents the spring force of 0 stroke,
and "F2" represents the spring force of half stroke.
2. The locking torque of M10 nut is 2.5~3.5N. m.
Please operate within the specified torque range.



PSPL-I3M5F-M10

Model/Size	H	L	Y	F1 N	F2 N
PSPL-I3M5F-M10	16.5	9	3	0.7	1.0

Note: 1. "F1" represents the spring force of 0 stroke,
and "F2" represents the spring force of half stroke.

ISMR SERIES

Lightweight and compact buffer support rod

Cobot Care VAC

3C electronics

feature

- Built in spring buffer support rod with low elasticity
- Small size, light weigh
- The guide rod is made of stainless steel material, and the guide sleeve is embedded with an oil-free liner
- Suitable for fast handling situations with limited space and environmental resistance
- Can resist corrosion and wear



advantage

Wear resistant and non powdering

Efficient buffering

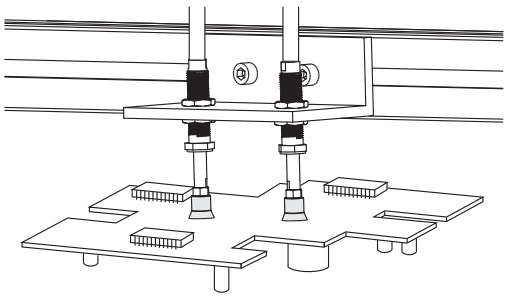
Main body stainless steel

Environmental resistance

Complete specifications

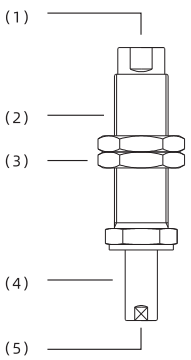
application

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  AGV/AMR shock absorber struts, cushioning road bumps
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  Vibration isolation for precision positioning platforms (such as optical instruments)
  Emergency stop buffer for conveyor belt sorting mechanism
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structure

- (1) Generator connection terminal
- (2) Guide sleeve
- (3) Install nut
- (4) Guide rod
- (5) Suction cup connection end



ISMR SERIES

Lightweight and compact buffer support rod

Cobot Care VAC

Model

CCV-ISMR-ZPT2-J10-B5-A10

① ② ③ ④ ⑤

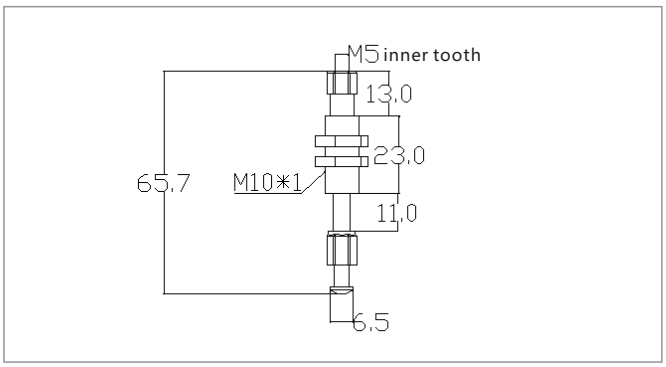
① Product Series	② Adapt to suction cup diameter	③ Is it rotatable
ISMR(built-in spring)	ZPT2:10、13、16 ZPT3:20、25、32	J: Cylinder is rotatable K: Hexagonal anti rotation

④ Vacuum port thread size	④ Installation connection thread size
B5:M5x0.8	A10:M10x1.0

Selection specifications

Model	B5	Is it rotatable	Link thread	Buffer travel
ZPT2-J10	M5x0.8	Cylinder is rotatable	A10	10
ZPT2-J20	M5x0.8	Cylinder is rotatable	A10	20
ZPT2-J30	M5x0.8	Cylinder is rotatable	A10	30
ZPT2-J40	M5x0.8	Cylinder is rotatable	A10	40
ZPT2-J50	M5x0.8	Cylinder is rotatable	A10	50
ZPT2-K10	M5x0.8	Hexagonal anti rotation	A10	10
ZPT2-K20	M5x0.8	Hexagonal anti rotation	A10	20
ZPT2-K30	M5x0.8	Hexagonal anti rotation	A10	30
ZPT2-K40	M5x0.8	Hexagonal anti rotation	A10	40
ZPT2-K50	M5x0.8	Hexagonal anti rotation	A10	50

Specifications and Dimensions



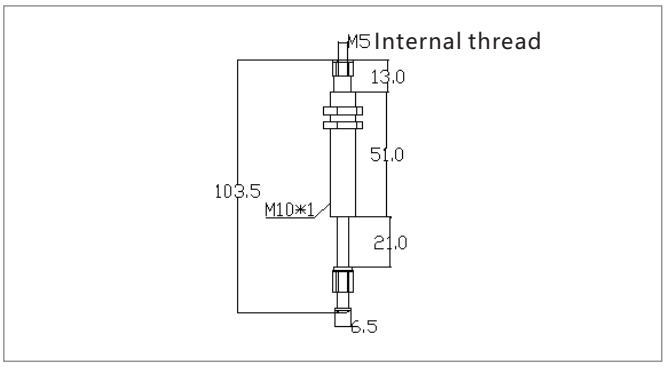
Model/Size	H	L	M	M	Y
CCV-ISMR-J10	65	6.5	11	M10	M5
CCV-ISMR-K10	65	6.5	11	M10	M5
CCV-ISMR-J10	65	8	11	M10	M5
CCV-ISMR-K10	65	8	11	M10	M5

ISMR SERIES

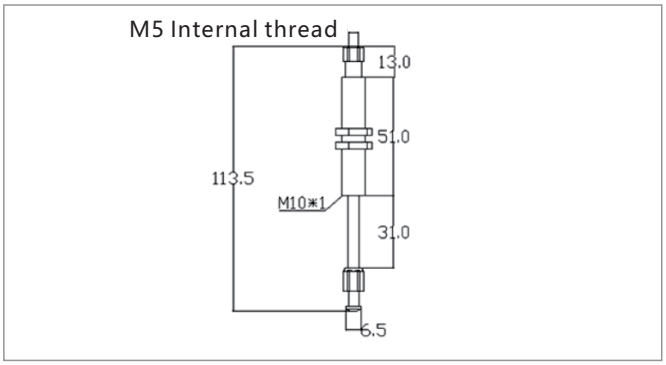
Lightweight and compact buffer support rod

Cobot Care VAC

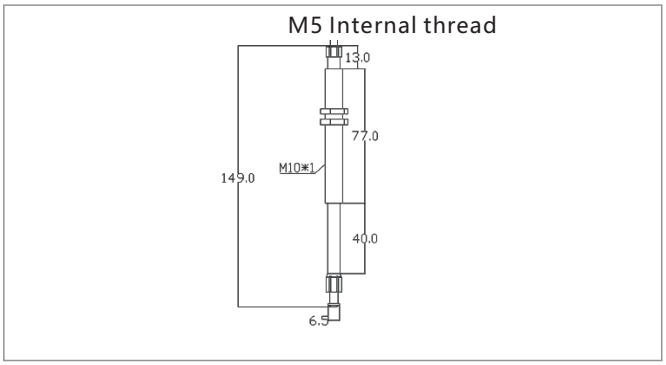
Size specifications (mm)



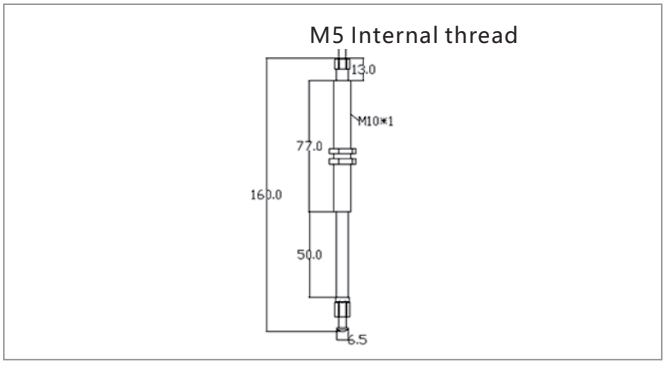
Model/Size	H	J	H	M	Y
CCV-ISMR-J20	103.5	6.5	11	M10	M5
CCV-ISMR-K20	103.5	6.5	11	M10	M5
CCV-ISMR-J20	103.5	8	11	M10	M5
CCV-ISMR-K20	103.5	8	11	M10	M5



Model/Size	H	J	H	M	Y
CCV-ISMR-J30	113.5	6.5	11	M10	M5
CCV-ISMR-K30	113.5	6.5	11	M10	M5
CCV-ISMR-J30	113.5	8	11	M10	M5
CCV-ISMR-K30	113.5	8	11	M10	M5



Model/Size	H	J	H	M	Y
CCV-ISMR-J10	149	6.5	11	M10	M5
CCV-ISMR-K10	149	6.5	11	M10	M5
CCV-ISMR-J10	149	8	11	M10	M5
CCV-ISMR-K10	149	8	11	M10	M5



Model/Size	H	J	H	M	Y
CCV-ISMR-J10	160	6.5	11	M10	M5
CCV-ISMR-K10	160	6.5	11	M10	M5
CCV-ISMR-J10	160	8	11	M10	M5
CCV-ISMR-K10	160	8	11	M10	M5

vacuum suction cup

PU CORRUGATED SUCTION CUP — BGSERIES

- Size specification: 25-55mm
- Material: U UD




3C electronics


High lifespan

Ripple suction cup — BGSERIES

- Size specification: 50-70mm
- Material: U UD




carton


injection molding


3C electronics

Ripple suction cup — BGSERIES

- Size specification: 25-63mm
- Material: Silicone




carton


injection molding


3C electronics

silicone suction cup — BKSERIES

- Size specification: 18-33mm
- Material: Silicone




plastic bag


High sealing

General-purpose flat suction cup — VFSERIES

- Size specification:15-110mm
- Material: Nitrile rubber, silicone rubber




General

Universal Corrugated Suction Cup — VBSERIES

- Size specification:5-150mm
- Material: Nitrile rubber, silicone rubber




General

Heavy-duty flat suction cup — ZPSERIES

- Size specification:64-128mm
- Material: Nitrile rubber




Metal sheet


wooden plank



Heavy-duty

Heavy-duty flat suction cup — ZPTSERIES

- Size specification:64-128mm
- Material: Nitrile rubber




Metal sheet


wooden plank



Heavy-duty

Flat suction cup — SAFSERIES

- Size specification:64-128mm
- Material: Nitrile rubber




Metal sheet


slip resistance


Oily surface

Use a 1.5-fold corrugated suction cup — SABSERIES

- Size specification:22-125mm
- Material: Nitrile rubber




Metal sheet


slip resistance


Oily surface

4.5 folded corrugated suction cup CBLSERIES

- Size specification: 15-50mm
- Material: Nitrile rubber and silicone rubber




food packaging


plastic bag



Food-grade certification

Double layer corrugated suction cup VBFSERIES

- Size specification: 30-100mm
- Material: PU polyurethane




metal plate


slip resistance


Oily surface

Flat ribbed suction cup FCFSERIES

- Size specification: 30-100mm
- Material: PU polyurethane




metal plate


slip resistance


Oily surface

BG SERIES

PU corrugated suction cup

Cobot Care VAC

3C Electronics

High lifespan

characteristic

- 2.5-fold corrugated suction cup, expandable and deformable, suitable for different surfaces and height differences
- Equipped with internal support structure to prevent suction cup collapse and enhance durability
- PU material, thickened edge design to ensure sealing with the workpiece surface
- Complete size specifications



advantage

High flexibility and toughness

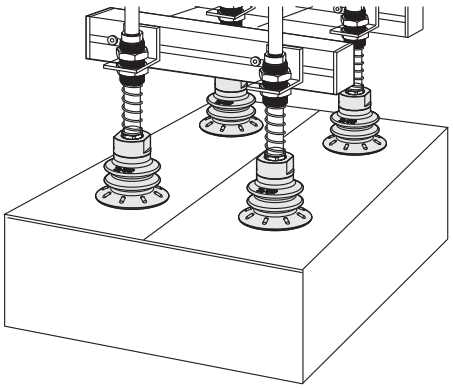
Wear resistant and oil resistant

tear resistance

Lightweight

application

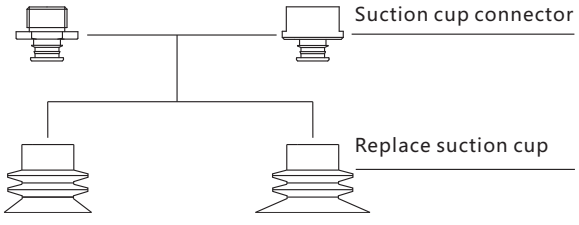
- **Automobile manufacturing**: handling curved parts such as door interior panels, instrument panels, etc
- **Logistics and warehousing**: Grab corrugated cardboard boxes and woven bags, and use corrugated suction cups with reinforced ribs to adapt to surface textures
- **Electronic assembly**: Absorb mobile phone cases and plastic parts to avoid creasing small corrugated suction cups (such as those with a diameter of 20mm)
- **Food packaging**: Transfer food boxes, PET bottles, white food grade PU suction cups that comply with FDA standards
- **Glass processing**: handling curved glass and solar panels, buffering and shock-absorbing high elasticity corrugated suction cups



structure

- Suction cup and joint split structure design
- Suction cup joint with filter device

Within the same series, replacement suction cups and suction cup connectors can be combined according to requirements



BG SERIES

PU corrugated suction cup

Cobot Care VAC

Model specifications

CCV-BG-48-G3/8

① ② ③

① Product series	② Disk diameter	③ adaptor
BG	25mm 31mm 34mm 41mm 48mm 63mm	External teeth: G3/8 "G1/8" Internal teeth: G1/8 "

Selection specifications

model	External teeth: G3/8 "G1/8"	Internal teeth: G1/8 "
CCV-BG-25	BG25-G1/8	BG25-G1F
CCV-BG-31	BG31-G1/8	BG31-G1F
CCV-BG-34	BG34-G1/8	BG34-G1F
CCV-BG-41	BG41-G1/8、BG41-G3/8	BG41-G2F、BG41-G3F
CCV-BG-48	BG48-G1/8、BG48-G3/8	BG48-G1/8、BG48-G3/8
CCV-BG-63	BG63-G1/8、BG63-G3/8	BG63-G1/8、BG63-G3/8

performance parameter

Product Model	Pull off force N	Internal volume cm	Minimum curvature radius of workpiece mm	Single weight g	Recommended hose diameter mm	Minimum packaging pcs
CCV-BG-25	22	3	31	2	6	5
CCV-BG-31	`31	4	36	3.2	6	5
CCV-BG-34	43	6	42	4.8	6	5
CCV-BG-41	71	13	54	11	6	1
CCV-BG-48	89	18	59	14.3	6	1
CCV-BG-63	106	23	64	19.9	8	1

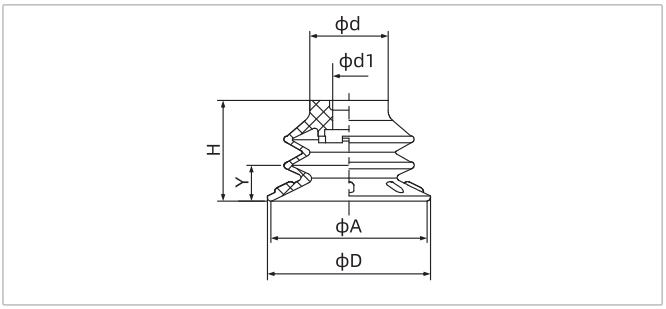
◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean.
The above pull-out force data does not include the safety factor. According to the different surface conditions of the workpiece,
The values may vary. It is recommended to keep the vacuum tube as short as possible, with a length not exceeding 2m

BG SERIES

PU corrugated suction cup

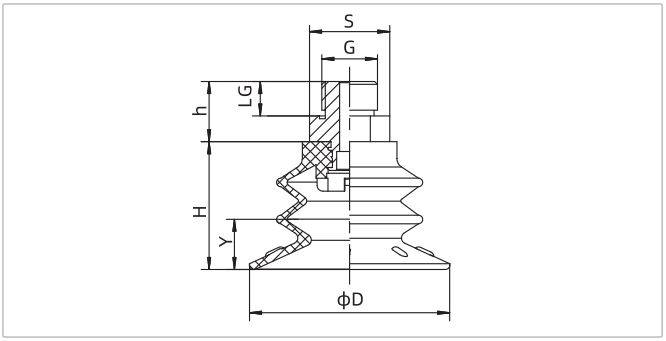
Cobot Care VAC

Size specifications (mm)



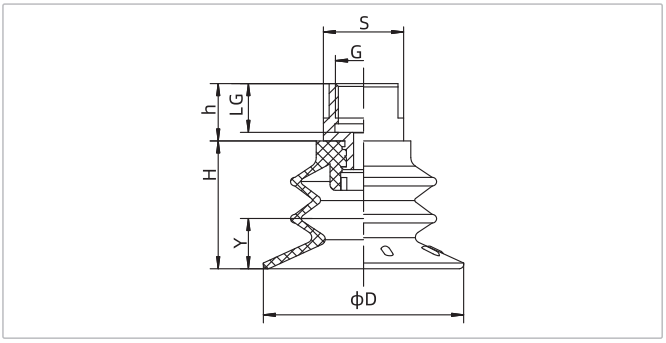
◇ BM25-63

Model/Size	D	H	A	d	d1	Y
CCV-BG-25	25	15.5	24	12	5	5.5
CCV-BG-31	35	22.3	33.4	16.5	5	8.4
CCV-BG-34	45	29.3	42.8	16.8	6.6	11.5
CCV-BG-41	55	36.3	52.4	27.5	10.5	12.9
CCV-BG-48	45	29.3	42.8	16.8	6.6	11.5
CCV-BG-63	55	36.3	52.4	27.5	10.5	12.9



◇ BM25-63 External spiral link

Model/Size	D	H	G	h	LG	S	Y
CCV-BG-25-male	25	15.5	G1/8	7.8	6	13	5.5
CCV-BG-31-male	35	22.3	G1/8	7.8	6	13	8.4
CCV-BG-34-male	29.3	G1/8	12	6	17	16	10.2
CCV-BG-31-male	36						
CCV-BG-48-male	55	36.3	G3/8	18	10	24	12.9
CCV-BG-61-male	55	36.3	G3/8	18	10	24	12.9



◇ BM25-63 Internal spiral link

Model/Size	D	H	G	h	LG	S	Y
CCV-BG-25-Internal teeth	25	15.5	G1/8	7.8	6	13	5.5
CCV-BG-31-Internal teeth	35	22.3	G1/8	7.8	6	13	8.4
CCV-BG-34-Internal teeth	29.3	G1/8	12	6	17	16	10.2
CCV-BG-31-Internal teeth	36						
CCV-BG-48-Internal teeth	55	36.3	G3/8	18	10	24	12.9
CCV-BG-61-Internal teeth	55	36.3	G3/8	18	10	24	12.9

BG SERIES

Ripple suction cup

Cobot Care VAC

carton | Injection molding | 3C Electronics

characteristic

- 1.5 fold corrugated suction cup, easy to adhere to workpieces with uneven surfaces, and has a certain buffering effect.
- Equipped with internal support structure
- Silicone material, high temperature resistance (≤ 200 ° C), food grade application
- Complete size specifications, suitable for workpieces of various sizes and shapes

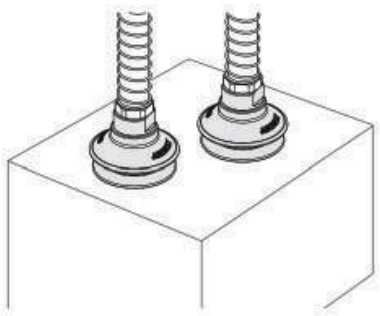


advantage

Strong compatibility | Energy saving and efficient | Long service life | Flexible installation

application

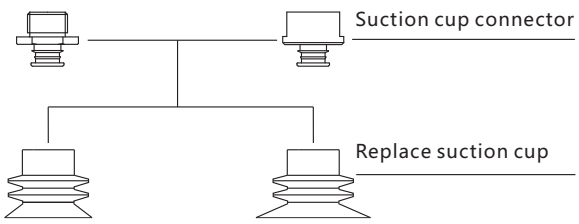
- **Automotive manufacturing**: Grasp metal parts with curved surfaces such as door inner panels and engine hood stamping parts.
- **Home appliance industry**: handling deep cavity components such as washing machine drums and air conditioning casings.
- **Metal processing**: sorting of sheet metal parts, loading and unloading of stamping molds.
- **Packaging logistics**: suitable for woven bags and soft bags with serious deformation (such as feed bags and foam boxes)
- **Electronics industry**: Non destructive handling of precision injection molded parts (such as phone frames).



structure

- Concentric circles/spiral grooves increase fit and gas sealing path
- Suction cup disc diameter ranging from 10mm to 50mm, with a separate structure design for suction cup and joint
- Suction cup joint with filter device
- Threaded hole/quick change connector, compatible with vacuum generator or vacuum pump pipelines

Within the same series, replacement suction cups and suction cup connectors can be combined according to requirements



BG SERIES

Ripple suction cup

Cobot Care VAC

Model specifications

CCV-BG-48-G3/8

① ② ③

① Product series	② Disk diameter	③ adaptor
BG	25mm 31mm 34mm 41mm 48mm 63mm	External teeth: G3/8 "G1/8 Internal teeth: G1/8

Selection specifications

model	External teeth: G3/8 "G1/8"	Internal teeth: G1/8 "
CCV-BG-25	BG25-G1/8	BG25-G1F
CCV-BG-31	BG31-G1/8	BG31-G1F
CCV-BG-34	BG34-G1/8	BG34-G1F
CCV-BG-41	BG41-G1/8、BG41-G3/8	BG41-G2F、BG41-G3F
CCV-BG-48	BG48-G1/8、BG48-G3/8	BG48-G1/8、BG48-G3/8
CCV-BG-63	BG63-G1/8、BG63-G3/8	BG63-G1/8、BG63-G3/8

performance parameter

Product model	Pull off force N	Internal volume cm3	Minimum curvature radius of workpiece mm	Single weight g	Recommended hose diameter mm	Minimum packaging pcs
CCV-BG-25	22	3	31	2	6	5
CCV-BG-31	`31	4	36	3.2	6	5
CCV-BG-34	43	6	42	4.8	6	5
CCV-BG-41	71	13	54	11	6	1
CCV-BG-48	89	18	59	14.3	6	1
CCV-BG-63	106	23	64	19.9	8	1

◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean. The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece. It is recommended to keep the vacuum tube as short as possible, with a length not exceeding 2m

BG SERIES

Ripple suction cup

Cobot Care VAC

carton | Injection molding | 3C Electronics

characteristic

- 2.5 fold corrugations, each layer of corrugations can deform independently, enhancing the fit
- The lips are soft and tapered, fitting snugly against irregular surfaces
- Made of lightweight materials such as silicone and polyurethane, suitable for high
- speed handling scenarios ◇ Complete size specifications

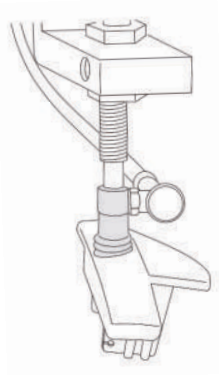


advantage

Strong compatibility | Energy saving and efficient | Long service life | Easy installation

application

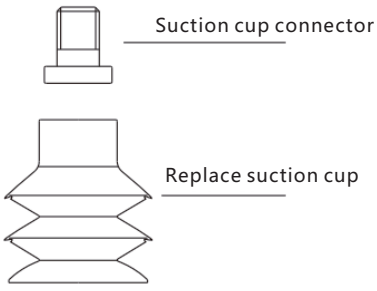
- **Industrial automation**: handling panels (such as solar panels), packaging boxes, automotive parts (interior parts, sheet metal)
- **Electronic Manufacturing**: Non destructive Grasping of Precision Components (Circuit Boards, Display Screens)
- **Logistics and warehousing**: sorting deformable items such as soft bags and woven bags
- **Food and medicine**: Sanitary suction cups are used for handling bottle caps and packaging boxes (in compliance with FDA standards)
- **Special environment**: High temperature workshop (heat-resistant silicone suction cup), clean room (anti-static design)



structure

- Concentric circles/spiral grooves increase fit and gas sealing path
- Silicone (high temperature resistant, food grade), polyurethane (wear-resistant, oil resistant), nitrile rubber (oil resistant)
- Metal or plastic reinforcement ring
- Threaded hole/quick change connector, compatible with vacuum generator or vacuum pump pipelines

Within the same series, replacement suction cups and suction cup connectors can be combined according to requirements



BG SERIES

Ripple suction cup

Cobot Care VAC

Model specifications

CCV-BG-48-G3/8

① ② ③

① Product series	② Disk diameter	③ adaptor
BG	25mm 31mm 34mm 41mm 48mm 63mm	male:G3/8"G1/8" Internal teeth:G1/8"

Selection specifications

model	male:G3/8"G1/8"	Internal teeth:G1/8"
CCV-BG-25	BG25-G1/8	BG25-G1F
CCV-BG-31	BG31-G1/8	BG31-G1F
CCV-BG-34	BG34-G1/8	BG34-G1F
CCV-BG-41	BG41-G1/8、BG41-G3/8	BG41-G2F、BG41-G3F
CCV-BG-48	BG48-G1/8、BG48-G3/8	BG48-G1/8、BG48-G3/8
CCV-BG-63	BG63-G1/8、BG63-G3/8	BG63-G1/8、BG63-G3/8

performance parameter

Product Model	Pull off force N	Internal volume cm3	Minimum curvature radius of workpiece mm	Single weight g	Recommended hose diameter mm	Minimum packaging pcs
CCV-BG-25	22	3	31	2	6	5
CCV-BG-31	`31	4	36	3.2	6	5
CCV-BG-34	43	6	42	4.8	6	5
CCV-BG-41	71	13	54	11	6	1
CCV-BG-48	89	18	59	14.3	6	1
CCV-BG-63	106	23	64	19.9	8	1

◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean. The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece. It is recommended to keep the vacuum tube as short as possible, with a length not exceeding 2m

BKSERIES

Cobot Care VAC

Special for film packaging bags - ultra-thin lip edge flat suction cup

plastic bag High sealing

characteristic

- Silicone rubber material: used for food grade, high temperature resistance, good chemical stability, soft and non damaging adsorption material
- Lightweight sealed lip edge
- Bottom with supporting structure

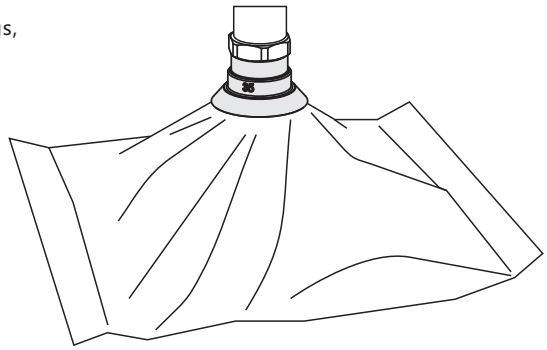


advantage

closely fit prevent wrinkles food-grade silicone Easy installation

application

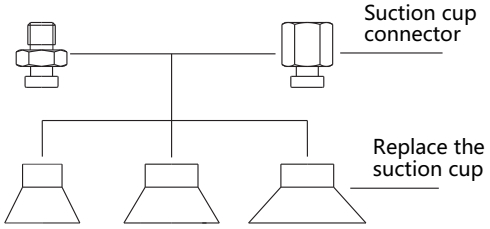
- **Food and beverage industry**: Grab standing bags of beverages, sauce bags, potato chip bags, biscuit bags, etc. for packing or arranging
- **Pharmaceutical and Medical Device Industry:** Capture breathable film packaging for sterile medical devices, aluminum-plastic blister packs for tablets, infusion bags, etc
- **Daily chemical industry:** upright bags for shampoo and laundry detergent, wet towel bags, facial mask bags, etc
- **Electronics industry**: anti-static shielding bags for absorbing and protecting chips and components
- **Logistics and postal sorting**: sorting flat envelopes, document bags, and small plastic packages



Structure

- Suction cup body: The main body is flat disc-shaped, with an extremely thin thickness. There is a quick plug interface in the center for connecting vacuum generators or pipelines.
- Lips: A very thin and soft fan-shaped or sloping structure that surrounds the outer edge of the suction cup.
- Internal channel: The central ventilation duct is used to introduce vacuum (negative pressure).
- Support ribs/reinforcement ribs: In some larger diameter flat suction cups, there may be slight reinforcement rib designs inside to prevent excessive deformation or collapse of the suction cup under high pressure, while maintaining its ultra-thin characteristics.

Within the same series, replacement suction cups and suction cup connectors can be combined according to requirements



BKSERIES

Special for film packaging bags - ultra-thin lip edge flat suction cup

Cobot Care VAC

Model

CCV-BK-18-M5

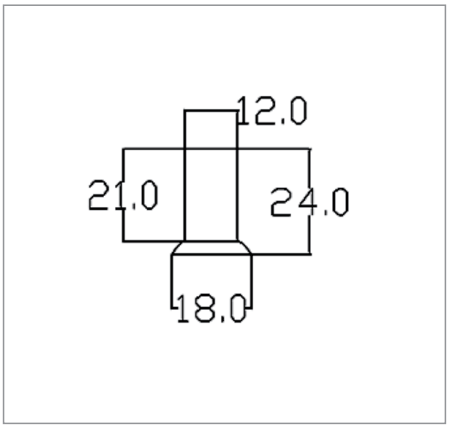
① ② ③

① Product Series	② Suction cup size	③ External tooth joint size
BK	18mm 26mm 33mm	M5 M1/8

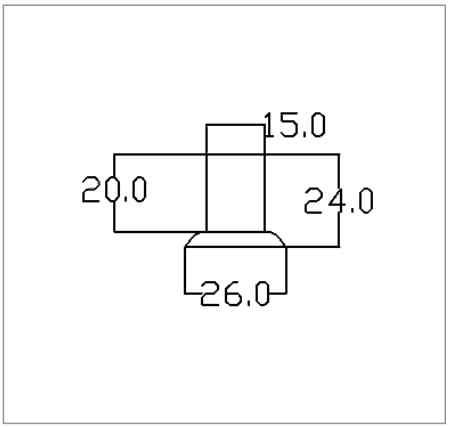
Connection specifications

model	External tooth joint size
CCV-BK-18	BK18-G1/8 M5
CCV-BK-26	BK26-G1/8 M5
CCV-BK-33	BK33-G1/8 M5

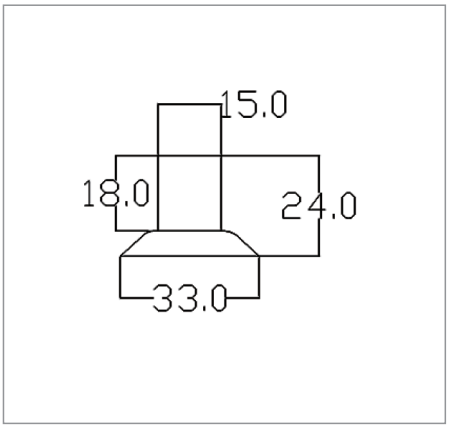
Size specification (mm) - individual suction cup



CCV-BK-18



CCV-BK-26



CCV-BK-33

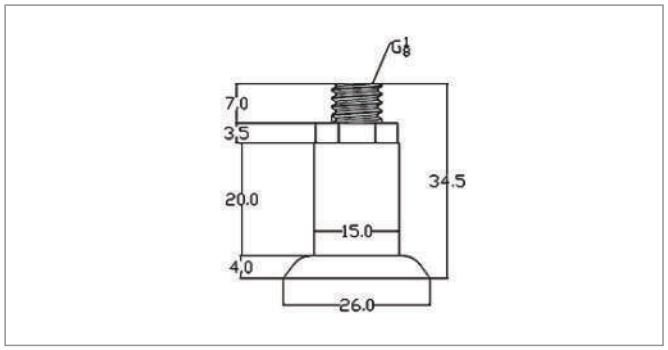
Model/Size	D	H	d	Y
CCV-BK-18-external thread	18	24	13	1.6
CCV-BK-26-external thread	26	24	14	2
CCV-BK-33-external thread	33	24	20	3

BKSERIES

Special for film packaging bags - ultra-thin lip edge flat suction cup

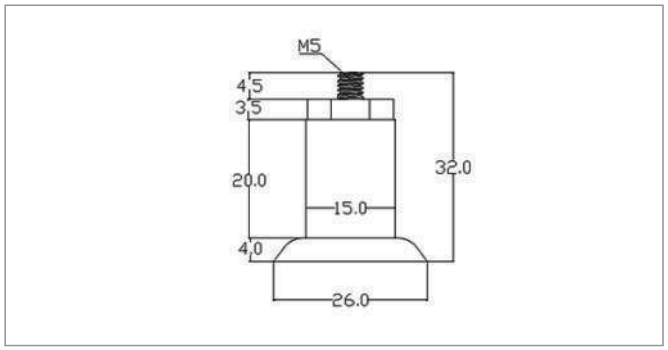
Cobot Care VAC

Size specification (mm) - Suction cup with connector



CCV-BK-26-G1/8External spiral joint

Model/Size	D	H	h	G	LG	d
CCV-BK-18-external thread	18	34.5	5	G1/8	12	13
CCV-BK-26-external thread	26	34.5	5	G1/8	12	14
CCV-BK-33-external thread	33	34.5	5	G1/8	12	20



CCV-BK-26-M5External spiral joint

型号 / 尺寸	D	H	h	G	LG	d
CCV-BK-18-external thread	18	32.5	5	M5	12	13
CCV-BK-26-external thread	26	32.5	5	M5	12	14
CCV-BK-33-external thread	33	32.5	5	M5	12	20

Accessory selection specifications

name	Model: External thread	Model internal thread	Suitable for suction cups
Suction cup connectorCCV-BK	18		18
	26		26
	33		33

VFSERIES

Universal Flat Suction Cup

Cobot Care VAC



Universal

Features

- Multiple material options available to suit various working environments
- Anti-slip pattern design enhances friction on contact surfaces
- Low overall height and small internal volume facilitate rapid vacuum establishment and release
- Comprehensive range of sizes available



Advantages



High Stability



Wear and Oil Resistance



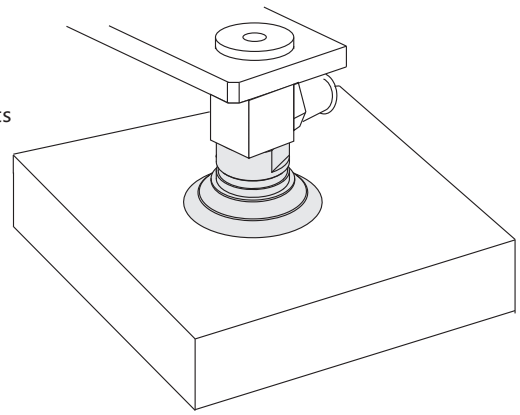
Rapid Response



Superior Sealing

Applications

- **Metal Processing**: Handling steel plates of various materials and drawn extrusions
- **Packaging & Logistics**: Gripping cardboard boxes and plastic components
- **Electronics and Semiconductors**: Optional ESD-safe suction cups for precision tasks like chip mounting and component handling, preventing static discharge damage to sensitive components
- **Automotive Manufacturing**: Handling and securing body parts and injection molds
- **Woodworking**: Moving wooden panels

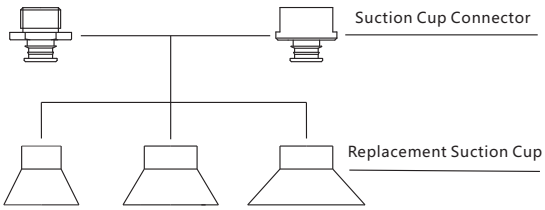


Structure

- Separate suction cup and connector design allows for individual replacement of wear parts.
- Suction cups with diameters between 50-150mm can be equipped with contact-type sensing valves to prevent accidental vacuum leaks.

- Note: For contact-type sensing valve selection, refer to the spring force specifications and recommended buffer rod combinations listed on the following pages.

Within the same series, replacement suction cups and suction cup connectors can be combined as required.



VFSERIES
Universal Flat Suction Cup

Cobot Care VAC

Model Specifications

CCV-VF40-N-M1/8

① ② ③ ④

① Product Series	② Dimensions		③ Suction Cup Material	④ Compatible Connectors
VF	15 - ϕ15mm	50 - ϕ50mm	55 N-Nitrile Rubber	M: G1/8 Male Thread
	20 - ϕ20mm	75 - ϕ75mm	50 S -Silicone Rubber	M: G3/8 Male Thread
	25 - ϕ25mm	110 - ϕ110mm		F: G1/8 Female Thread
	30 - ϕ30mm			F: G3/8 Female Thread
	40 - ϕ40mm			

Product Specifications

MODEL	Connection Specifications M-Male Thread	F-Female Thread
VF15	VF15-M:G1/8	-
VF20	VF20-M:G1/8	VF20-F:G1/8
VF25	VF25-M:G1/8	VF25-F:G1/8
VF30	VF30-M:G1/8	VF30-F:G1/8
VF40	VF40-M:G1/8	VF40-F:G1/8
VF50	VF50-M:G1/8	VF50-F:G1/8
VF75	-	VF75-F:G3/8
VF110	-	VF110-F:G3/8

Performance Parameters

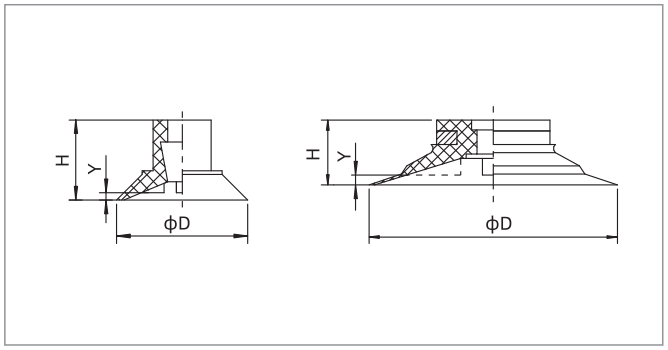
Product Model	Pull-off ForceN	Internal Volume cm³	Unit Weight	Recommended Hose Diametermm	Minimum Packagingpcs
VF15	8	0.5	0.7	6	10
VF20	14.5	0.8	1.4	6	5
VF25	22	1.2	1.8	6	5
VF30	32	1.5	2.6	6	5
VF40	60	3	5.2	6	5
VF50	88	7	11.5	6	1
VF75	200	20	47.2	8	1
VF110	430	60	116	10	1

◇ Note: Vacuum level measured at -60 kPa. Workpiece surface must be smooth and clean. The pull-off force data above does not include a safety factor. Values may vary depending on the condition of the workpiece surface. Vacuum tubes should be kept as short as possible, not exceeding 2 meters in length.

VFSERIES
Universal Flat Suction Cup

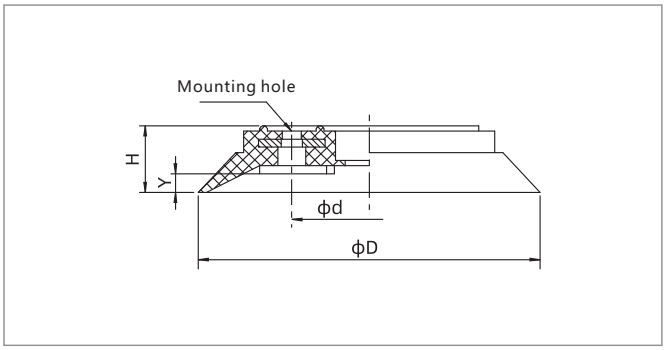
Cobot Care VAC

Dimensions (mm) - Single Suction Cup



VF15 VF20-50

Model/Size	D	H	Y
VF15	16.5	11	0.8
VF20	22	8	1
VF25	27	9	1
VF30	32	10	1.2
VF40	42	13	1.2
VF50	53	17.5	3.2

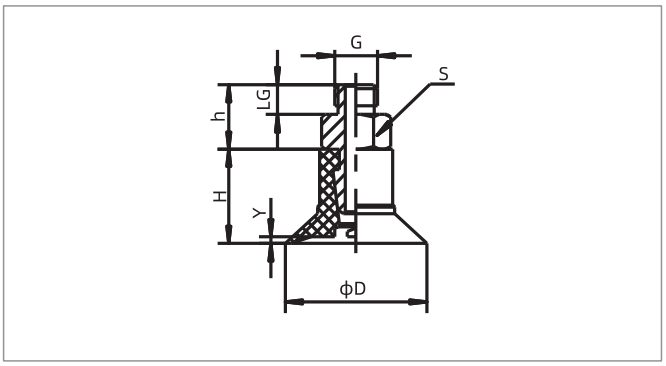


VF75-110

Model/Size	D	H	d	Y	Mounting hole
VF75	77	13	35	4	4-ϕ6
VF110	112	20	55	6	8-ϕ6

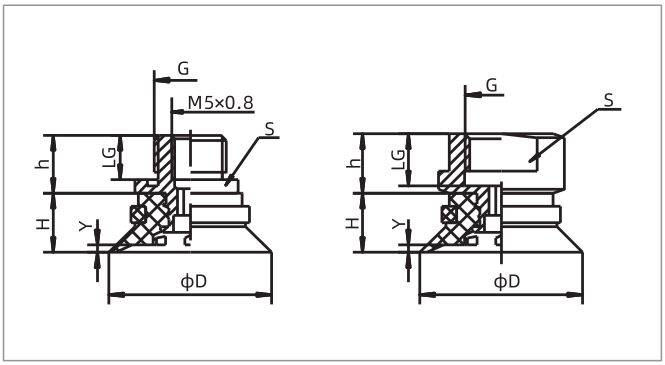
◇ Note: Dimensional tolerances comply with the requirements specified in GB/T 3672.
1-2002-1M3 Standard for Dimensional Tolerances of Rubber Products.

Dimensions (mm) - Suction Cup with Connector



Vf15 External Thread Connection

Model/Size	D	H	G	LG	h	S	Y
VF15MG1/8	16.5	11	G1/8	3.5	7.5	7	0.8



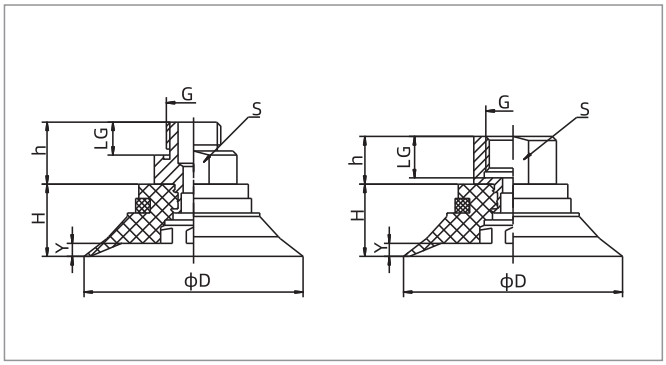
Vf20-30 External Thread Connection Vf20-30 Female Thread Connection

Model/Size	D	H	G	LG	h	S	Y
VF20-MG1/8	22	8	G1/8	6	7.8	13	1
VF20-FG1/8	22	8	G1/8	7	8	13	1
VF25-MG1/8	27	9	G1/8	6	7.8	13	1
VF25-FG1/8	27	9	G1/8	7	8	13	1
VF30-MG1/8	32	10	G1/8	6	7.8	13	1.2
VF30-FG1/8	32	10	G1/8	7	8	13	1.2

VFSERIES
Universal Flat Suction Cup

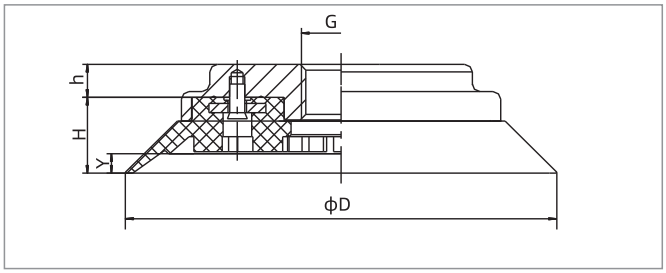
Cobot Care VAC

Dimensions (mm) - Suction Cup with Connector



VF40-50External thread connection VF40-50Internal thread connection

Model/Size	D	H	G	LG	h	S	Y
VF40-MG1/8	42	13	G1/8	6	12	17	1.2
VF40-FG1/8	42	13	G1/8	7	10	17	1.2
VF50-MG1/8	53	17.5	G1/8	9	17	24	3.2
VF50-FG1/8	53	17.5	G1/8	10	13	24	3.2



VF75-110Internal thread connection

Model/Size	D	H	G	h	Y
VF75-FG3/8	77	13	G3/8	13	4
VF110-FG3/8	112	20	G3/8	9	6

VBSERIES

Universal Corrugated Chuck

Cobot Care VAC

Universal

Features

- Flexible corrugated body with 1.5-fold design. When handling workpieces with inclined surfaces or varying heights, this corrugation provides height compensation to ensure effective simultaneous suction across multiple suction cups.
- Soft sealing lip that tightly conforms to various uneven surfaces.
- Complete range of sizes available.

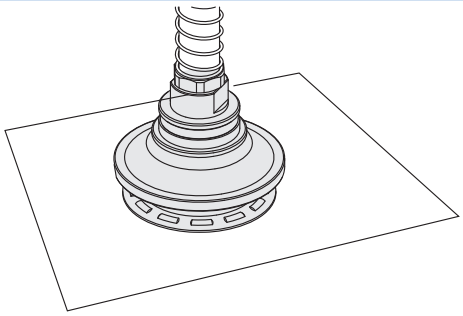


Advantages

Highly adaptable | Gentle gripping | Excellent dynamic stability | Prevents workpiece deformation

Applications

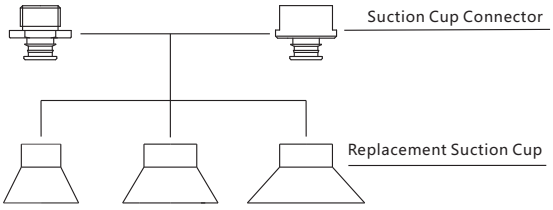
- **Automotive Manufacturing:** Handling metal body panels and stamped parts
- **Packaging Industry:** Handling cartons, plastic packaging bags, aluminum foil/thermoplastic packaging products
- **Electronics Industry:** Handling electronic components and circuit boards
- **Other:** Handling plastic parts, wooden boards, etc.



Structure

- 1.5-fold corrugated structure design for extended compression stroke
- Separate suction cup and connector design allows individual replacement of wear parts

Within the same series, replacement suction cups and suction cup connectors can be combined as required.



Model Specifications

CCV-VB40-N-M1/8

① ② ③ ④

① Product Series	② Dimensions			③ Suction Cup Material	④ Compatible Connectors
VB	5 - ϕ5mm	20 - ϕ20mm	75 - ϕ75mm	55 N-Nitrile Rubber	M: G1/8 Male Thread
	8 - ϕ8mm	30 - ϕ30mm	110 - ϕ110mm	50 S -Silicone Rubber	M: G3/8 Male Thread
	10 - ϕ10mm	40 - ϕ40mm	150 - ϕ150mm		F: G1/8 Female Thread
	12 - ϕ12mm	50 - ϕ50mm			F: G3/8 Female Thread

VBSERIES

Universal Corrugated Chuck

Cobot Care VAC

Model Specifications

MODEL	Connection Specifications M-Male Thread	F-Female Thread
VB5	VB5-G1/8	-
VB8	VB8-G1/8	-
VB10	VB10-G1/8	-
VB12	VB12-G1/8	-
VB20	VB20-G1/8	VB20-G1/8
VB30	VB30-G1/8	VB30-G1/8
VB40	VB40-G1/8	VB40-G1/8
VB50	VB50-G1/8	VB50-G1/8
VB75	-	VB75-G3/8
VB110	-	VB110-G3/8
VB150	-	VB150-G3/8

Performance Parameters

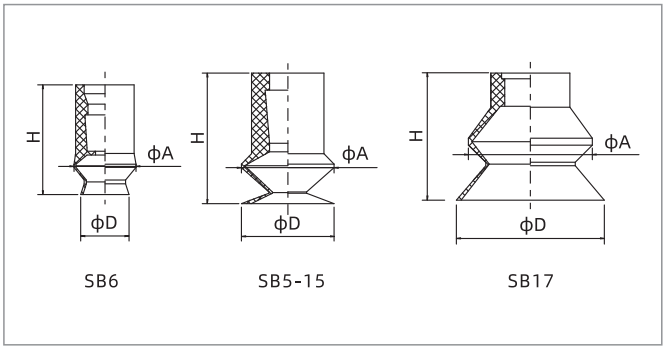
Product Model	Pull-off Force N	Internal Volume cm^3	Minimum Workpiece Curvature Radius mm	Unit Weight G	Recommended Hose Diameter mm	Minimum Packaging pcs
VB5	0.8	<0.1	8	0.3	4	10
VB6	1.2	<0.1	8	0.5	4	10
VB8	2.1	<0.1	10	0.4	4	10
VB10	3.2	0.4	12	0.9	4	10
VB12	4.7	0.5	15	1.5	6	10
VB15	7.4	0.8	20	1.5	6	10
VB17	9.5	1.1	25	1	6	10
VB20	18	1.2	30	3	6	5
VB30	33	14	35	7.5	6	5
VB40	60	18	50	13	6	5
VB50	92	26	80	24	8	1
VB75	210	96	60	68	8	1
VB110	412	314	120	178	12	1
VB150	740	798	160	439.5	12	1

◇ Note: Vacuum level measured at -60 kPa. Workpiece surface must be smooth and clean. The pull-off force data above does not include a safety factor. Values may vary depending on the condition of the workpiece surface. Vacuum tubes should be kept as short as possible, not exceeding 2 meters in length.

VBSERIES
Universal Corrugated Chuck

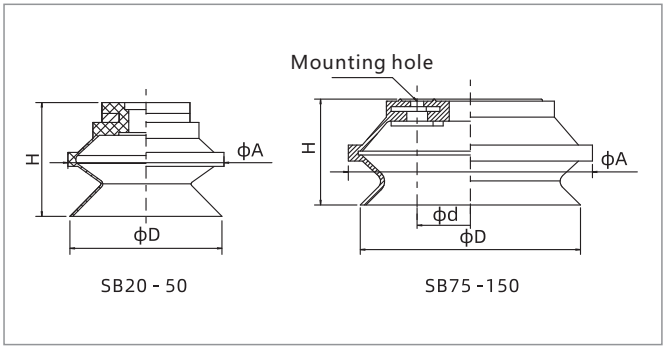
Cobot Care VAC

Dimensions (mm) - Single Suction Cup



VB5-17

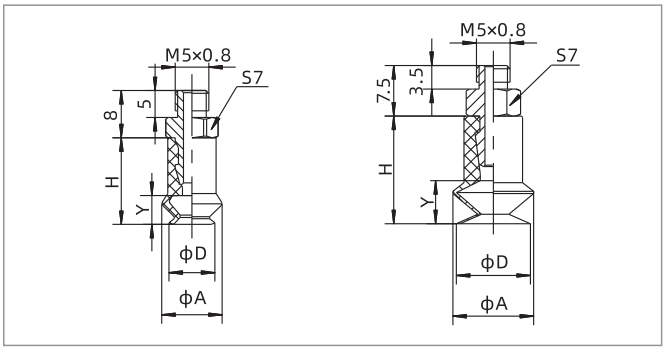
Model/Size	D	A	H
VB5	5.8	6.2	9.2
VB6	7	9	13.5
VB8	8.8	9.6	11.9
VB10	11	12	16
VB12	12	14	16.5
VB15	17.5	17.5	19.5
VB17	18.5	16.6	15.6



VB20-150

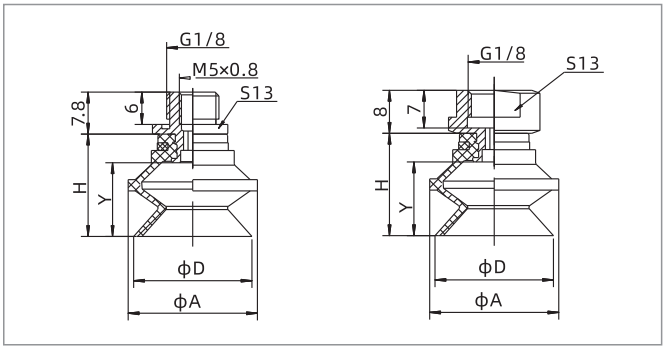
Model/Size	D	A	H	d	Mounting hole
VB20	22	24	19	-	-
VB30	34	36	26	-	-
VB40	43	46	28	-	-
VB50	53	58	35	-	-
VB75	78	83	37	35	4-ϕ6
VB110	115	124	54	55	8-ϕ6
VB150	155	166	71	70.5	8-ϕ6

Dimensions (mm) - Suction Cup with Connector



VB6 VB6-15-M

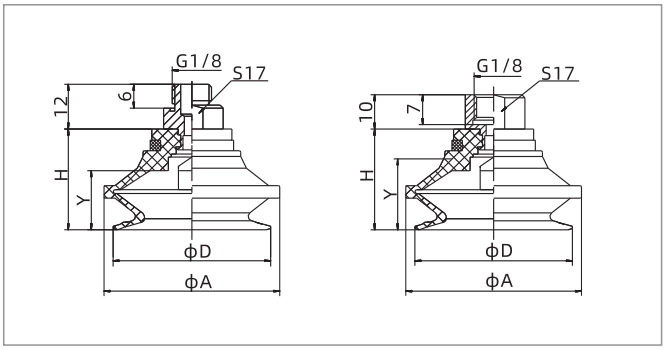
Model/Size	D	A	H	Y
VB5-MG1/8	5.8	6.2	9.2	3.6
VB6-MG1/8	7	9	13.5	4.5
VB8-MG1/8	8.8	9.6	11.9	6.5
VB10-MG1/8	11	12	16	7
VB12-MG1/8	12	14	16.5	5.5
VB15-MG1/8	15.5	17.5	19.5	10



VB17-20-M VB17-20-F

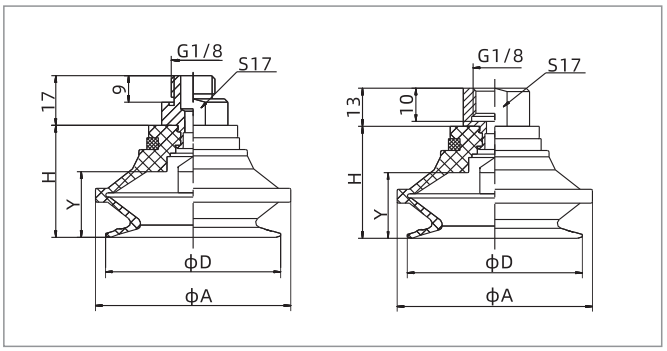
Model/Size	D	A	H	Y
VB17-MG1/8	18.5	16.6	15.6	10.5
VB17-FG1/8	18.5	16.6	15.6	10.5
VB20-MG1/8	22	24	19	9
VB20-FG1/8	22	24	19	9

Dimensions (mm) - Suction Cup with Connector



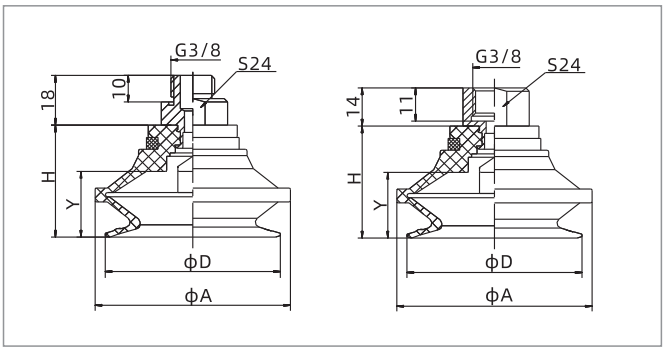
VB30-40-M VB30-40-F

Model/Size	D	A	H	Y
VB30-MG1/8	34	36	26	19
VB30-FG1/8	34	36	26	19
VB40-MG1/8	43	46	28	20
VB40-FG1/8	43	46	28	20



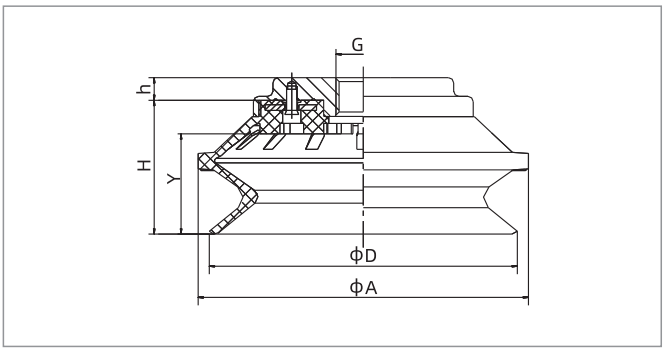
VB50-M VB50-F

Model/Size	D	A	H	Y
VB50-MG1/8	53	58	35	20
VB50-FG1/8	53	58	35	20



VB50-M VB50-F

Model/Size	D	A	H	Y
VB50-MG3/8	53	58	35	20
VB50-FG3/8	53	58	35	20



VB75-150

Model/Size	D	A	H	h	G	Y
VB75-FG3/8	78	83	37	13	G3/8	27
VB110-FG3/8	115	124	54	9	G3/8	38.5
VB150-FG3/8	155	166	71	10	G3/8	44.5

◇ Note: Dimensional tolerances comply with the requirements specified in GB/T 3672.1-2002-1M3 Standard for Dimensional Tolerances of Rubber Products.

ZPSERIES

Heavy-duty flat suction cup



metal sheet wooden plank Heavy-duty

Cobot Care VAC

Features

- Large support structure at the base
- Flat design with minimal
- Compression stroke
- Modular design
- Complete range of sizes



Advantages



Strong holding force



High load capacity



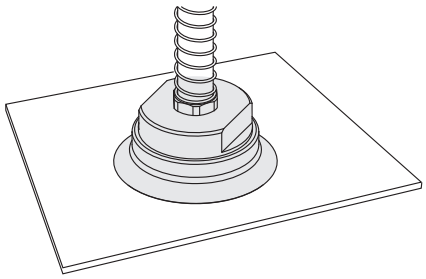
Stable and controllable



Suitable for heavy-duty, high-speed operations

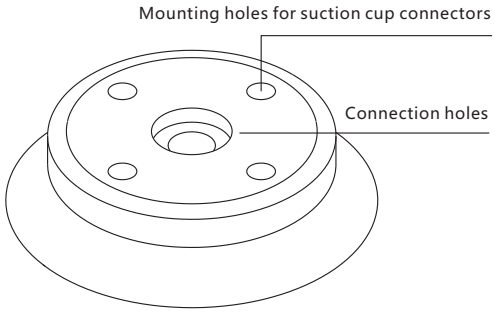
Applications

- **Automotive Manufacturing**: Handling metal body panels and stamped parts
- **Metalworking and Sheet Metal Industry**: Metal sheet handling is another key application area, particularly well-suited for automated production lines
- **Glass Processing and Construction Industry**: Capable of safely and carefully handling large-format glass panels
- **New Energy Industry**: Handling batteries, sheet metal panels, and other components



Structure

- The rubber components are mounted together with a sturdy mounting plate to ensure the structural integrity of the assembly, while the mounting fittings are connected to it via threads.



ZPSERIES

Heavy-duty flat suction cup

Cobot Care VAC

Model and Specifications

CCV-ZP-H-10

① ② ③

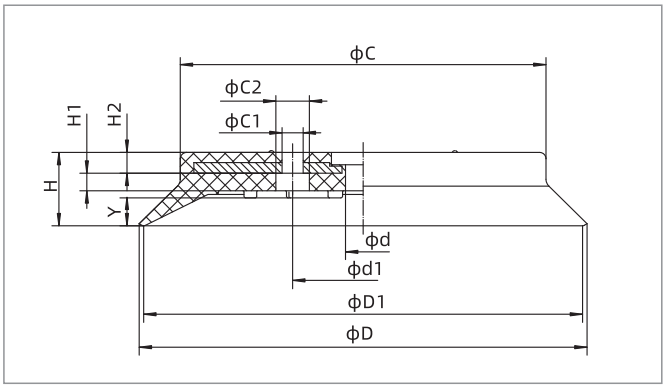
① Product Line	② Number of suction cup layers	③ Suction cup diameter
ZP	Single-story	64mm 82mm 100mm 128mm

Performance Specifications

Product Model	Pull-off Force N	Internal Volume cm^3	Unit Weight g	Recommended Hose Diameter (mm)	Minimum Order Quantity (pcs)
ZP64	140	11.5	47.9	8	1
ZP82	226	24	75.4	8	1
ZP100	353	55	149.7	10	1
ZP128	552	85	263.6	10	1

◇ Note: Vacuum level measured at -60 kPa; workpiece surface is smooth and clean. The pull-off force data above does not include a safety factor.
Values may vary depending on the condition of the workpiece surface. It is recommended that the vacuum tubing be as short as possible, with a maximum length of 2 m.

Dimensions (mm)



ZP64-128

Model/Size	D	D1	d	d1	H	H1	H2	C	C1	C2	Y
ZP64	65	63	8	34	14.5	4.5	4.5	51	4-ϕ5	4-ϕ8	3.5
ZP82	82	80	8	34	16.5	4.5	4.5	68	4-ϕ5	4-ϕ8	4.5
ZP100	103	100	10	40	21	5	6	80	4-ϕ6	4-ϕ9.5	7.5
ZP128	127	125	10	40	21	5	6	104	4-ϕ6	4-ϕ9.5	7.5

◇ Note: Dimensional tolerances comply with the requirements of GB/T 3672.1-2002, "Dimensional Tolerances for M3 Rubber Products."

ZPSERIES

Vacuum suction cup + mounting bracket

Cobot Care VAC



metal sheet wooden plank Heavy-duty

Features

- The product consists of a vacuum suction cup and a mounting rod, and is available in three connection configurations:
- Figure 1: Vertical air intake, female threaded connection
- Figure 2: Vertical air intake, male threaded connection
- Figure 3: Horizontal air intake, female threaded connection



Figure 1 Figure 2 Figure 3

Model and Specifications

CCV-ZPT- LR1 - M10F

① ② ③ ④

① Product Line	② Mounting threaded hole	③ Vacuum port direction	④ Connection Specifications
ZPT	M10X1.5	Blank: Vertical orientation, female thread connection R1: Vertical orientation, male thread connectionL R1: Horizontal orientation, female thread connection	M10F: M10x1.5internal thread M12F: M12x1.75internal thread G2F: G1/4internal thread G3F: G3/8internal thread M14M: M14x1male thread M16M: M16x1.5male thread

Model and Specifications

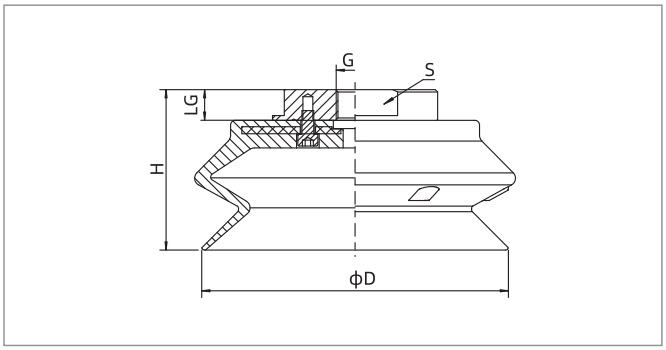
Model	Vacuum port direction Blank		R1	LR1
ZPT64	ZP64T-M10F	ZP64T-G2F	ZP64T-R1-M16M	ZP64T-LR1-M10F
ZPT82	ZP82T-M10F	ZP82T-G2F	ZP82T-R1-M16M	ZP82T-LR1-M10F
ZPT100	ZP100T-M12F	ZP100T-G3F	ZP100T-R1-M16M	ZP100T-LR1-M10F
ZPT128	ZP128T-M12F	ZP128T-G3F	ZP128T-R1-M16M	ZP128T-LR1-M10F

ZPSERIES

Vacuum suction cup + mounting bracket

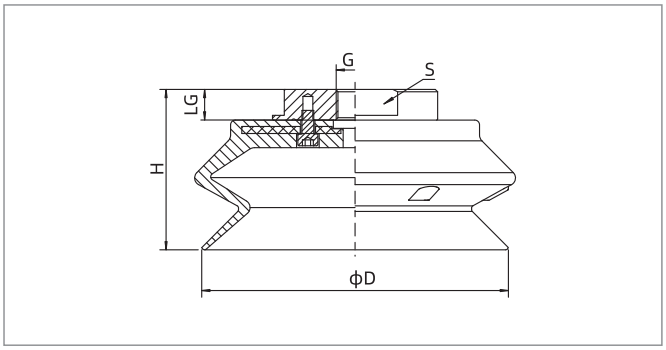
Cobot Care VAC

Dimensions (mm)



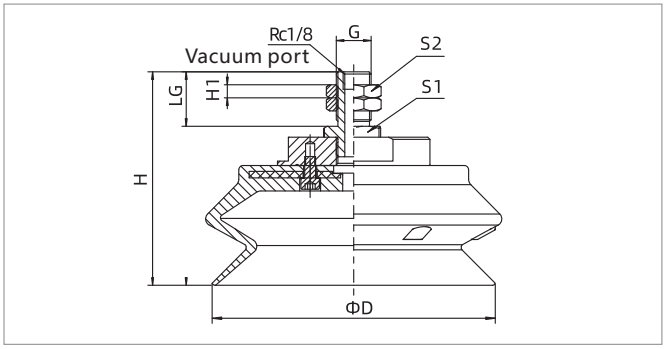
Zpt64-128Vertical orientation, female threaded connection

Model/Size	D	H	G	LG	S
ZP64-G2F	65	43	G1/4	11.5	37
ZP82-G2F	83	48.5	G1/4	11.5	37
ZP100-G3F	103	60.5	G3/8	13	60
ZP128-G3F	128.5	69	G3/8	13	60



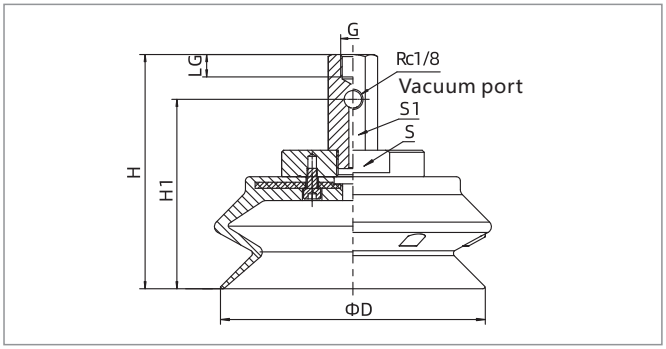
Zpt64-128Vertical orientation, female threaded connection

Model/Size	D	H	G	LG	S
ZP64-M10F	65	43	M10×1.5	11.5	37
ZP82-M10F	83	48.5	M10×1.5	11.5	37
ZP100-M12F	103	60.5	M12×1.75	13	60
ZP128-M12F	128.5	69	M12×1.75	13	60



Zpt64-128Vertical orientation, external threaded connection

Model/Size	D	H	H1	G	LG	S1	S2
ZP64-R1-M16M	65	73	6	M16×1.5	25	24	22
ZP82-R1-M16M	83	78.5	6	M16×1.5	25	24	22
ZP100-R1-M16M	103	90.5	6	M16×1.5	25	24	22
ZP128-R1-M16M	128.5	99	6	M16×1.5	25	24	22



Zpt64-128Horizontal, female threaded connection

Model/Size	D	H	H1	G	LG	S	S1
ZP64-LR1-M10F	65	80	58	M10×1.5	11	37	21
ZP82-LR1-M10F	83	85.5	63.5	M10×1.5	11	37	21
ZP100-LR1-M10F	103	97.5	75.5	M10×1.5	11	60	21
ZP128-LR1-M10F	128.5	106	84	M10×1.5	11	60	21

SAFSERIES

Flat suction cup


metal sheet


slip resistance


Oily surface

Cobot Care VAC

characteristic

- Sturdy and wear-resistant, made of nitrile rubber material, with a single sealing lip, special groove, and internal support
- Suction cup and connection joint vulcanized connection (extremely strong)
- Suction cups with various connection methods
- Available in two material hardness options (45 Shore, 60 Shore)



advantage


Adaptable

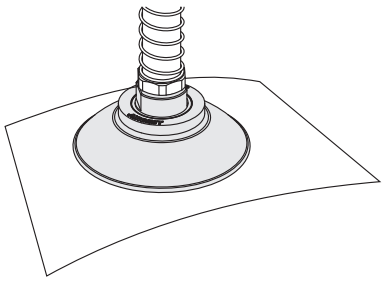

Seamless grasping


High dynamic stability


Prevent workpiece deformation

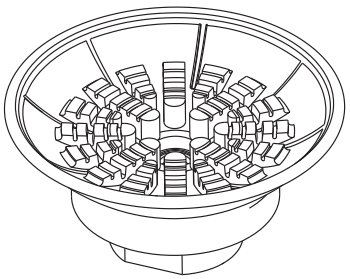
application

- Moving metal sheet metal parts with oil on the surface
- Transporting metal sheets and aluminum plates will not cause deformation
- Used for the handling of loading and unloading materials during CNC or machine tool processing
- Handling metal sheet metal with slight curvature and curvature on the surface
- Used for transporting automotive stamped metal parts



structure

- Integrated structure design of suction cup and joint
- Joint material: Aluminum



Model

CCV-SAF-30-G

① ② ③

① Product Series	② Dimensions	③ Screw thread interface
SAF	30mm 40mm 50mm 60mm 80mm 100mm 125mm	F: G1/4 internal thread F: G3/8 internal thread M: G1/4 external thread M:M10x1.5 external thread M: M14x1.5 external thread

SAFSERIES

Flat suction cup

Cobot Care VAC

Selection specifications (mm)

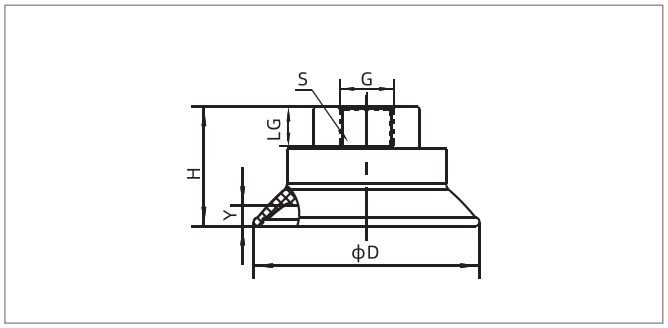
model	Connection specifications F:G1/4	F:G3/8	M:G1/4	M:M10x1.5	M:M10x1.5
SAF30	SAF30-G1/4	SAF30-G3/8	SAF30-G1/4	SAF30-M10X1.5	SAF30-M14X1.5
SAF40	SAF40-G1/4	SAF40-G3/8	SAF40-G1/4	SAF40-M10X1.5	SAF40-M14X1.5
ZPT50	SAF50-G1/4	SAF50-G3/8	SAF50-G1/4	SAF50-M10X1.5	SAF50-M14X1.5
SAF60	SAF60-G1/4	SAF60-G3/8	SAF60-G1/4	SAF60-M10X1.5	SAF60-M14X1.5
SAF80	SAF80-G1/4	SAF80-G3/8	SAF80-G1/4	SAF80-M10X1.5	SAF80-M14X1.5
SAF100	SAF100-G1/4	SAF100-G3/8	SAF100-G1/4	SAF100-M10X1.5	SAF100-M14X1.5
SAF125	SAF125-G1/4	SAF125-G3/8	SAF125-G1/4	SAF125-M10X1.5	SAF125-M14X1.5

performance parameters

model	Vertical pull out force N	Lateral pull out force N	Lateral pull-out forceoily surface N	Internal volume cm^3	Minimum curvature radius of workpiece mm	Single weight g	Recommended hose diameter mm	Minimum packaging pcs
SAF30	45	35	33	1.6	35	11	6	1
SAF40	72	54	51	3.5	47.5	13	6	1
ZPT50	112	90	86	7.5	70	20	8	1
SAF60	145	102	93	12.6	81	26	8	1
SAF80	288	212	190	35	115	43	8	1
SAF100	445	322	308	60	141	57	8	1
SAF125	660	475	400	115	165	145	10	1

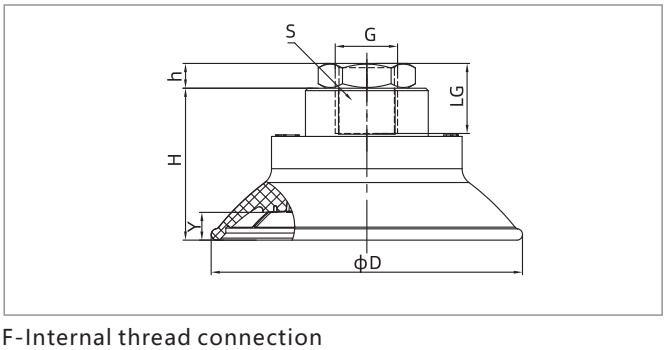
◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean. The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.

Dimensions (mm)



F-Internal thread connection

Model/Size	D	H	G	LG	S	Y
SAF30-G1/4	32	19.5	G1/4	11	17	2.7
SAF40-G1/4	42	22	G1/4	11	17	3.4
SAF50-G3/8	52	28	G3/8	13	22	4.7
SAF60-G3/8	62.5	31	G3/8	13	22	6
SAF80-G3/8	83	34.5	G3/8	13	22	6
SAF100-G3/8	102	36.5	G3/8	13	22	9.2
SAF125-G3/8	128	43	G3/8	13	22	12.5



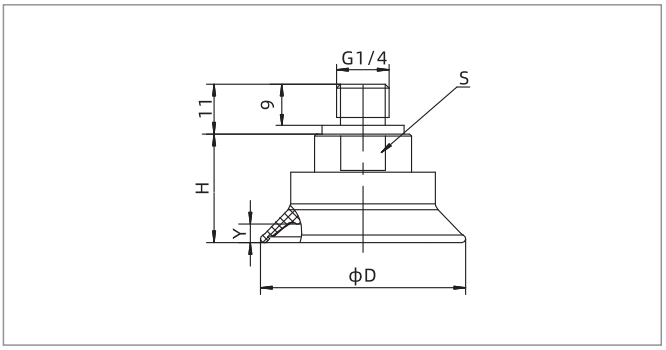
F-Internal thread connection

Model/Size	D	H	G	h	LG	S	Y
SAF30-G1/4	32	19.5	G3/8	14	11	22	2.7
SAF40-G1/4	42	22	G3/8	14	11	22	3.4
SAF50-G3/8	52	28	G1/4	5	13	19	4.7
SAF60-G3/8	62.5	31	G1/4	5	13	19	6
SAF80-G3/8	83	34.5	G1/4	5	13	19	6
SAF100-G3/8	102	36.5	G1/4	5	13	19	9.2
SAF125-G3/8	128	43	G1/4	5	13	19	12.5

SAFSERIES
Flat suction cup

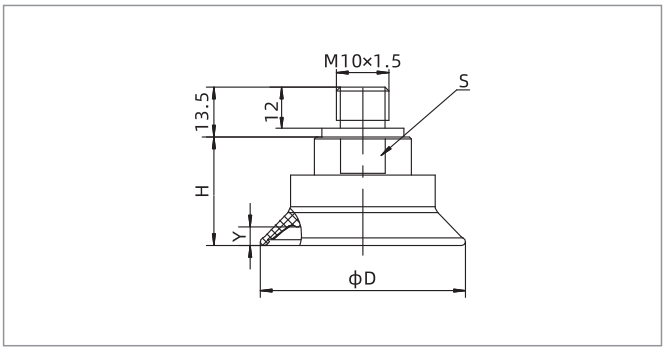
Cobot Care VAC

Dimensions (mm)



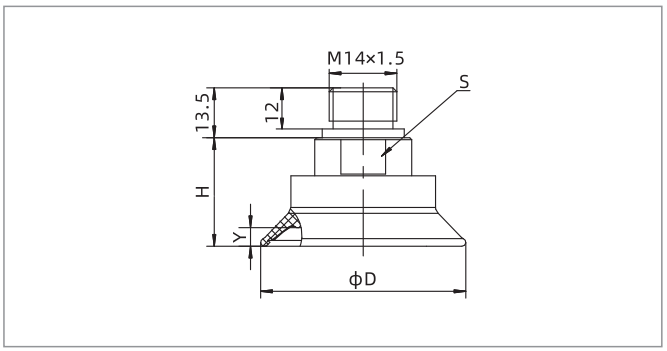
M-External thread connection

Model/Size	D	H	s	Y
SAF30-G1/4	32	19.5	17	2.7
SAF40-G1/4	42	22	17	3.7
SAF50-G1/4	52	28	22	4.7
SAF60-G1/4	62.5	31	22	6
SAF80-G1/4	83	34.5	22	6
SAF100-G1/4	102	36.5	22	9.2
SAF125-G1/4	128	43	22	12.5



M-External thread connection

Model/Size	D	H	s	Y
SAF30-M10X1.5	32	19.5	17	2.7
SAF40-M10X1.5	42	22	17	3.7
SAF50-M10X1.5	52	28	22	4.7
SAF60-M10X1.5	62.5	31	22	6
SAF80-M14X1.5	83	34.5	22	6
SAF100-M10X1.5	102	36.5	22	9.2
SAF125-M10X1.5	128	43	22	12.5



M-External thread connection

Model/Size	D	H	s	Y
SAF30-M14X1.5	32	19.5	17	2.7
SAF40-M14X1.5	42	22	17	3.7
SAF50-M14X1.5	52	28	22	4.7
SAF60-M14X1.5	62.5	31	22	6
SAF80-M14X1.5	83	34.5	22	6
SAF100-M14X1.5	102	36.5	22	9.2
SAF125-M14X1.5	128	43	22	12.5

◇ Note: The dimensional tolerance complies with the requirements of GBT3672.1-2002-1M3 Rubber Product Dimensional Tolerance Standard.

SABSERIES

Cobot Care VAC

Special 1.5 fold corrugated suction cup for metal sheet



metal sheet　slip resistance　Oily surface

characteristic

- Material: NBR (nitrile rubber) with a single sealing lip, special groove, and internal support
- Suction cup and connection joint vulcanized connection (extremely strong)
- 1.5 fold corrugation, consisting of a rigid upper section and a flexible lower section, balancing rigidity and flexibility
- Complete size specifications



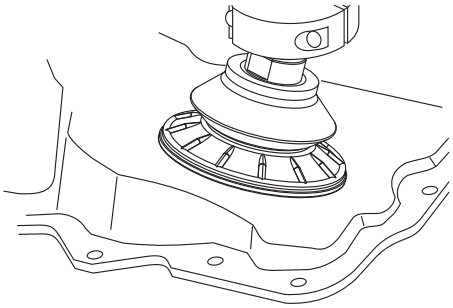
优势



Anti slip positioning accuracy　Seamless grasping　Dynamic stability and resistance to lateral forces　Anti deformation without damaging the board

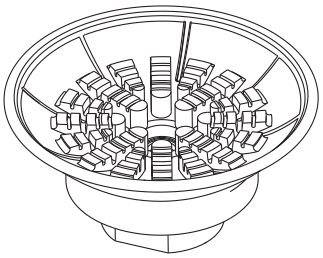
application

- **Automotive manufacturing (core)**: handling of stamping lines/body parts/ welding/painting and other workpieces, adapting to curved surfaces
- **Metal processing/sheet metal**: laser cutting/bending: sheet metal loading and unloading, anti scratch and anti deformation
- **Home appliances/3C**: Home appliances/3C: Handling of thin aluminum/ galvanized sheets such as refrigerator/air conditioner casings and mobile phone middle panels.
- **Other**: Handling of metal coated panels, aluminum foil rolls, and ultra-thin photovoltaic aluminum/back panels



structure

- 1.5 fold corrugated structure design, large compression stroke
- Suction cup and joint integrated structural design



Model

CCV-SAB-30-G

① ② ③

① Product Series	② Dimensions	③ Screw thread interface	
SAB	22mm 30mm 40mm 50mm 60mm 80mm 100mm 125mm	F:G1/4internal thread F:G3/8internal thread	M:G1/4external thread M:M10x1.5external thread M:M14x1.5external thread

SABSERIES

Special 1.5 fold corrugated suction cup for metal sheet

Cobot Care VAC

Selection specifications

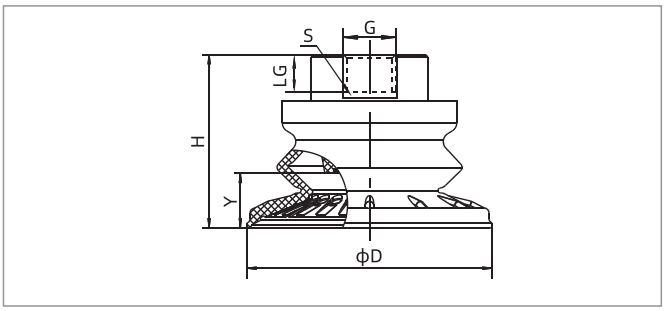
model	connection specification				
	M:G1/4	M:M10X1.5	M:M14X1.5	F:G1/4	F:G3/8
SAB22	SAB22-G1/4	SAB22-M10X1.5	SAB22-M14X1.5	SAB22-G1/4	SAB22-G3/8
SAB30	SAB30-G1/4	SAB30-M10X1.5	SAB30-M14X1.5	SAB30-G1/4	SAB30-G3/8
SAB40	SAB40-G1/4	SAB40-M10X1.5	SAB40-M14X1.5	SAB40-G1/4	SAB40-G3/8
SAB50	SAB50-G1/4	SAB50-M10X1.5	SAB50-M14X1.5	SAB50-G1/4	SAB50-G3/8
SAB60	SAB60-G1/4	SAB60-M10X1.5	SAB60-M14X1.5	SAB60-G1/4	SAB60-G3/8
SAB80	SAB80-G1/4	SAB80-M10X1.5	SAB80-M14X1.5	SAB80-G1/4	SAB80-G3/8
SAB100	SAB100-G1/4	SAB100-M10X1.5	SAB100-M14X1.5	SAB100-G1/4	SAB100-G3/8
SAB125	SAB125-G1/4	SAB125-M10X1.5	SAB125-M14X1.5	SAB125-G1/4	SAB125-G3/8

性能参数

model	Vertical pull out force N	Lateral pull out force N	Lateral pull-out forceoily surface N	Internal volume cm^3	Minimum curvature radius of workpiece mm	Single weight g	Recommended hose diameter mm	Minimum packaging pcs
SAB22	23	20	6.5	1.5	20	8.6	6	5
SAB30	35	28	12	6.3	35	12	6	5
SAB40	62	37	34	7.2	40	13.5	6	1
SAB50	85	58	55	11.2	45	21	8	1
SAB60	141	88	83	22.5	52	29	8	1
SAB80	236	141	136	57	70.5	51	8	1
SAB100	371	228	221	92	95	77	8	1
SAB125	558	352	335	191	140	165	10	1

◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean.
The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.

Size specifications (mm)



F-Internal thread connection

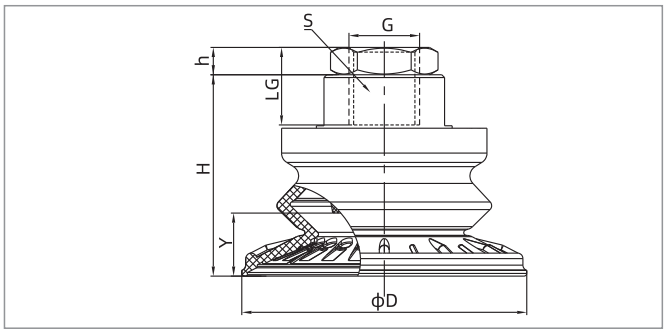
Model/Size	D	H	G	LG	S	Y
SAB22-F:G1/4	22	25	G1/4	10	16	5.5
SAB30-F:G1/4	32	28	G1/4	11	17	9.5
SAB40-F:G1/4	42	28.5	G1/4	11	17	10
SAB50-F:G1/4	52	36.2	G3/8	13	22	11.5
SAB60-F:G1/4	62.5	41	G3/8	13	22	14.5
SAB80-F:G1/4	82	49.5	G3/8	13	22	22.5
SAB100-F:G1/4	103	55	G3/8	13	22	25
SAB125-F:G1/4	128	68	G3/8	13	22	32

SABSERIES

Special 1.5 fold corrugated suction cup for metal sheet

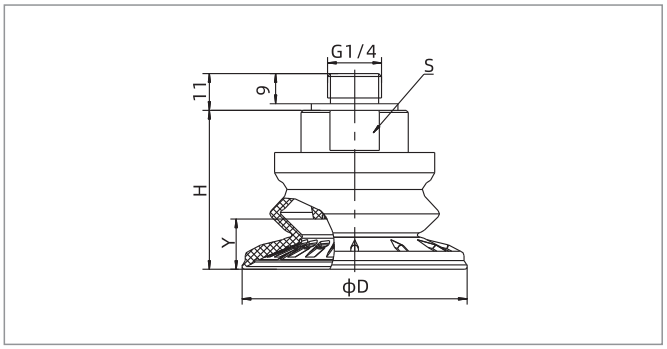
Cobot Care VAC

Size specifications (mm)



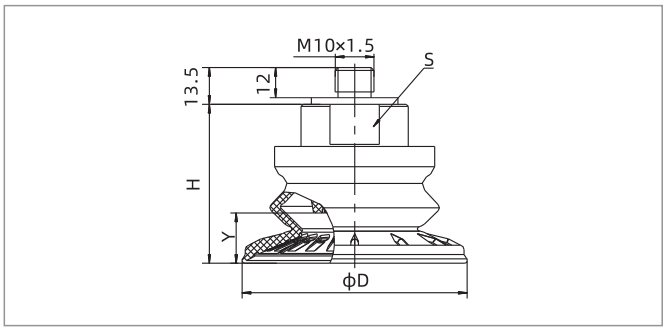
F-Internal thread connection

Model/Size	D	H	G	h	LG	S	Y
SAB22-F:G3/8	22	25	G3/8	14	11	22	5.5
SAB30-F:G3/8	32	28	G3/8	14	11	22	9.5
SAB40-F:G3/8	42	28.5	G3/8	14	11	22	10
SAB50-F:G3/8	52	36.2	G1/4	5	13	19	11.5
SAB60-F:G3/8	62.5	41	G1/4	5	13	19	14.5
SAB80-F:G3/8	82	49.5	G1/4	5	13	19	22.5
SAB100-G3/8	103	55	G1/4	5	13	19	25
SAB125-G3/8	128	68	G1/4	5	13	19	32



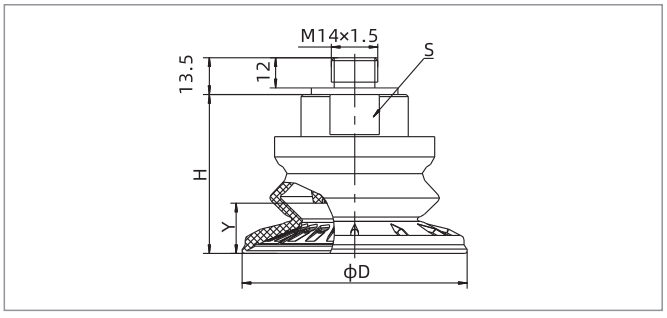
M-External thread connection

Model/Size	D	H	S	Y
SAB22-M:G1/4	22	25	17	5.5
SAB30-M:G1/4	32	28	17	9.5
SAB40-M:G1/4	42	28.5	17	10
SAB50-M:G1/4	52	36.2	22	11.5
SAB60-M:G1/4	62.5	41	22	14.5
SAB80-M:G1/4	82	49.5	22	22.5
SAB100-M:G1/4	103	55	22	25
SAB125-M:G1/4	128	68	22	32



M-External thread connection

Model/Size	D	H	S	Y
SAB22-M:M10X1.5	22	25	17	5.5
SAB30-M:M10X1.5	32	28	17	9.5
SAB40-M:M10X1.5	42	28.5	17	10
SAB50-M:M10X1.5	52	36.2	22	11.5
SAB60-M:M10X1.5	62.5	41	22	14.5
SAB80-M:M10X1.5	82	49.5	22	22.5
SAB100-M:M10X1.5	103	55	22	25
SAB125-M:M10X1.5	128	68	22	32



M-External thread connection

Model/Size	D	H	S	Y
SAB22-M:M14X1.5	22	25	17	5.5
SAB30-M:M14X1.5	32	28	17	9.5
SAB40-M:M14X1.5	42	28.5	17	10
SAB50-M:M14X1.5	52	36.2	22	11.5
SAB60-M:M14X1.5	62.5	41	22	14.5
SAB80-M:M14X1.5	82	49.5	22	22.5
SAB100-M:M14X1.5	103	55	22	25
SAB125-M:M14X1.5	128	68	22	32

◇ Note: The dimensional tolerance complies with the requirements of GBT3672.1-2002-1M3 Rubber Product Dimensional Tolerance Standard.

CBLSERIES

4.5 folded corrugated suction cup

Cobot Care VAC

food packaging | plastic bag | Food-grade certification

characteristic

- Composed of 4 complete ripples and 1 half ripple
- Yellow positioning ring support structure
- Ultra thin tilted design
- Complete size specifications

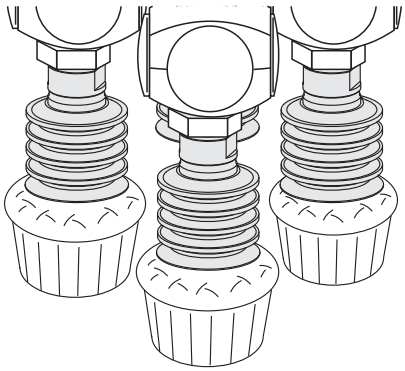


advantage

Strong height difference compensation | High flexibility and anti damage | Anti collapse design | High traffic adaptation

application

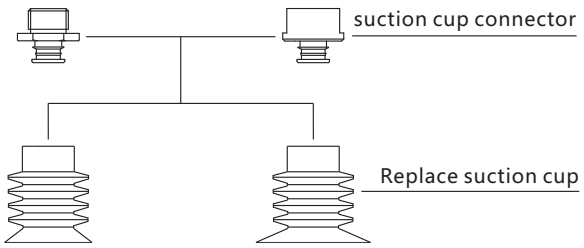
- **Food packaging industry (core)**: grabbing plastic packaging bags, vacuum packaging food, bread, cookies, bagged beverages, etc
- **Packaging and logistics industry**: grabbing cardboard boxes, soft bags, express bags, woven bags, suitable for packaging with bulges, folds, and deformations
- **Fragile item handling**: handling eggs, glass cups, ceramic parts, glass panels, etc., with gentle contact force to avoid collision and damage
- **3C and home appliance industry**: Capture soft plastic parts, foam parts, and irregular injection molded parts to compensate for height differences caused by mold errors



structure

- Multi fold corrugated structure design, large compression stroke
- The suction cup and joint are designed with a split structure, which allows for separate replacement of vulnerable parts

Within the same series, replacement suction cups and suction cup connectors can be combined according to requirements



CBLSERIES

4.5 folded corrugated suction cup

Cobot Care VAC

Model

CCV-CBL-15-S-G

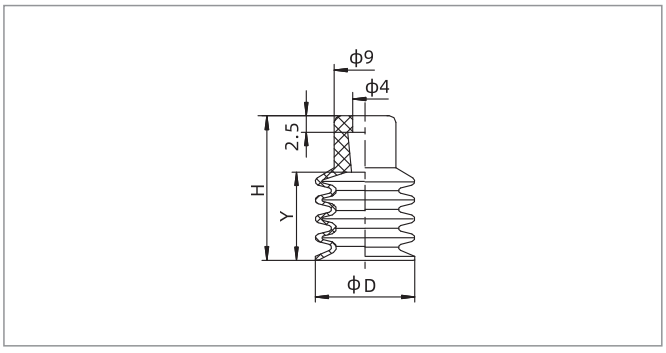
① ② ③ ④

① Product Series	② Dimensions	③ Suction cup material	④ connection specification	
CBL	15mm	55	Blank - Separate suction cup	M: M5X0.8 external thread
	20mm	N - Nitrile rubber	F: G1/8 internal thread	M: G1/8 external thread
	30mm	50	F: G1/4 internal thread	M: G1/4 external thread
	40mm	S - silicone rubber	F: G3/8 internal thread	M: G3/8 external thread
	50mm			

Selection specifications

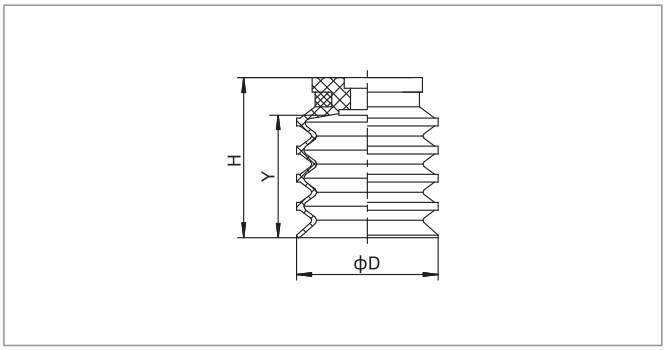
model	threaded connection M-External thread		F-Internal thread		Minimum packaging pcs
CBL15	CBL15-M5X0.8		-		5
CBL20	CBL20-G1/8		CBL20-G1/8		5
CBL30	CBL30-G1/8		CBL30-G1/8		1
CBL40	CBL40-G1/8		CBL40-G1/8		1
CBL50	CBL50-G1/4	CBL50-G3/8	CBL50-G1/4	CBL50-G3/8	1

Size specification (mm) - individual suction cup



CBL15

Model/Size	D	H	Y	Weight G
CBL15	15.5	21.5	13.5	12



CBL20-40

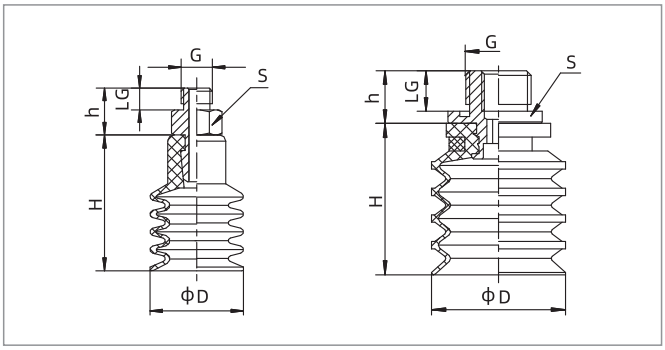
Model/Size	D	H	Y	Weight G
CBL20	20	23	17.5	2.3
CBL30	30	32	25.5	5.8
CBL40	40	42	34.5	12.4
CBL50	50	52	40	20.9

CBLSERIES

4.5 folded corrugated suction cup

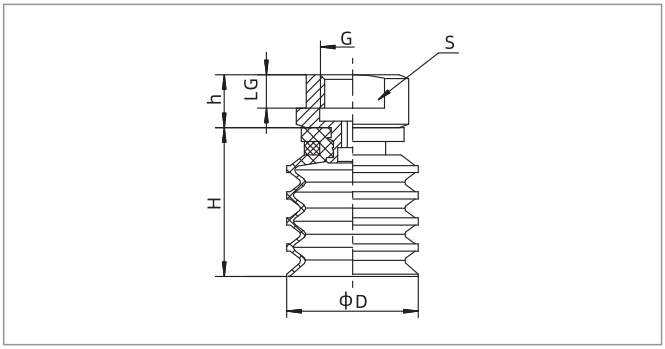
Cobot Care VAC

Size specification (mm) - Suction cup with connector



CBL-external thread connection

Model/Size	D	H	h	G	LG	S
CBL15-M:M5X0.8	15.5	21.5	7.5	M5×0.8	3.5	7
CBL20-M:G1/8	20	23	7.8	G1/8	6	13
CBL30-M:G1/8	30	32	12	G1/8	6	17
CBL40-M:G1/8	40	42	12	G1/8	6	17
CBL50-M:G1/4	50	52	17	G1/4	9	24
CBL50-M:G3/8	50	52	18	G3/8	10	24



CBL-internal thread connection

Model/Size	D	H	h	G	LG	S
CBL20-F:G1/8	20	23	8	G1/8	7	13
CBL30-F:G1/8	30	32	10	G1/8	7	17
CBL40-F:G1/8	40	42	10	G1/8	7	17
CBL50-F:G1/4	50	52	13	G1/4	10	24
CBL50-F:G3/8	50	52	13	G3/8	11	24

◇ Note: The dimensional tolerance complies with the requirements of GBT3672.1-2002-1M3 Rubber Product Dimensional Tolerance Standard.

Accessory selection specifications

name	Model M-External thread	F-Internal thread	Suitable for suction cups
suction cup connector	PJS-M:M5X0.8-SC3	-	CBL15
	PJS-M:G1/8-SF1	PJS-F:G1/8-SF1	CBL20
	PJS-M:G1/8-SF2	PJS-F:G1/8-SF2	CBL30、40
	PJS-M:G1/4-SF3	PJS-F:G1/4-SF3	CBL50
	PJS-M:G3/8-SF3	PJS-F:G3/8-SF3	CBL50

FCFSERIES

Flat ribbed suction cup

Cobot Care VAC

metal plate | slip resistance | Oily surface

characteristic

- Circular flat suction cup, used for dynamic handling of metal sheets under extremely short cycle time conditions
- Handling metal sheets and aluminum plates without deformation
- Used for stamping line feeding system in the automotive industry
- The special groove at the bottom of the suction cup can prevent the oil coated metal sheet from slipping, ensuring precise positioning in stamping and other processes

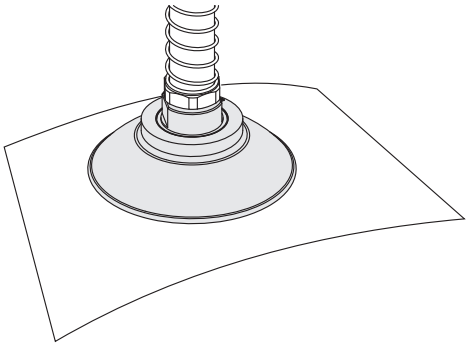


advantage

Enhance friction | High flexibility and anti damage | a wide range of categories | High traffic adaptation

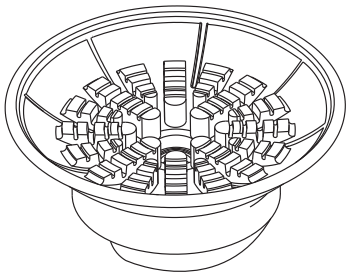
application

- **Electronic casing manufacturing:** precision unloading of laptop casing after stamping and forming
- **Automotive stamping line:** high-speed feeding of galvanized steel plates and aluminum alloy door panels
- **Home appliance sheet metal processing:** seamless handling of stainless steel panels, compatible with laser cutting machines for loading and unloading



structure

- The suction cup and joint are designed with a split structure, which allows for separate replacement of vulnerable parts



Model

CCV-FCF-30-PU-G

① ② ③ ④

① Product Series	② Dimensions	③ Suction cup material	④ connection specifications
FCF	30mm 40mm 50mm 60mm 70mm 80mm 100mm	60 PU polyurethane	F:G1/8internal thread F:G3/8internal thread M:G1/8external thread M:G3/8external thread

FCFSERIES

Flat ribbed suction cup

Cobot Care VAC

Selection specifications

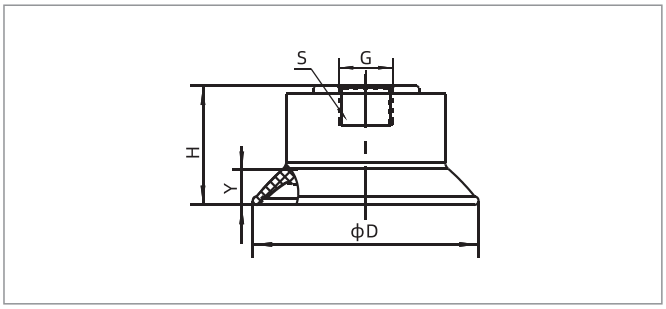
model	threaded connection M-External thread	F-Internal thread
FCF30	FCF30-G1/8	FCF30-G1/8
FCF40	FCF40-G1/8	FCF40-G1/8
FCF50	FCF50-G1/8	FCF50-G1/8
FCF60	FCF60-G1/8	FCF60-G1/8
FCF70	FCF70-G1/8	FCF70-G1/8
FCF80	FCF80-G3/8	FCF80-G3/8
FCF100	FCF100-G3/8	FCF100-G3/8

Selection specifications

model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force oily surface N	Internal volume cm	Single weight G	Recommended hose diameter mm	Minimum packaging pcs
FCF30	45	35	33	1.6	12.9	6	1
FCF40	72	54	51	3.5	15.0	6	1
FCF50	112	90	86	7.5	50.7	8	1
FCF60	145	102	93	12.6	58.3	8	1
FCF70	288	212	190	35	62.6	8	1
FCF80	445	322	308	60	63.6	8	1
FCF100	660	475	400	115	75.9	8	1

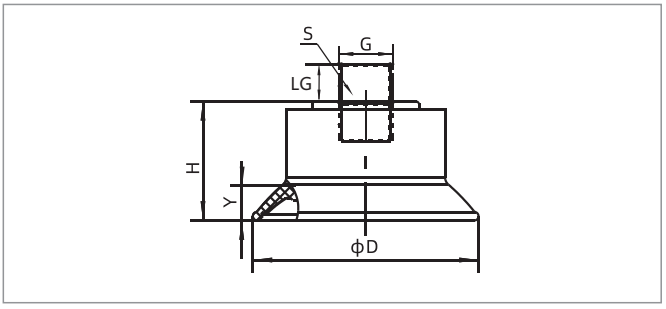
◇ Note: The measured vacuum degree is -60kPa, and the surface of the workpiece is smooth and clean. The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.

Size specification (mm) - Suction cup with connector



F-Internal thread connection

model	D	H	G	S	Y
FCF30	34	21	G1/8	8.7	4.5
FCF40	43	22.5	G1/8	8.7	11
FCF50	54	29	G1/8	8.7	8.4
FCF60	64	32	G1/8	8.7	12
FCF70	75	34	G1/8	8.7	15
FCF80	86	36.5	G3/8	15.4	20
FCF100	109	35	G3/8	15.4	20



M-External thread connection

model	D	H	G	LG	S	Y
FCF30	34	21	G1/8	9	8.7	4.5
FCF40	43	22.5	G1/8	9	8.7	11
FCF50	54	29	G1/8	9	8.7	8.4
FCF60	64	32	G1/8	9	8.7	12
FCF70	75	34	G1/8	9	8.7	15
FCF80	86	36.5	G3/8	12	15.4	20
FCF100	109	35	G3/8	12	15.4	20

VBFSERIES

Double layer corrugated suction cup

Cobot Care VAC


metal plate


slip resistance


Oily surface

characteristic

- Translucent orange PU polyurethane, high elasticity and wear resistance
- Top aluminum alloy threaded joint with built-in standard internal threaded hole
- Multi layer circular folds, with built-in cushioning and shock absorption function
- Full coverage of multiple specifications and sizes



advantage


Adapt to complex surfaces


Buffer noise reduction

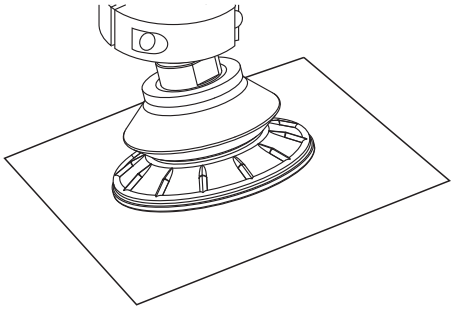

Anti slip textured surface


Excellent sealing performance


Not damaging the surface of the workpiece

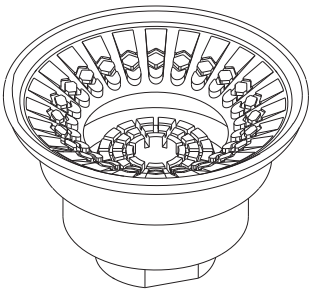
application

- Woodworking furniture industry: wooden doors, boards, density boards, cabinet boards
- 3C electronics industry: PCB circuit board, plastic shell, glass cover plate
- Glass/Photovoltaic Industry: Tempered Glass, Photovoltaic Glass Panels, Acrylic Mirrors
- Packaging and printing industry: cardboard boxes, plastic films
- Metal sheet metal industry: aluminum plate, stainless steel plate
- Plastic injection molding industry: Automated demolding of injection molded parts and films



structure

- 1.5 fold corrugated structure design, large compression stroke
- Suction cup and joint integrated structural design



Model

CCV-VBF-30-PU-G

① ② ③ ④

① Product Series	② Dimensions	③ Suction cup material	④ connection specifications
VBF	30mm 40mm 50mm 60mm 80mm 100mm	60 PU polyurethane	F:G1/8internal thread M:G1/8external thread F:G3/8internal thread M:G3/8external thread

VBFSERIES

Double layer corrugated suction cup

Cobot Care VAC

Selection specifications

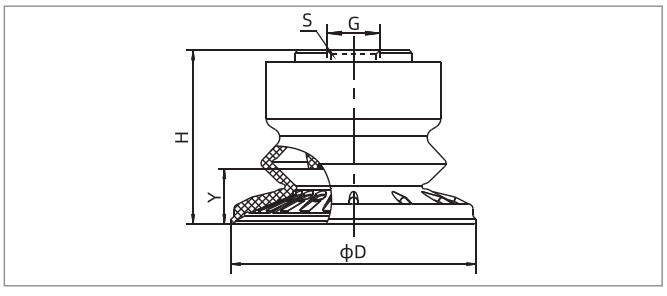
model	connection specifications F:G1/8	F:G3/8	M:G1/8	M:G3/8
VBF30	VBF30-G1/8	-	VBF30-G1/8	-
VBF40	VBF40-G1/8	-	VBF40-G1/8	-
VBF50	VBF50-G1/8	-	VBF50-G1/8	-
VBF60	VBF60-G1/8	-	VBF60-G1/8	-
VBF80	-	VBF80-G3/8	-	VBF80-G3/8
VBF100	-	VBF100-G3/8	-	VBF100-G3/8

performance parameters

model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-outforce oily surface N	Internal volume cm^3	Minimum curvature radius of workpiece mm	Single weight G	Recommended hose diameter mm	Minimum packaging pcs
VBF30	35	28	12	6.3	35	14.6	6	5
VBF40	62	37	34	7.2	40	16	6	1
VBF50	85	58	55	11.2	45	49	8	1
VBF60	141	88	83	22.5	52	54.8	8	1
VBF80	236	141	136	57	70.5	79	8	1
VBF100	371	228	221	92	95	132	8	1

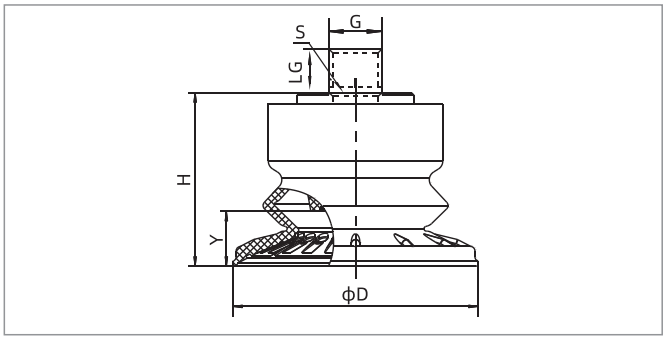
◇ Measure the vacuum degree to -60kPa, and ensure that the surface of the workpiece is smooth and clean. The above pull-out force data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.

Size specifications (mm)



F-Internal thread connection

model	D	H	G	S	Y
VBF30	32	27.5	G1/8	8.7	10
VBF40	42	30	G1/8	8.7	11
VBF50	56	40	G1/8	8.7	13.7
VBF60	66	41.5	G1/8	8.7	15
VBF80	84	50	G3/8	15.4	23
VBF100	105	63.5	G3/8	15.4	32



M-External thread connection

model	D	H	G	LG	S	Y
VBF30	32	27.5	G1/8	9	8.7	10
VBF40	42	30	G1/8	9	8.7	11
VBF50	56	40	G1/8	9	8.7	13.7
VBF60	66	41.5	G1/8	9	8.7	15
VBF80	84	50	G3/8	12	15.4	23
VBF100	105	63.5	G3/8	12	15.4	32

Other attachments

Mechanical negative pressure gauge JXBSERIES

- Vacuum type: built-in vacuum generator/external vacuum source
- Adsorption surface type: Silicone suction nozzle



General

silencer XYSERIES

- Connection specifications: G3/8 G3/4 G1



General

High precision micro pressure digital pressure switch DP25FHSERIES

- Pressure range: -10-0kpa
- Interface diameter: R1/8 outer thread+ inner M5 thread



General

High precision micro pressure digital pressure switch DP20FHZSERIES

- Pressure range: -105-105kpa
- Interface diameter: R1/8 outer thread+ inner M5 thread



General

High precision micro pressure digital pressure switch DP1SERIES

- Pressure range: Negative pressure (-101.3-105kpa) Positive pressure (-0.1-1.0Mpa)
- Interface diameter: R1/8 outer thread+inner M5 thread



General

High precision micro pressure digital pressure switch DP30FHZSERIES

- Pressure range: -105-105kpa
- Interface diameter: R1/8 outer thread+ inner M5 thread



General

High precision micro pressure digital pressure switch DP2/DP5SERIES

- Pressure range: Positive pressure (-0.1MPa~1.0MPa) Composite pressure (-101kPa~100kPa)
- Interface diameter: R1/8 outer thread+inner M5 thread



General

Integrated fan control valve system KZFASERIES

- Control voltage: 24V
- Material: Aluminum alloy



General

Five for two, five for three 4V200/4V300series SOLENOID VALVE

- Maximum operating pressure: 0.7kPa
- Maximum vacuum flow rate: 1200NL/min



carton Packaging injection molding

JXB SERIES

Mechanical negative pressure gauge

Cobot Care VAC

General

feature

◇ Mechanical pressure gauge, panel material made of acrylic organic glass, shell material made of ABS black plastic:

◇ Axial installation, universal specifications, simple and easy to use



Model

CCV-JXB-W1/8-F-0.1-0-P

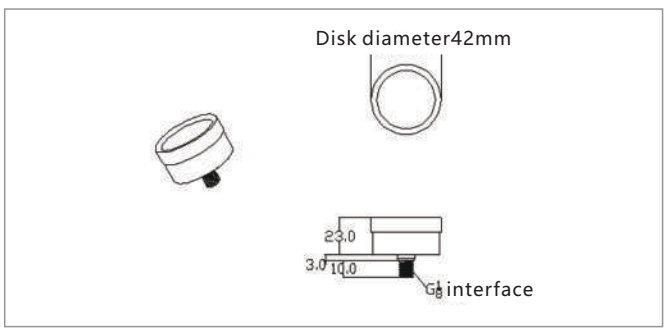
① ② ③ ④ ⑤

① Product Series	② Install thread	③ Pressure	④ Range (Mpa)	⑤ Dial position
JXB	W: Outer thread G1/8 N: Inner thread G1/8	F: Negative pressure Z: Positive pressure	-0.1-0	P: Parallel ground C: Vertical ground

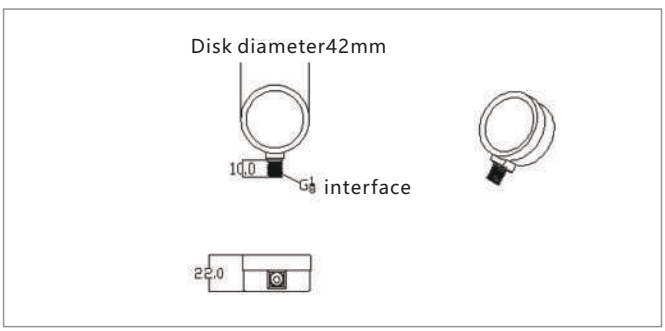
performance parameters

Product Model	pressure range	Dial size	Joint material	threaded connection	Single weight 9
JXB-P	-1~0MPa	42MM	copper alloy	W: Outer thread G1/8	42.6
JXB-C	-1~0MPa	42MM	copper alloy	W: Outer thread G1/8	45.9

Size specifications (mm)



JXB-P



JXB-C

XY SERIES
muffler

Cobot Care VAC

general

characteristic

- Compatible with various standard vacuum generators, significantly reducing noise generated during exhaust
- Simple design, easy to install
- Low airflow resistance, does not affect equipment efficiency



advantage

Environmental compliance

Reduce noise

equipment protection

Flexible adaptation

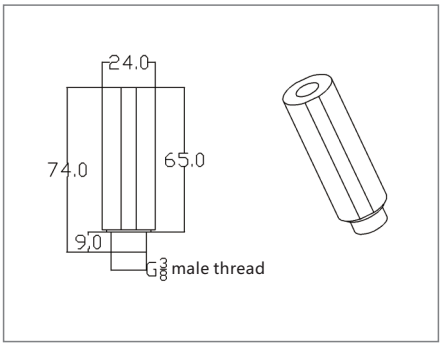
Model specifications

CCV-XY-G3/8

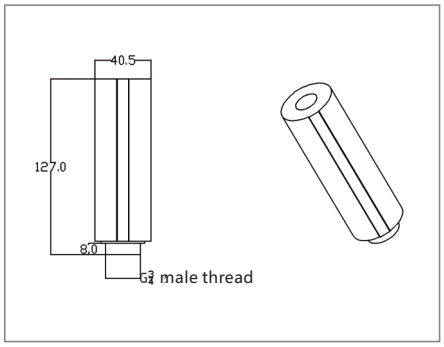
① ②

① Product Line	② Link Specifications
XY	M:G3/8male thread M:G3/4male thread M:G1male thread

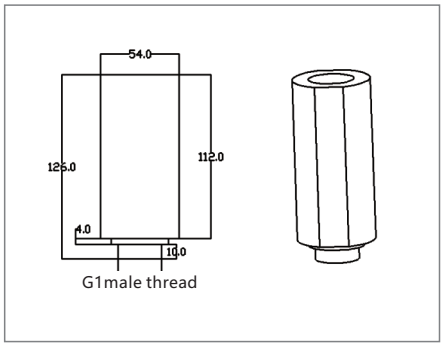
Specification(mm)



XY-G3/8



XY-G3/4



XY-G1

Model/Size	L	D	G	L1	Weightg	Noise Reduction dB(A)
XY-G3/8	71	27	G3/8	9	12	10
XY-G3/4	128	40	G3/4	8	72.4	10
XY-G1	72	24	G1	10	77.8	10

DP25FHSERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

General

feature



- Accuracy up to ± 0.1% FS (full range), suitable for precision pressure monitoring
- Equipped with LCD/LED display screen, real-time pressure value is displayed for easy on-site reading
- Supports 4-20mA, 0-10V, RS485 (Modbus), HART and other output modes, compatible with PLC/DCS systems
- The measurable range ranges from vacuum (-100kPa) to high pressure (above 100MPa), suitable for different working conditions
- Built in temperature compensation algorithm to reduce the impact of environmental temperature changes on measurement accuracy
- Using digital filtering technology to reduce the impact of electromagnetic interference (EMI)
- Suitable for portable devices powered by batteries

advantage

High degree of intelligence | Easy installation and maintenance | Good long-term stability | high protection level | High cost-effectiveness

Specifications

model		DP25F	DP25H	
Set pressure range		-10- 0kpa	-10-10kpa	
Maximum pressure resistance		15kpa	15kpa	
Set minimum unit		Ipa	Ipa	
Suitable for fluids		Air, non corrosive gas, non flammable gas		
power supply voltage		DC12-24V ± 10%, fluctuation (P-P) below 10% (with reverse current protection)Below		
current consumption		40mANPN		
Switch output		PNP, open collector 1 output or 2 output 28V (when NPN output)		
Maximum applied voltage		125mA		
Maximum load current		Equipped with short-circuit protection function		
short circuit protection		2.5ms or less (optional for anti vibration function: 2010050010000200ms)		
reaction time		±0.2%F.S.±digit		
repeatability accuracy		± 2% F.S. ± 1 digit (at ambient temperature of 25 ± 3 ° C)		
display precision		P40		
environment	Protection level	Work: 0-55 ° C, Storage: -10-55 ° C (non condensing and non freezing)		
	Temperature range for use	Work, save: 35-85% HR (non condensing)		
	Use humidity range	50MQ or above (DC500 megohmmeter, between lead and housing)		
	insulation resistance	10-50Hz, 1.5mm or 20m/s2 full amplitude in X.Y.Z direction for 2 hours		
	Vibration-resistant	100m/s2. X.Y.Z, 3 times in each direction (uncharged)		
	impact resistance	15kpa		
	conductor	Oil resistant insulated wire, three core, four core, medium 3.5,2m, insulation outer diameter 1.0mm		

DP25FHSERIES

High precision micro pressure digital pressure switch

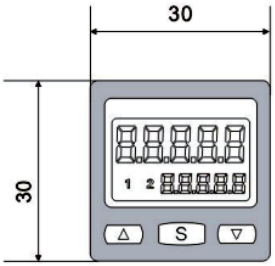
Cobot Care VAC

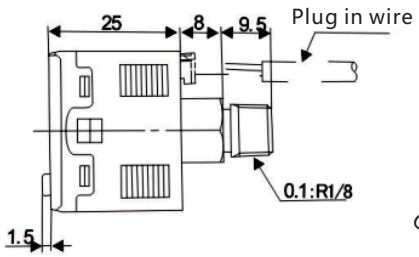
application

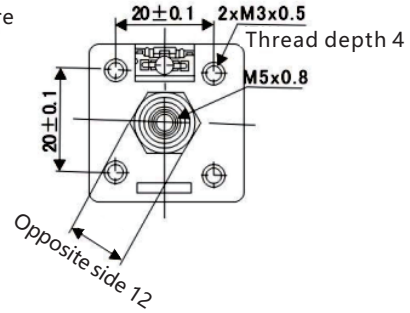
- **Medical and laboratory equipment:** precise control of gas supply pressure and flow rate.
- **Semiconductor and electronic manufacturing:** monitoring vacuum chamber and process gas pressure.
- **HVAC and cleanroom:** Control room positive/negative pressure to prevent cross infection of pollutants.
- **Industrial automation and pneumatic systems:** Pressure control of precision pneumatic fixtures to prevent damage to precision workpieces.
- **Environmental Protection and Energy:** Boiler Furnace Negative Pressure Monitoring. Filter differential pressure monitoring in VOC treatment equipment.

structure

1. Five digit high contrast LCD display screen
2. Output indication, pressure unit indication
3. Terminal type quick plug interface
4. M3 screw fixing hole
5. Air interface (R1/8 external thread+internal M5 thread)







Model

CCV-DP25-F-01-N

① ② ③ ④

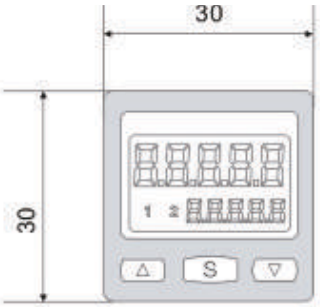
① Series code	② Pressure type	③ Takeover caliber	④ Output type
Dp25: Electronic digital display pressure sensor	F-Negative pressure (-10-0kpa) H-connected pressure (-10-10kpa)	01-R1/8 outer thread+inner thread M5 teeth - M5 internal teeth	N-NPN Open-Collector Output 1 P-PNP Open-Collector Output 1 A-NPN Open-Collector Output 2 B-PNP Open-Collector Output 2 C-NPN+ Analog Voltage Output D-NPN+ Analog Current Output E-PNP+ Analog Voltage Output F-PNP+ Analog Current Output

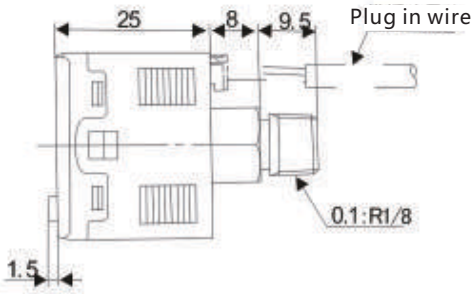
DP25FHSERIES

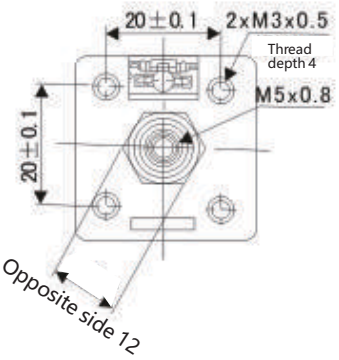
High precision micro pressure digital pressure switch

Cobot Care VAC

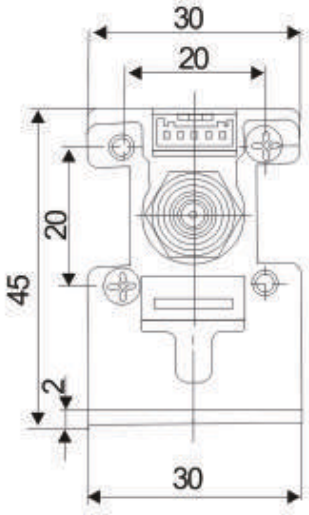
Installation method and accessories

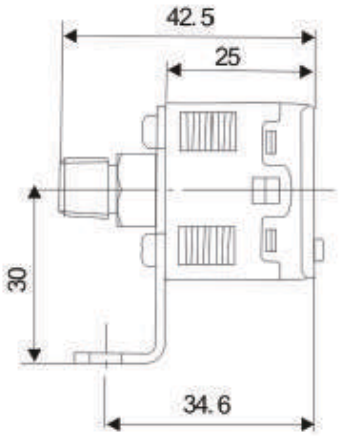


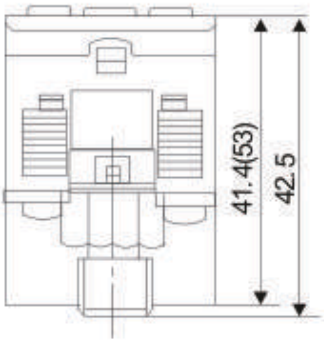


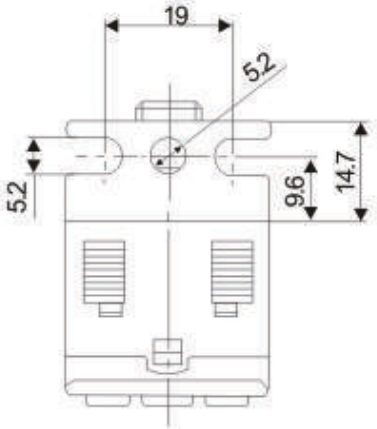


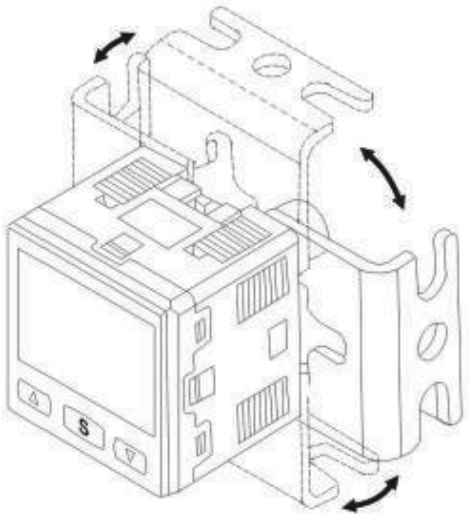
L-shaped bracket







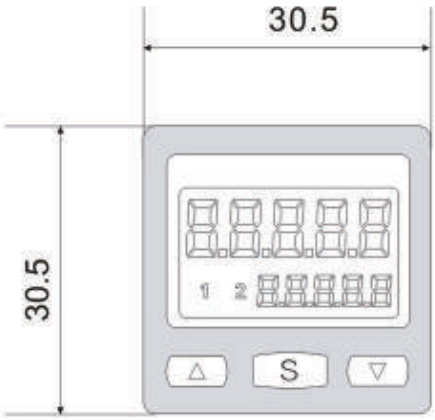


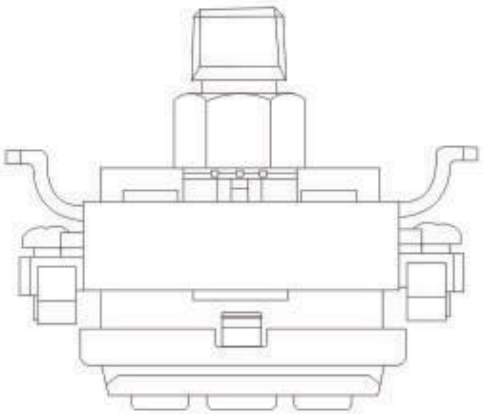


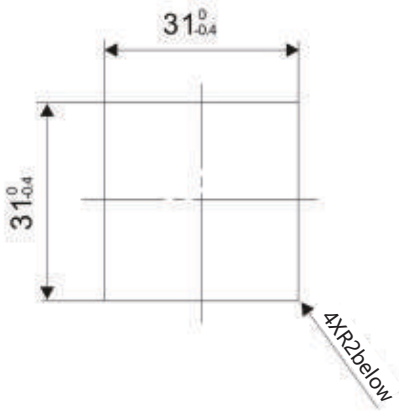
DP25FHSERIES

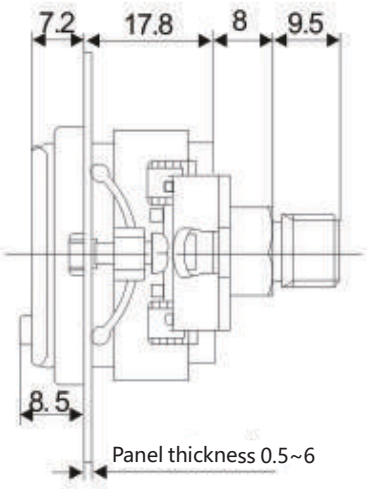
High precision micro pressure digital pressure switch

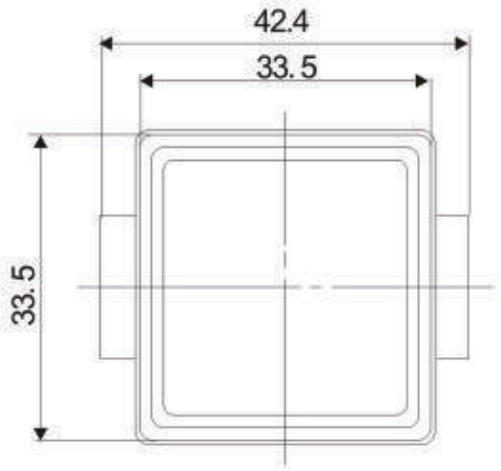
Panel installation bracket

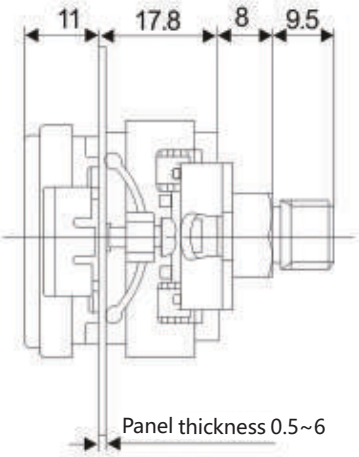












DP20FHZSERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

General

feature



- Accuracy up to ± 0.1% FS (full range), suitable for precision pressure monitoring
- Equipped with LCD/LED display screen, real-time pressure value is displayed for easy on-site reading
- Supports 4-20mA, 0-10V, RS485 (Modbus), HART and other output modes, compatible with PLC/DCS systems
- The measurable range ranges from vacuum (-100kPa) to high pressure (above 100MPa), suitable for different working conditions
- Built in temperature compensation algorithm to reduce the impact of environmental temperature changes on measurement accuracy
- Using digital filtering technology to reduce the impact of electromagnetic interference (EMI)
- Suitable for portable devices powered by batteries

advantage

High degree of intelligence

Easy installation and maintenance

Good long-term stability

high protection level

High cost-effectiveness

Specifications

model		DP20F	DP20H	DP20Z
Set pressure range		-105.0-10.0kpa	-105.0-105.0kpa	-0.105-1.050Mpa
Maximum pressure resistance		500kpa	500kpa	1.5Mpa
Set minimum unit		0. 1kpa	0. 1kpa	0.001Mpa
Suitable for fluids		Air, non corrosive gas, non flammable gas		
power supply voltage		DC12-24V ± 10%, fluctuation (P-P) below 10% (with reverse current protection)Below		
current consumption		40mANPN		
Switch output		PNP, open collector 1 output or 2 output 28V (when NPN output)		
Maximum applied voltage		125mA		
Maximum load current		Equipped with short-circuit protection function		
short circuit protection		2.5ms or less (optional for anti vibration function: 2010050010000200ms)		
reaction time		±0.2%F.S.±digit		
repeatability accuracy		± 2% F.S. ± 1 digit (at ambient temperature of 25 ± 3 ° C)		
display precision		P40		
environment	Protection level	Work: 0-55 ° C, Storage: -10-55 ° C (non condensing and non freezing)		
	Temperature range for use	Work, save: 35-85% HR (non condensing)		
	Use humidity range	50MQ or above (DC500 megohmmeter, between lead and housing)		
	insulation resistance	10-50Hz, 1.5mm or 20m/s2 full amplitude in X.Y.Z direction for 2 hours		
	Vibration-resistant	100m/s2. X.Y.Z, 3 times in each direction (uncharged)		
	impact resistance	15kpa		
	conductor	Oil resistant insulated wire, three core, four core, medium 3.5,2m, insulation outer diameter 1.0mm		

DP20FHZSERIES

High precision micro pressure digital pressure switch

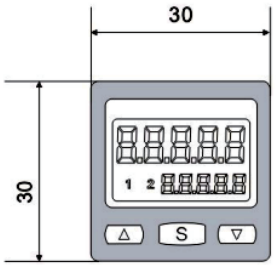
Cobot Care VAC

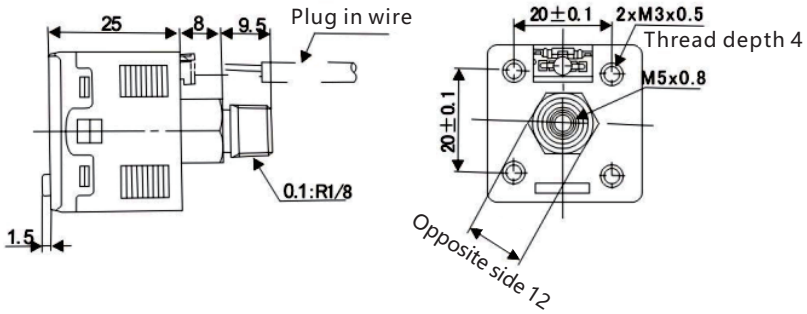
application

- **Medical and laboratory equipment:** precise control of gas supply pressure and flow rate.
- **Semiconductor and electronic manufacturing:** monitoring vacuum chamber and process gas pressure.
- **HVAC and cleanroom:** Control room positive/negative pressure to prevent cross infection of pollutants.
- **Industrial automation and pneumatic systems:** Pressure control of precision pneumatic fixtures to prevent damage to precision workpieces.
- **Environmental Protection and Energy:** Boiler Furnace Negative Pressure Monitoring. Filter differential pressure monitoring in VOC treatment equipment.

structure

- 1. Five digit high contrast LCD display screen
  2. Output indication, pressure unit indication
  3. Terminal type quick plug interface
  4. M3 screw fixing hole
  5. Air interface (R1/8 external thread+internal M5 thread)





Model

CCV-DP20-F-01-N

① ② ③ ④

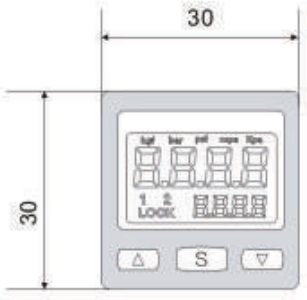
① Series code	② Pressure type	③ Takeover caliber	④ Output type
Dp20: Electronic digital display pressure sensor	F - Negative pressure (-105-0kPa) H-connected pressure (-105-105kpa) Z-positive pressure (-0.1-1.0Mpa)	01-R1/8 outer thread+inner thread M5 teeth - M5 internal teeth	N-NPN Open-Collector Output 1 P-PNP Open-Collector Output 1 A-NPN Open-Collector Output 2 B-PNP Open-Collector Output 2 C-NPN + Analog Voltage Output D-NPN + Analog Current Output E-PNP + Analog Voltage Output F-PNP + Analog Current Output NM-NPN Output 1 + RS-485 Communication PM-PNP 1-channel output + RS-485 communication L-NPN or PNP 1-channel + 10-Link

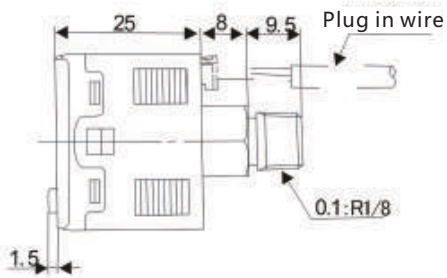
DP20FHZSERIES

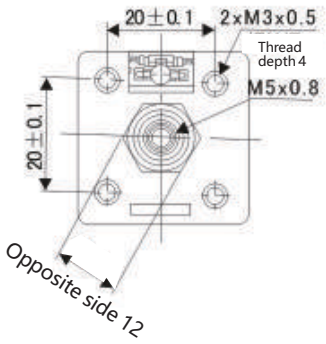
High precision micro pressure digital pressure switch

Cobot Care VAC

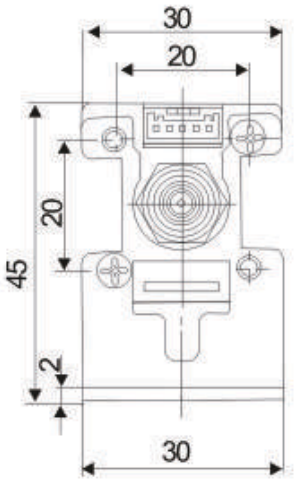
Installation method and accessories

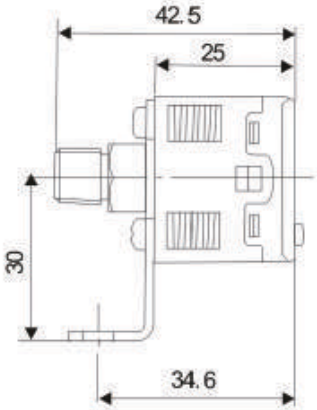


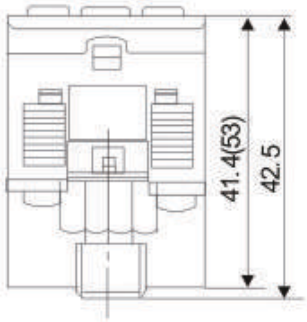


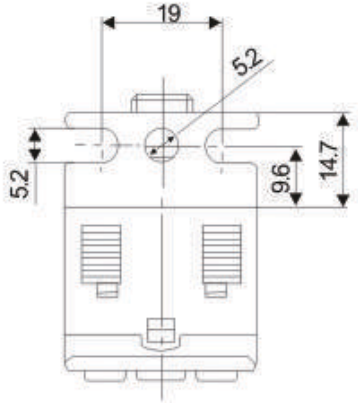


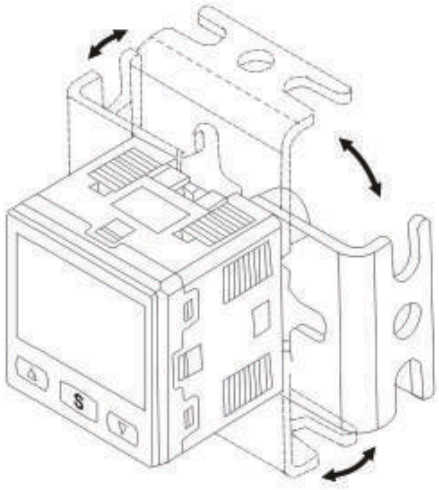
L-shaped bracket









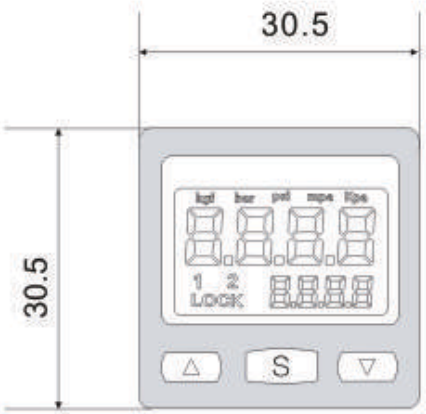


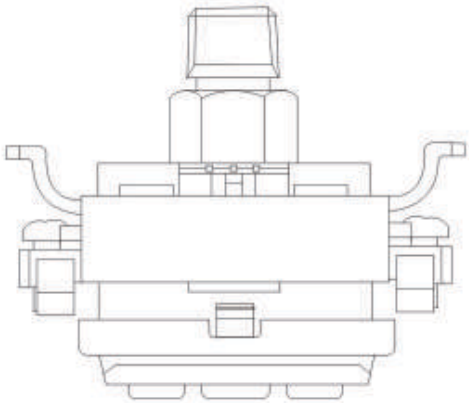
DP20FHZSERIES

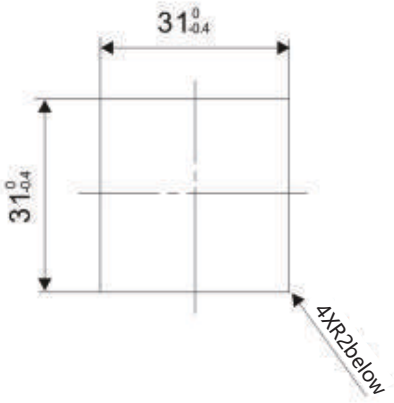
High precision micro pressure digital pressure switch

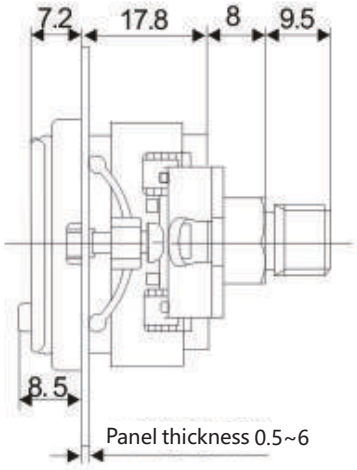
Cobot Care VAC

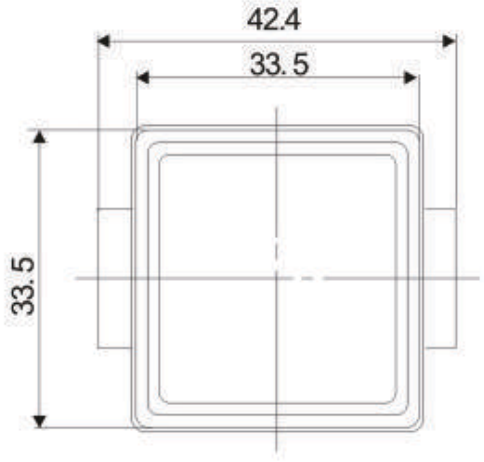
Panel installation bracket

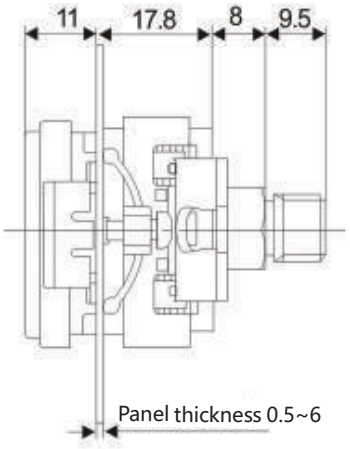












DP1SERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

General

feature





- Accuracy up to ± 0.1% FS (full range), suitable for precision pressure monitoring
- Equipped with LCD/LED display screen, real-time pressure value is displayed for easy on-site reading
- Supports 4-20mA, 0-10V, RS485 (Modbus), HART and other output modes, compatible with PLC/DCS systems
- The measurable range ranges from vacuum (-100kPa) to high pressure (above 100MPa), suitable for different working conditions
- Built in temperature compensation algorithm to reduce the impact of environmental temperature changes on measurement accuracy
- Using digital filtering technology to reduce the impact of electromagnetic interference (EMI)
- Suitable for portable devices powered by batteries

advantage

High degree of intelligence

Easy installation and maintenance

Good long-term stability

high protection level

High cost-effectiveness

Specifications

model		DP25F	Dp25h	
Set pressure range		-10- 0kpa	-10-10kpa	
Maximum pressure resistance		15kpa	15kpa	
Set minimum unit		Ipa	Ipa	
Suitable for fluids		Air, non corrosive gas, non flammable gas		
power supply voltage		DC12-24V ± 10%, fluctuation (P-P) below 10% (with reverse current protection)Below		
current consumption		40mANPN		
Switch output		PNP, open collector 1 output or 2 output 28V (when NPN output)		
Maximum applied voltage		125mA		
Maximum load current		Equipped with short-circuit protection function		
short circuit protection		2.5ms or less (optional for anti vibration function: 2010050010000200ms)		
reaction time		±0.2%F.S.±digit		
repeatability accuracy		± 2% F.S. ± 1 digit (at ambient temperature of 25 ± 3 ° C)		
display precision		P40		
environment	Protection level	Work: 0-55 ° C, Storage: -10-55 ° C (non condensing and non freezing)		
	Temperature range for use	Work, save: 35-85% HR (non condensing)		
	Use humidity range	50MQ or above (DC500 megohmmeter, between lead and housing)		
	insulation resistance	10-50Hz, 1.5mm or 20m/s2 full amplitude in X.Y.Z direction for 2 hours		
	Vibration-resistant	100m/s2. X.Y.Z, 3 times in each direction (uncharged)		
	impact resistance	15kpa		
	conductor	Oil resistant insulated wire, three core, four core, medium 3.5,2m, insulation outer diameter 1.0mm		

DP1SERIES

High precision micro pressure digital pressure switch

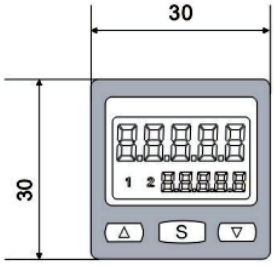
Cobot Care VAC

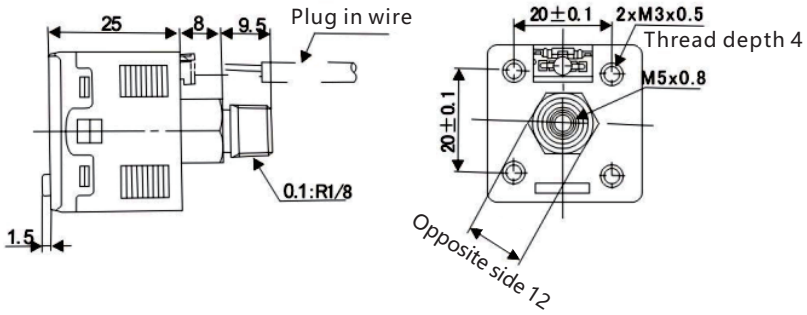
application

- **Medical and laboratory equipment:** precise control of gas supply pressure and flow rate.
- **Semiconductor and electronic manufacturing:** monitoring vacuum chamber and process gas pressure.
- **HVAC and cleanroom:** Control room positive/negative pressure to prevent cross infection of pollutants.
- **Industrial automation and pneumatic systems:** Pressure control of precision pneumatic fixtures to prevent damage to precision workpieces.
- **Environmental Protection and Energy:** Boiler Furnace Negative Pressure Monitoring. Filter differential pressure monitoring in VOC treatment equipment.

structure

1. Five digit high contrast LCD display screen
2. Output indication, pressure unit indication
3. Terminal type quick plug interface
4. M3 screw fixing hole
5. Air interface (R1/8 external thread+internal M5 thread)





Model

CCV-DP20-F-01-N

① ② ③ ④

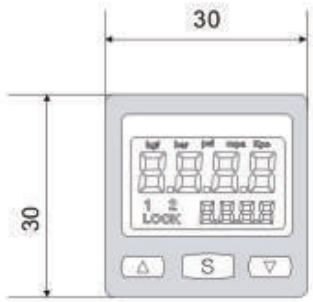
① Series code	② Pressure type	③ Takeover caliber	④ Output type
DP1: Electronic digital display pressure sensor	F - Negative pressure (-105-0kPa) H-connected pressure (-105-105kpa)	01-R1/8 outer thread+inner thread M5 teeth - M5 internal teeth	N-NPN Open-Collector Output 1 P-PNP Open-Collector Output 1 A-NPN Open-Collector Output 2 B-PNP Open-Collector Output 2 C-NPN+ Analog Voltage Output D-NPN+ Analog Current Output E-PNP+ Analog Voltage Output F-PNP+ Analog Current Output NM=NPN Output 1 + RS-485 Communication PM PNP 1-channel output + RS-485 communication

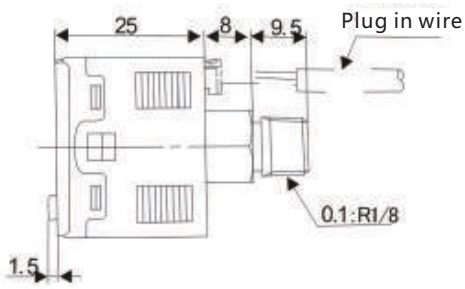
DP1SERIES

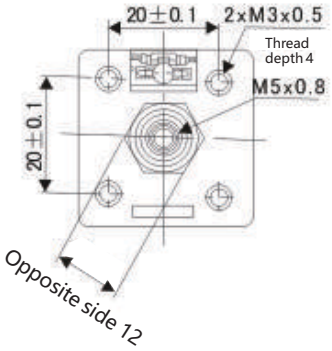
High precision micro pressure digital pressure switch

Cobot Care VAC

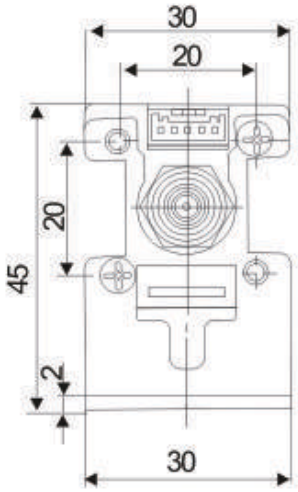
Installation method and accessories

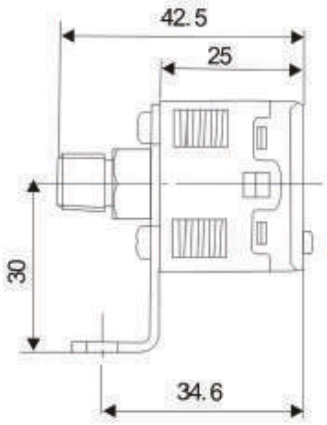


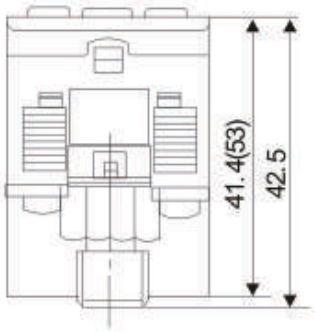


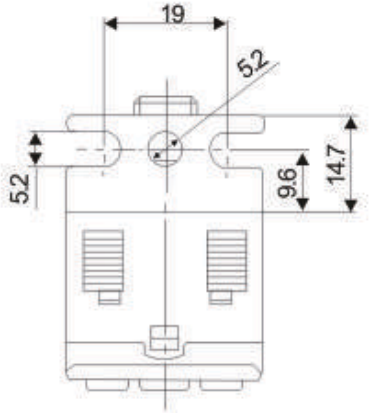


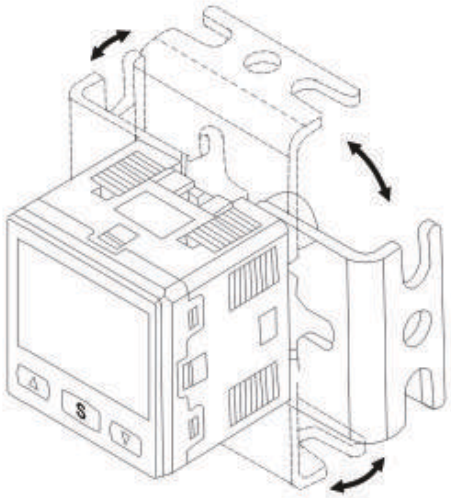
L-shaped bracket









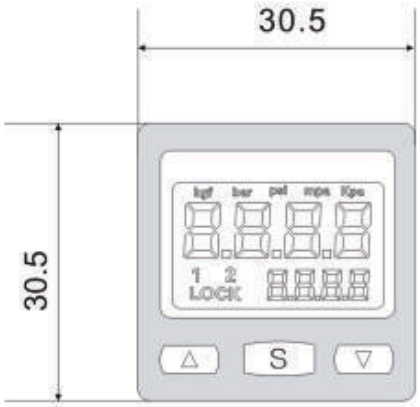


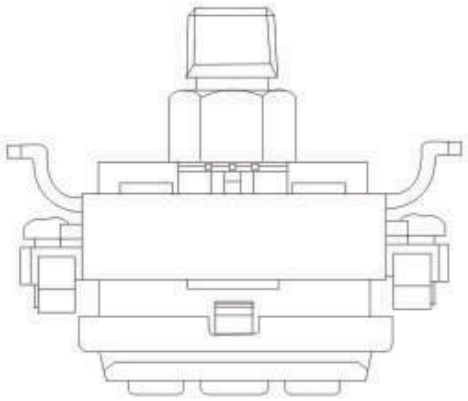
DP1SERIES

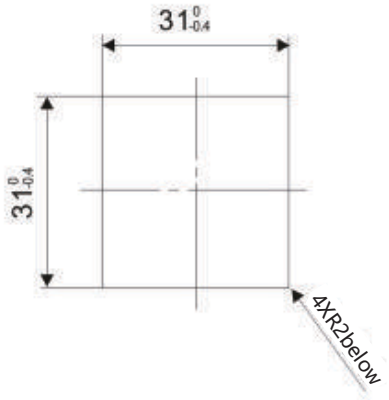
High precision micro pressure digital pressure switch

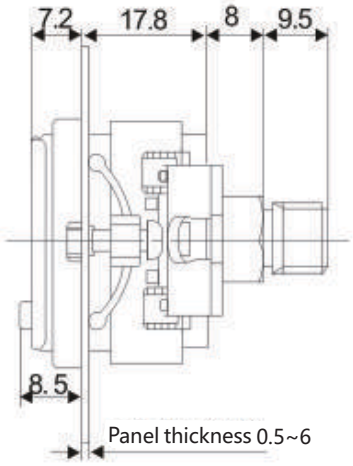
Cobot Care VAC

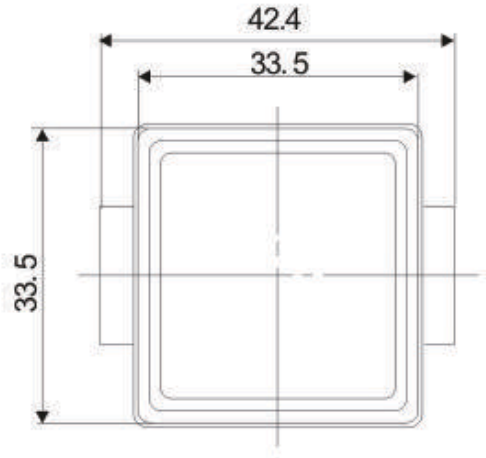
Panel installation bracket

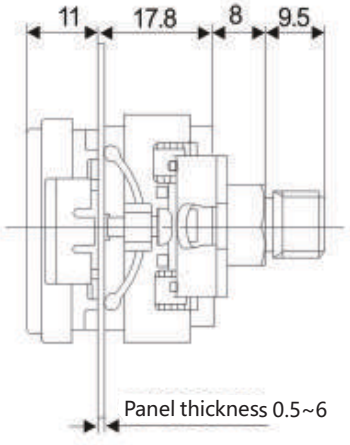












DP30FHZSERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

General

feature



- Accuracy up to ± 0.1% FS (full range), suitable for precision pressure monitoring
- Equipped with LCD/LED display screen, real-time pressure value is displayed for easy on-site reading
- Supports 4-20mA, 0-10V, RS485 (Modbus), HART and other output modes, compatible with PLC/DCS systems
- The measurable range ranges from vacuum (-100kPa) to high pressure (above 100MPa), suitable for different working conditions
- Built in temperature compensation algorithm to reduce the impact of environmental temperature changes on measurement accuracy
- Using digital filtering technology to reduce the impact of electromagnetic interference (EMI)
- Suitable for portable devices powered by batteries

advantage

High degree of intelligence

Easy installation and maintenance

Good long-term stability

high protection level

High cost-effectiveness

Specifications

model		DP30F	DP30H	DP30Z
Set pressure range		-105.0-10.0kpa	-105.0-105.0kpa	-0.105-1.050Mpa
Maximum pressure resistance		500kpa	500kpa	1.5Mpa
Set minimum unit		0. 1kpa	0. 1kpa	0.001Mpa
Suitable for fluids		Air, non corrosive gas, non flammable gas		
power supply voltage		DC12-24V ± 10%, fluctuation (P-P) below 10% (with reverse current protection)Below		
current consumption		40mANPN		
Switch output		PNP, open collector 1 output or 2 output 28V (when NPN output)		
Maximum applied voltage		125mA		
Maximum load current		Equipped with short-circuit protection function		
short circuit protection		2.5ms or less (optional for anti vibration function: 2010050010000200ms)		
reaction time		±0.2%F.S.±digit		
repeatability accuracy		± 2% F.S. ± 1 digit (at ambient temperature of 25 ± 3 ° C)		
display precision		P40		
environment	Protection level	Work: 0-55 ° C, Storage: -10-55 ° C (non condensing and non freezing)		
	Temperature range for use	Work, save: 35-85% HR (non condensing)		
	Use humidity range	50MQ or above (DC500 megohmmeter, between lead and housing)		
	insulation resistance	10-50Hz, 1.5mm or 20m/s2 full amplitude in X.Y.Z direction for 2 hours		
	Vibration-resistant	100m/s2. X.Y.Z, 3 times in each direction (uncharged)		
	impact resistance	15kpa		
	conductor	Oil resistant insulated wire, three core, four core, medium 3.5,2m, insulation outer diameter 1.0mm		

DP30FHZSERIES

High precision micro pressure digital pressure switch

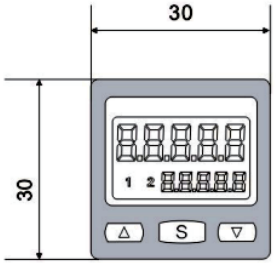
Cobot Care VAC

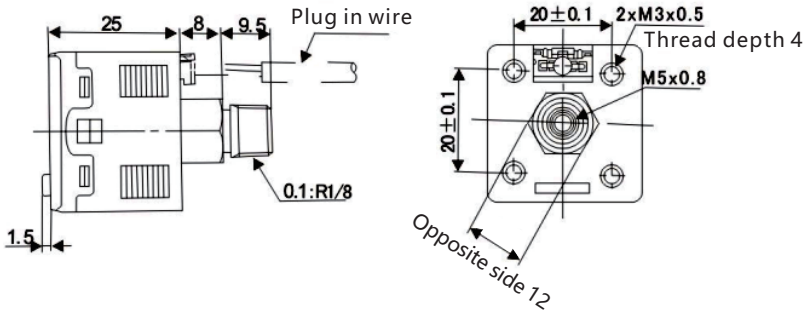
application

- **Medical and laboratory equipment:** precise control of gas supply pressure and flow rate.
- **Semiconductor and electronic manufacturing:** monitoring vacuum chamber and process gas pressure.
- **HVAC and cleanroom:** Control room positive/negative pressure to prevent cross infection of pollutants.
- **Industrial automation and pneumatic systems:** Pressure control of precision pneumatic fixtures to prevent damage to precision workpieces.
- **Environmental Protection and Energy:** Boiler Furnace Negative Pressure Monitoring. Filter differential pressure monitoring in VOC treatment equipment.

structure

1. Five digit high contrast LCD display screen
2. Output indication, pressure unit indication
3. Terminal type quick plug interface
4. M3 screw fixing hole
5. Air interface (R1/8 external thread+internal M5 thread)





Model

CCV-DP30-F-01-N

① ② ③ ④

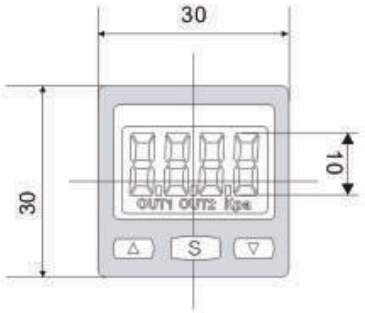
① Series code	② Pressure type	③ Takeover caliber	④ Output type
DP30: Electronic digital display pressure sensor	F - Negative pressure (-105-0kPa) H-connected pressure (-105-105kpa) Z-positive pressure (-0.1-1.0Mpa)	01-R1/8 outer thread+inner thread M5 teeth - M5 internal teeth	N-NPN Open-Collector Output 1 P-PNP Open-Collector Output 1 A-NPN Open-Collector Output 2 B-PNP Open-Collector Output 2 C-NPN+ Analog Voltage Output D-NPN+ Analog Current Output E-PNP+ Analog Voltage Output F-PNP+ Analog Current Output

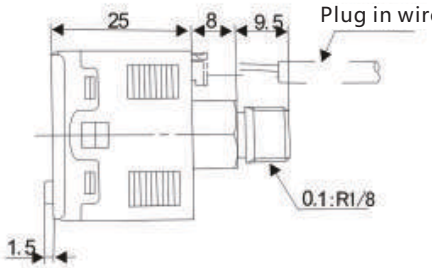
DP30FHZSERIES

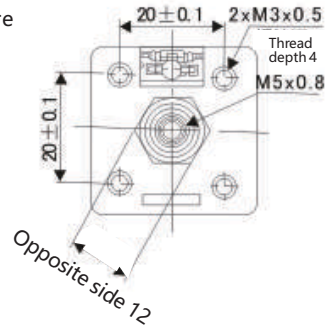
High precision micro pressure digital pressure switch

Cobot Care VAC

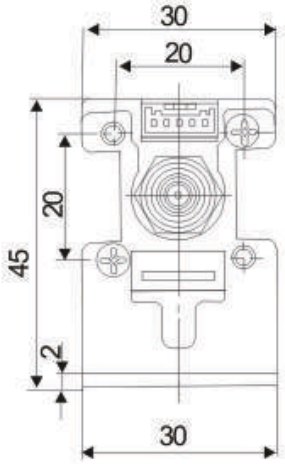
Installation method and accessories

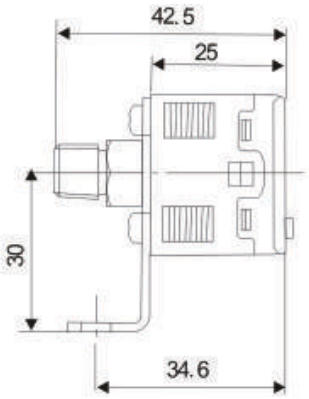


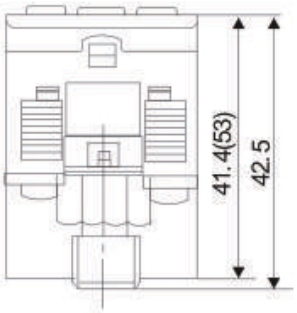


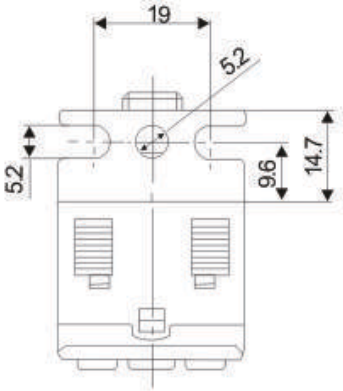


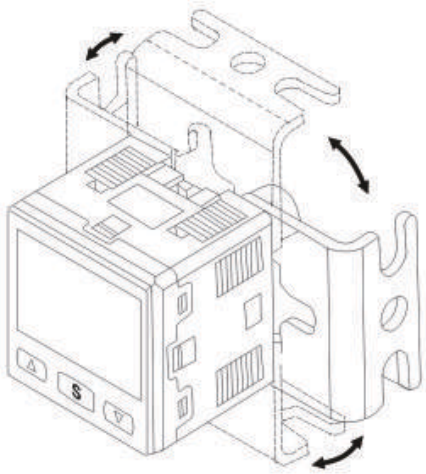
L-shaped bracket









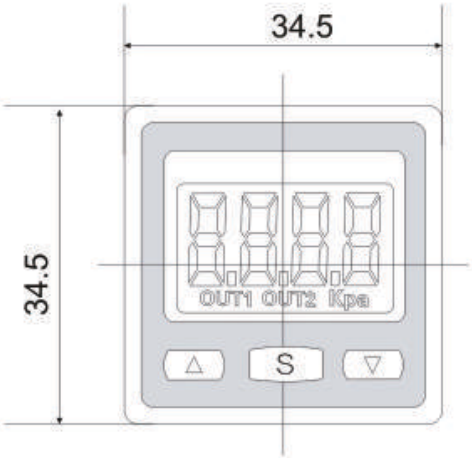


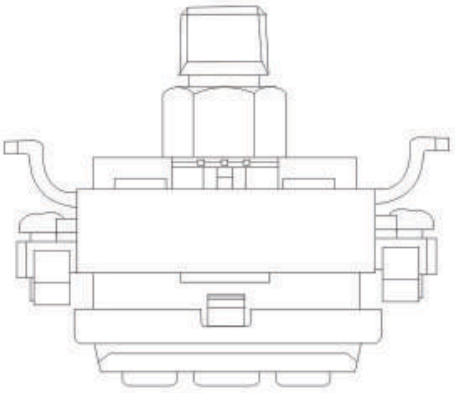
DP30FHZSERIES

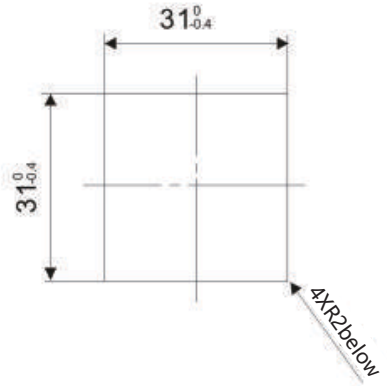
High precision micro pressure digital pressure switch

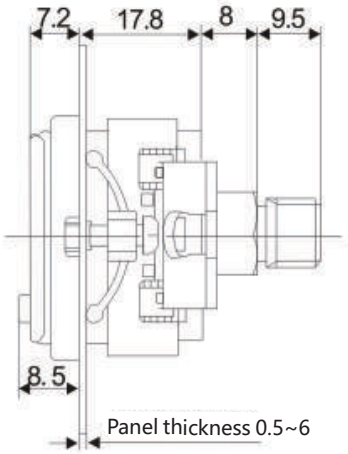
Cobot Care VAC

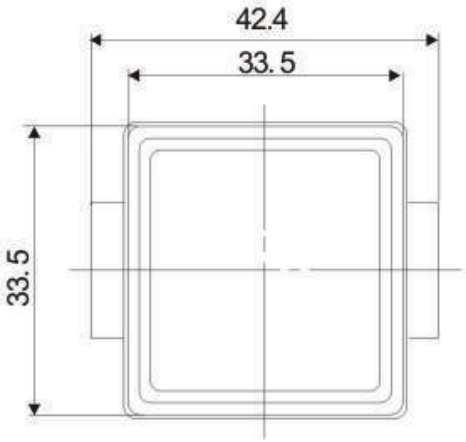
Panel installation bracket

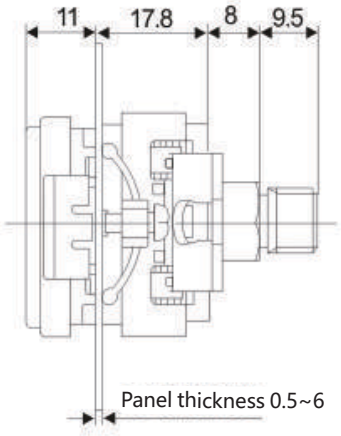












DP2/DP5SERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

universal

characteristic

- Accuracy: Level 1
- 1-channel switch output, NPN/PNP switchable
- Supports 1 channel of analog output
- Compact in appearance, easy to install
- "Current Value" and "Reference Value" are displayed simultaneously, and the reference value can be directly set
- Dual screen, 3-color display (red, green, orange)
- Digital display, easier to identify



advantage

Easy installation and maintenance | Good long-term stability | high protection level | High cost-effectiveness

specification

project		Positive pressure (Dp2)	Composite pressure (Dp5)[Note 3]
Types of stress		Standard pressure	
Rated pressure range [Note 1]			-101kPa~100kPa
Set pressure range [Note 1]		-0.1MPa~1.0MPa	-101kPa~100kPa
Pressure resistance		1.5MPa	500kPa
Applicable fluid		Non corrosive gas	
power supply voltage		12~24V DC±10%	
current consumption		24V 30mA Max	12V 50mA Max
Switch output [Note 2]		NPN O.Coutput: 80mA/24VDC Max orPNP O.Coutput: 80mA/24VDC	
repeatability accuracy		±0.2% F.S.	±0.5% F.S.
reaction time		Select through button operation: 2.5ms,5ms,10ms,25ms,50ms,100ms,250ms,500ms,1000ms,5000ms	
Analog output	voltage output	0.6V~5V (Or slightly smaller)	1V~5V (Or slightly smaller)
		Linearity:± 1%F.S. Output impedance: 1KΩ	
	current output	2.4mA~20mA (Or slightly smaller)	4mA~20mA (Or slightly smaller)
		Linearity: ± 1% F.S. Maximum load impedance, when the power supply voltage is 12V:300Ω; When the power supply voltage is 24V: 600 Ω Minimum load impedance: 50 Ω	
temperature range		Working temperature: 0~50℃ Storage temperature: -10~60℃ (non condensing)	
humidity range		35~85%RH	
temperature characteristics		±1%F.S. (25℃)	
protection level		IP40	
materia		Shell: Nylon+Fiberglass LCD display screen: Acrylic Pressure port: external thread POM+internal M5 copper nut Sealing ring: H-NBR Button: Silicone rubber	
Overall dimensions		30x30x25.2mm(Excluding connectors) / 30x30x42.2mm(Including connectors)	
weigh		About 80g (barometer body+user interface connector)	

Note 1: Due to temperature and linear compensation effects, there may be slight fluctuations near the upper/lower range of the pressure gauge, which is normal
Note 2: Factory default NPN output. Note 3: Factory default value is -50kPa

DP2/DP5SERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

application

- Medical and laboratory equipment: precise control of gas supply pressure and flow rate.
- Semiconductor and electronic manufacturing: monitoring vacuum chamber and process gas pressure.
- HVAC and cleanroom: Control room positive/negative pressure to prevent cross infection of pollutants.
- Industrial automation and pneumatic systems: Pressure control of precision pneumatic fixtures to prevent damage to precision workpieces.
- Environmental Protection and Energy: Boiler Furnace Negative Pressure Monitoring. Filter differential pressure monitoring in VOC treatment equipment.

Model

CCV-DP2-001-01

① ② ③ ④

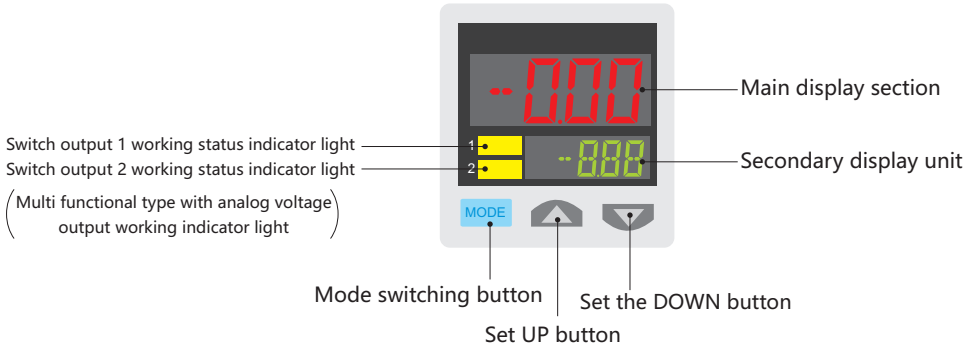
① Series code	② pressure type	④ output type	③ takeover caliber
DP: Economic type	2: Positive pressure (-0.1 MPa~1 Mpa) 5: Composite pressure (-101kPa~100kPa) [* Note 1]: The factory default value is -50kPa	000: 2-channel switch quantity (NPC/PNP adjustable, factory default 2NPN) 001: 1-channel switch quantity (NPN/PNP adjustable, factory default NPN) 050:1 switch quantity (NPN/PNP adjustable, factory default NPN) +1 analog output note 2 051:1 switch quantity (NPN/PNP adjustable, factory default NPN) +1 analog output note 3	01: R1/8+M5 (external thread POM, internal thread copper) 02: G1/8+M5 (external thread POM, internal thread copper) 07: R1/8+M5 (nickel plated brass end connection)

[* Note 2]: The analog output range of DP2-050 is 0.6V~5V (or slightly smaller)The analog output range of DP5-050 is 1V~5V (or slightly smaller)
[* Note 3]: The analog output range of DP2-051 is 2.4mA~20mA (or slightly smaller)
The analog output range of DP5-051 is 4mA~20mA (or slightly smaller)

Optional accessories

accessories(1)	cable*	A0: Without connecting cable (user provided) B1: 2m connecting wire (3-core) B2: 2m connecting wire (5 cores) *If you need cables of other lengths, please consult the salesperson.
accessories(2)	mounting bracket	C1: Metal bracket (MS-FP-04 type) C2: Metal bracket (MS-FP-05 type) D1: Panel bracket (MS-FP-01/02) with protective cover (MS-FP-03) E0: No installation bracket (user provided)
accessories(3)	Shipping packaging methodbracket	110: Carton A+Cardboard A 121: Carton A+Inner Box A 133: Carton A+Neutral Inner Box A

Panel structure



DP2/DP5SERIES

High precision micro pressure digital pressure switch

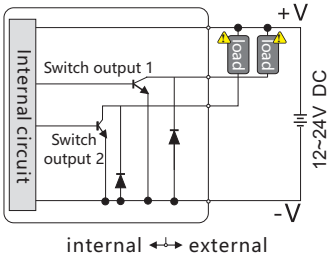
Cobot Care VAC

I/O circuit diagram and circuit diagram

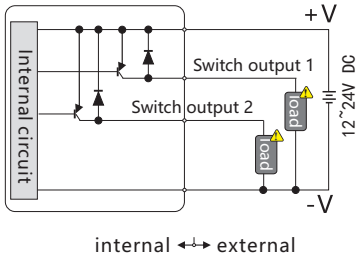
DP2/5-000-☐(2-channel switch output type)

Please be sure to pay attention! Be sure to connect the load in series before use, otherwise it may cause the pressure gauge to burn out!

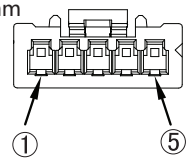
NPNOutput type



PNPOutput type



Terminal arrangement diagram

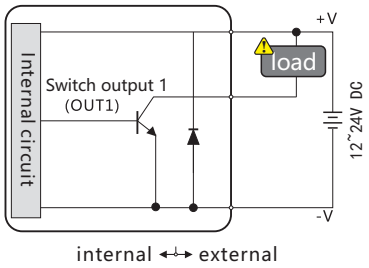


Connector pin NO	Terminal name
① brown	+V
② white	Switch output 1
③ white	Switch output 2
④ orange	–
⑤ Blue	0V

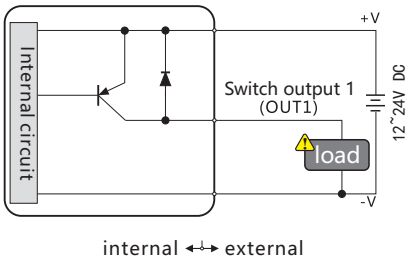
DP2/5-001-☐(Non analog output type)

Please be sure to pay attention! Be sure to connect the load in series before use, otherwise it may cause the pressure gauge to burn out!

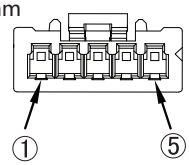
NPNOutput type



PNPOutput type



Terminal arrangement diagram

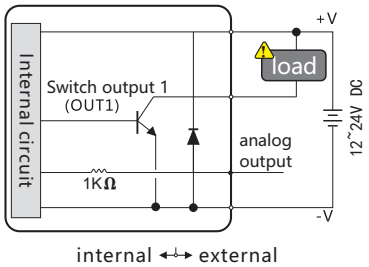


Connector pin NO	Terminal name
① brown	+V
② white	Switch output 1
③ white	–
④ orange	–
⑤ Blue	0V

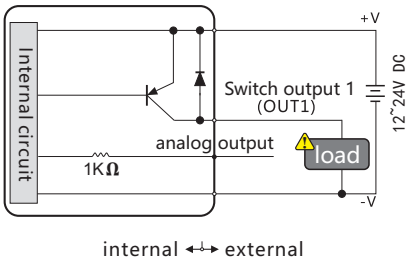
DP2/5-050/051-01-☐(Analog output type)

Please be sure to pay attention! Be sure to connect the load in series before use, otherwise it may cause the pressure gauge to burn out!

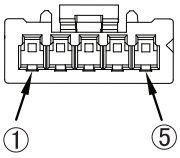
NPNOutput type



PNPOutput type



Terminal arrangement diagram

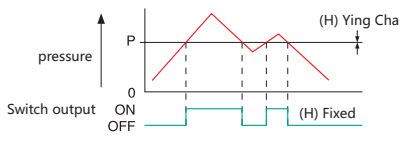


Connector pin NO	Terminal name
① brown	+V
② white	Switch output 1
③ white	–
④ orange	Analog output
⑤ Blue	0V

Input mode and output mode

① EASY mode

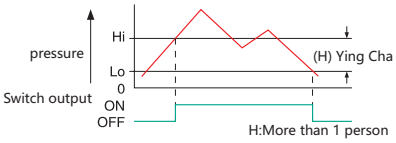
Mode for ON/OFF control of switch output



(Note) The tolerance can be fixed at level 8.

② Lag mode

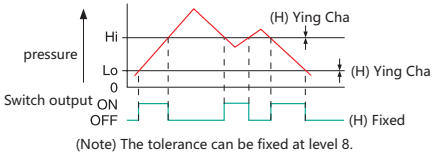
Set the response (hysteresis) of the switch output arbitrarily and perform ON/OFF control mode.



H:More than 1 person

③ Window comparison mode

Set the switch output to ON or OFF mode according to the pressure within the set range.



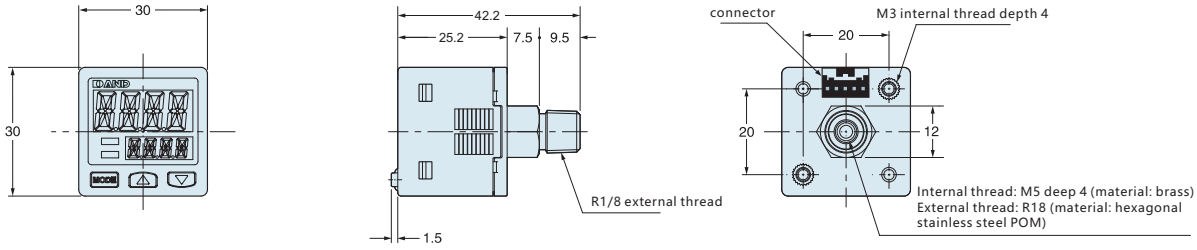
(Note) The tolerance can be fixed at level 8.

DP2/DP5SERIES

High precision micro pressure digital pressure switch

Cobot Care VAC

Outline dimension drawing (unit: mm)



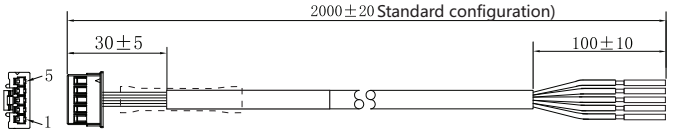
accessories

Accessory (1): Cable



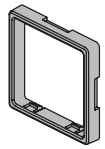
Please use the connecting cable with plug provided in the attachment.

Unit: mm

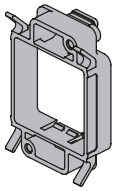


Note: When disassembling, please hold down the part of the connector to remove it. Otherwise, it may cause cable breakage and damage to the connecting cable.

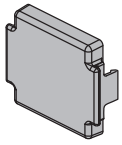
Accessory (2): Installation bracket (sold separately)



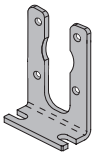
01 type panel bracket
（MS-FP-01）



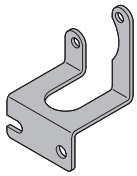
02 type panel bracket
（MS-FP-02）



03 type panel bracket
（MS-FP-03）



04 Type sensor installation bracket
(MS-FP-04)



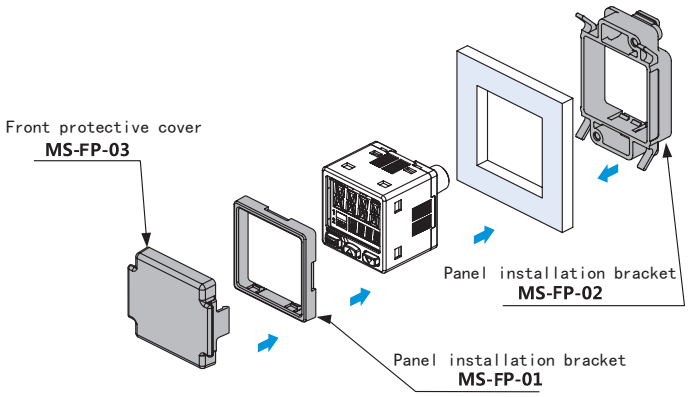
05 Type sensor installation bracket
(MS-FP-05)

accessories

name	model	explanation
Sensor installation bracket	MS-FP-04	Sensors can be installed in the bottom or top direction, or multiple sensors can be tightly installed.
	MS-FP-05	Sensors can be installed in the back direction, or multiple sensors can be tightly installed.
Panel installation bracket	MS-FP-02	When used in combination, sensors can be installed on panels with a thickness of 1-6mm, or multiple sensors can be used
	MS-FP-01	
Front protective cover	MS-FP-03	Protect the adjustment surface of the sensor. (When using a panel mounting bracket, this protective cover can be installed.)

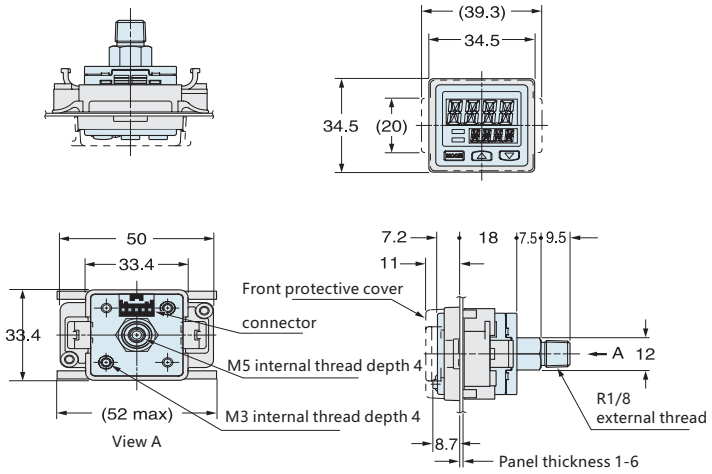
I/O circuit diagram and circuit diagram

Installation Instructions



MS-FP-01/MS-FP-02/MS-FP-03Panel mounting bracket (sold separately), front protective cover (sold separately)

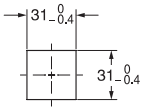
Installation effect and bracket size



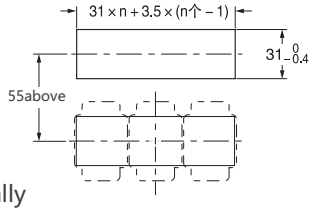
Material: POM panel mounting bracketPolycarbonate (front protective cover)

Panel processing dimensions

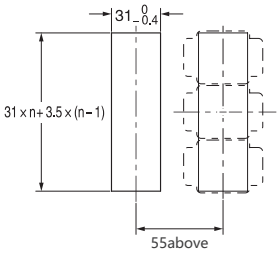
When installing one



When installing n consecutive horizontally



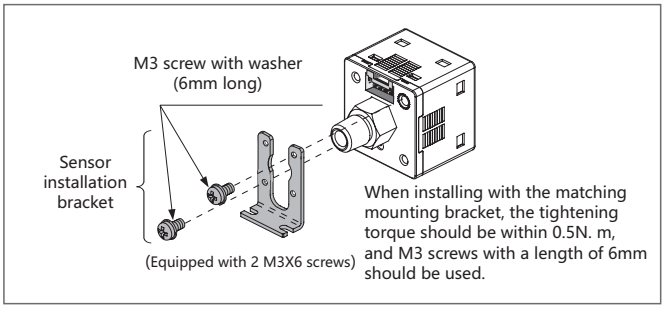
When installing n consecutive vertically



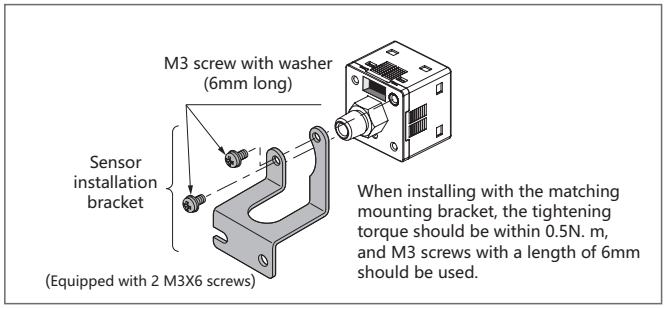
Note: The panel thickness should be between 1-6mm.

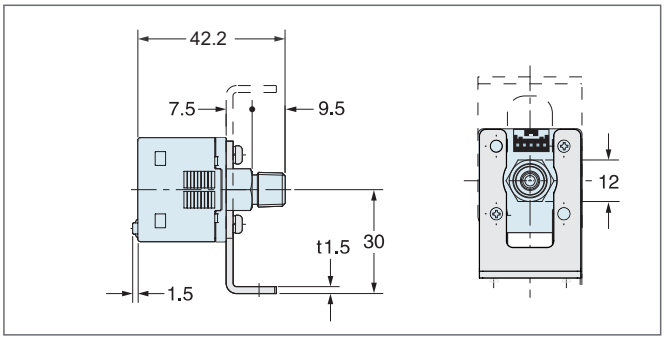
Installation bracket (sold separately) (unit: mm)

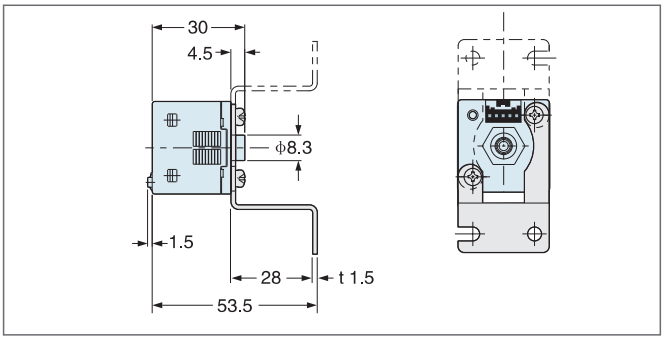
MS-FP-04 Sensor Installation Bracket (sold separately)

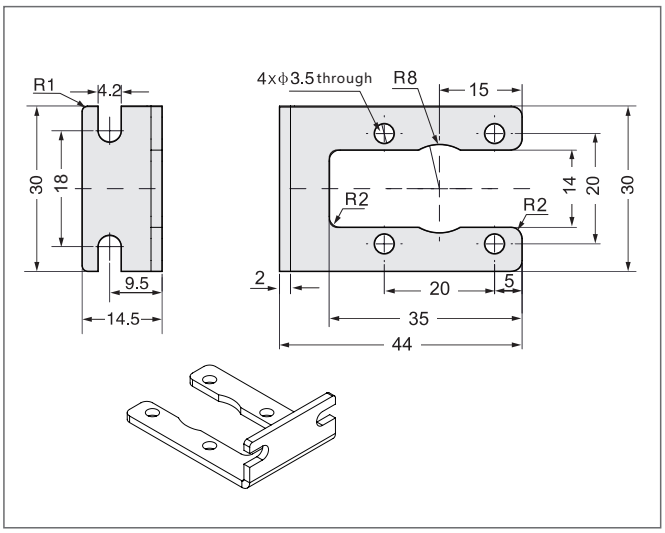


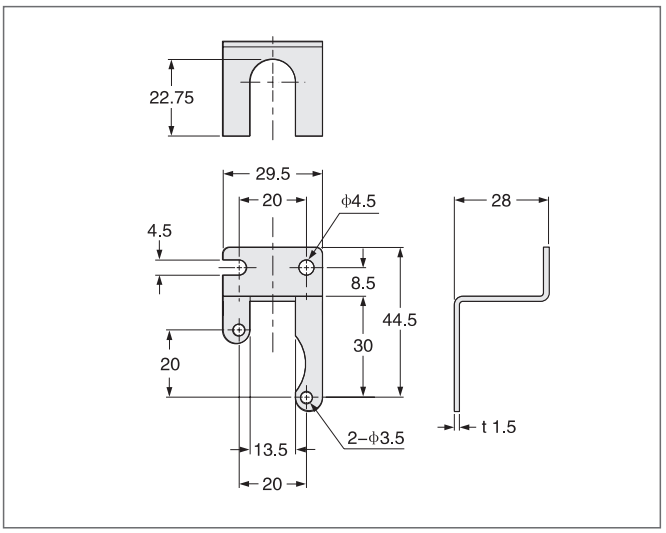
MS-FP-05 Sensor Installation Bracket (sold separately)











KZFASERIES

Integrated fan control valve system

Cobot Care VAC

General

Characteristics

◇ Main air valve body (aluminum alloy large chamber)
◇ Pneumatic actuator cylinder (left square cylinder)
◇ Integrated manifold for solenoid valve
◇ Two position five way pilot solenoid valve
◇ Vacuum pressure switch, pressure regulating valve, one-way throttle valve, and vacuum breaking valve can be installed to achieve integrated air volume regulation, negative pressure monitoring, and shutdown pressure relief



Advantage

Low installation and maintenance costs

stable operation Low failure rate

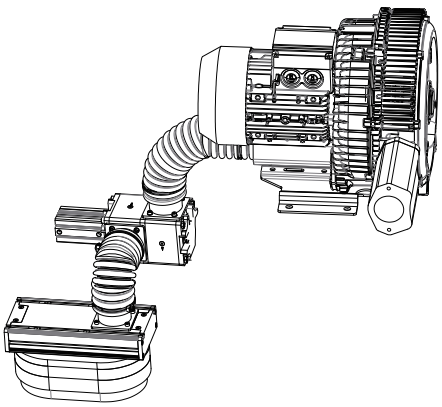
energy conservation and consumption reduction

Long lifespan and durability

Strong compatibility for expansion

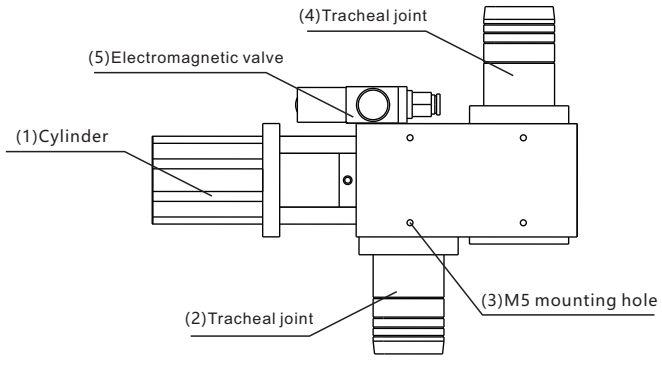
Application

◇ Environmental protection and dust removal industry (most mainstream)
◇3C Electronics/Lithium Battery Manufacturing
◇ Woodworking furniture industry
◇ Plastic injection molding and printing industry
◇ Metallurgy, polishing, and grinding processing
◇ Small industrial furnaces, hot air circulation equipment



structure

◇ (1) Cylinder
◇ (2) Tracheal joint
◇ (3) M5 mounting hole
◇ (4) Tracheal joint
◇ (5) Electromagnetic valve



KZFASERIES

Integrated fan control valve system

Cobot Care VAC

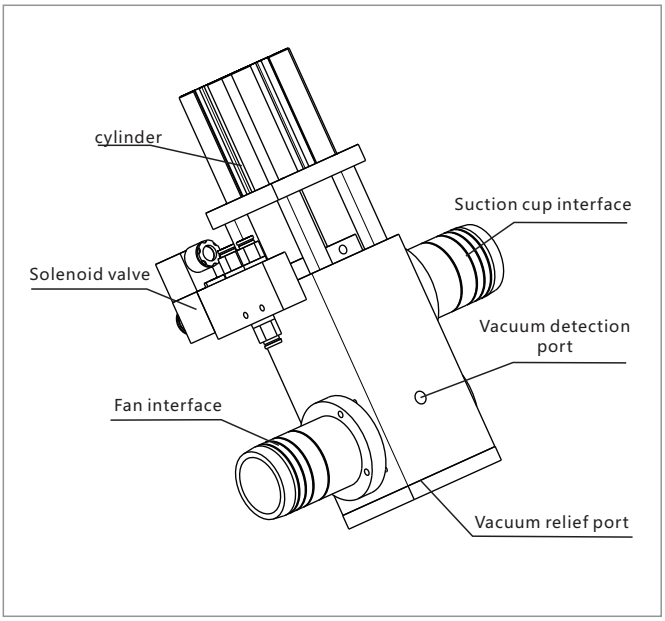
Model

CCV-KZFA-D50-24V

① ② ③

① Product Series	② Outer diameter of air duct joint	③ control voltage
KZFA	D50 D60 D75 D80	24V

Structural Description

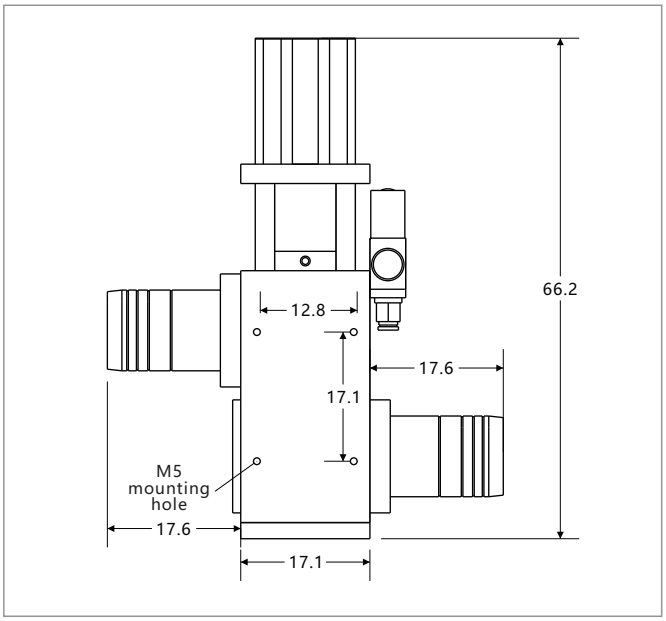


Working Principle:

Cylinder lifting>pressure relief>vacuum breaking>fan cooling

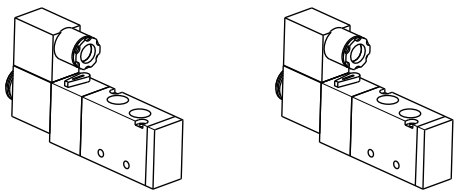
Cylinder compression>Connecting suction cup>Cylinder sealing.

Specifications and Dimensions(mm)



KZFA-D50-24V

Accessory selection specifications



4V200Series 4V300Series

Electromagnetic valve (five port two position, five port three position) 4V200 series 4V300 series

ELECTROMAGNETIC VALVE (FIVE PORT TWO POSITION, FIVE PORT THREE POSITION)

Cobot Care VAC

4V200 series 4V300 series

carton package Injection molding

characteristic



- Pilot mode: Internal or external guidance options available
- Sliding column structure, good sealing performance, sensitive response
- The three position solenoid valve has three central functions to choose from
- Dual head two position solenoid valve with memory function
- The inner hole is processed with special technology, with low friction resistance, low starting air pressure, and long service life
- No need to lubricate with oil
- Can be integrated with the base valve group to save installation space
- Equipped with a manual

advantage

Fast response and high-precision control

Strong adaptability and wide compatibility with media

Energy saving, environmentally friendly and low maintenance costs

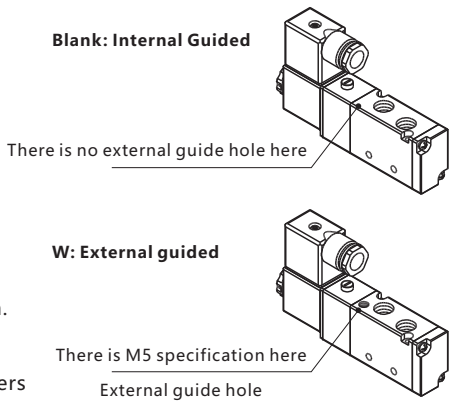
Reliability and safety

application

- **Industrial automation**: Control cylinders, hydraulic systems (such as injection molding machines, machine tools).
- **Fluid treatment**: Chemical pipeline medium on/off, proportional adjustmen
- **Home appliances**: water inlet control for washing machines and dishwashers.
- **Automobile**: fuel injection, transmission hydraulic system.
- **Medical equipment**: gas pathway management for ventilators and analyzers
- **Energy**: Solar hot water system, safe shutdown of gas pipelines

structure

- Electromagnetic coil: When powered, it generates a magnetic field that drives the movement of the iron core
  Valve body: The main structure is mostly made of brass, stainless steel, or engineering plastic
  Valve core (moving iron core): Directly opening and closing the flow channel affects the response speed
  Spring: Reset valve core when power is off (normally open/normally closed type)
  Seals: Nitrile rubber, fluororubber, etc., resistant to temperature and corrosion.
  Optional Structure:
  Direct acting: The coil directly pushes the valve core, suitable for small diameters
  Pilot type: using fluid pressure to assist in opening, suitable for high flow rates



ELECTROMAGNETIC VALVE (FIVE PORT TWO POSITION, FIVE PORT THREE POSITION)

Cobot Care VAC

Electromagnetic valve (five port two position, five port three position) 4V100 series

Model specifications

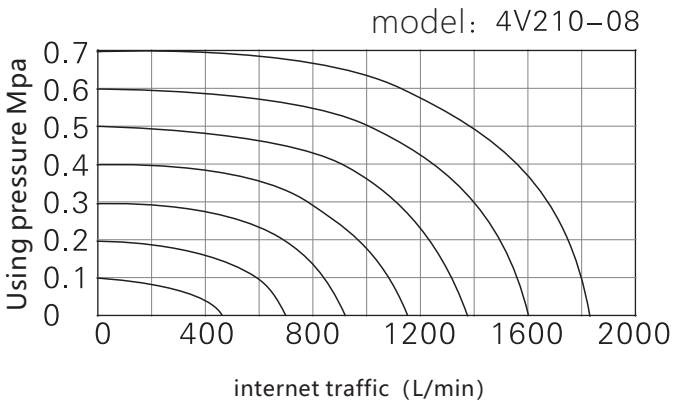
CCV-4V-1-10-06-A-*-*-W

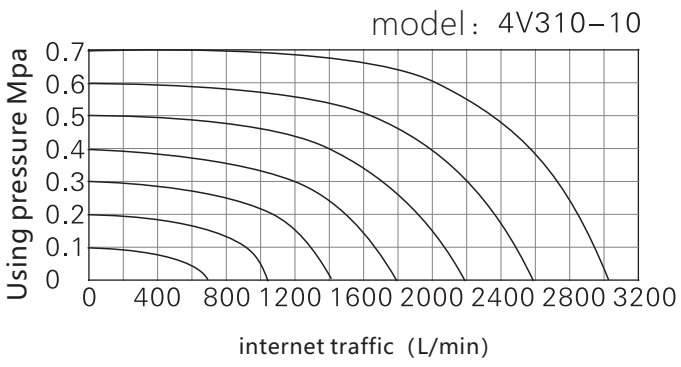
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Specification code	② Series code	③ Electric control mode	④ port size
4V:Five people, two people Five or three people solenoid valve	200series 300series	10/20:Dual position single electronic control 30C/30E/30P:Three position dual electronic control center closed type	G:1/8 G:1/4 G:3/8

⑤ Standard voltage	⑥ Power connection method	⑦ Dental code	⑧ Guidance method
A:AC220V B:DC24V C: AC110V E:AC24V F:DC12V	Blank: DIN socket type 1: Outgoing type The length of the outgoing line is 0.5m	No such code Empty self: PT teeth G: G teeth T: NPT Teeth	Blank: Built in Guided Mode W: External guided type

Traffic characteristics



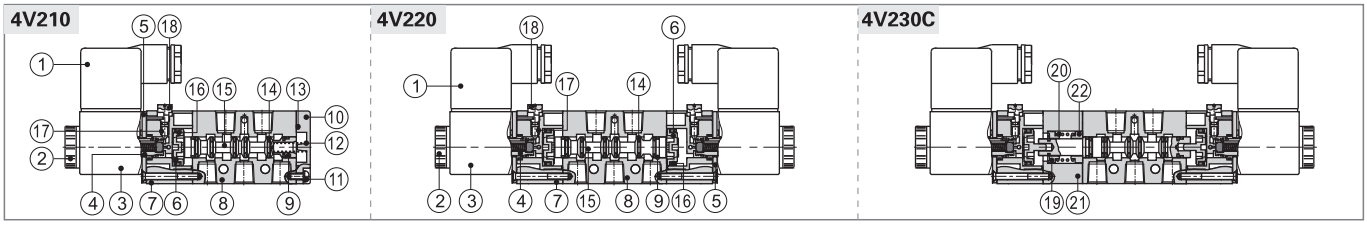


ELECTROMAGNETIC VALVE (FIVE PORT TWO POSITION, FIVE PORT THREE POSITION)

Cobot Care VAC

Electromagnetic valve (five port two position, five port three position) 4V100 series

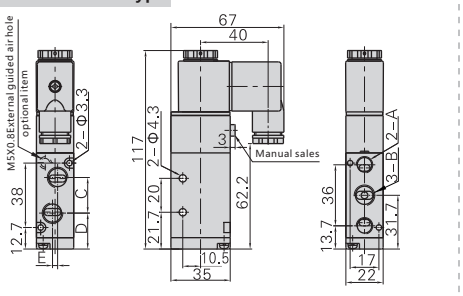
Internal structure of 4V200



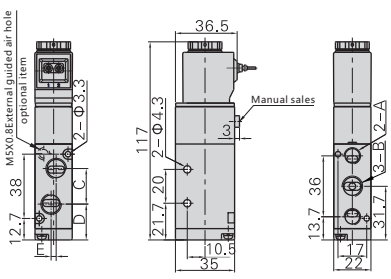
Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name
1	terminal	3	coil	5	Fixed iron sheet	7	Guiding Body	9	Wear resistant ring	11	screw	13	Wear resistant ring	15	Spindle	17	Spindle	19	spring	21	side cover
2	arm nut	4	Movable iron	6	piston	8	essence	10	bottom cover	12	spring	14	O Ling	16	Alien 0 Order	18	Alien 0 Order	20	Manual sales	22	Return to Seat

4V200 external specifications

4V210DIN socket type

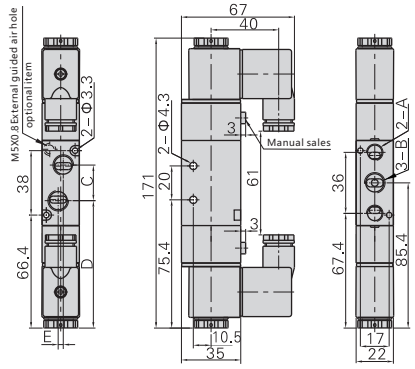


4V210DIN outgoing type

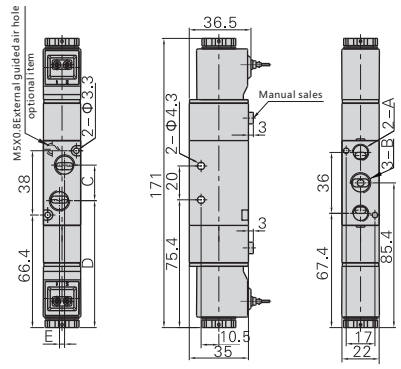


Type/symbol	A	B	C	D	E
4V210-06	PT1/8	PT1/8	18	22.7	0
4V210-08	PT1/8	PT1/4	21	21.2	3

4V220DIN socket type

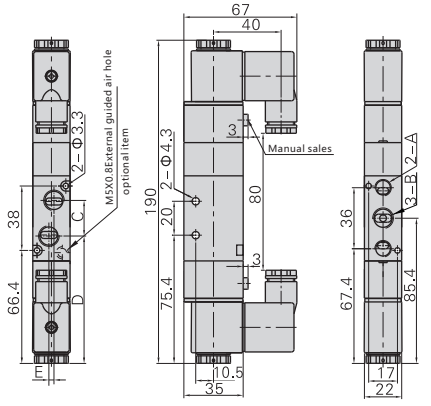


4V220DIN outgoing type

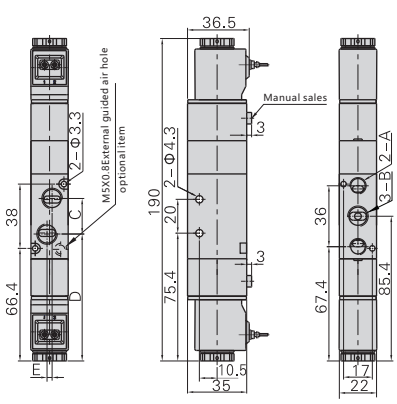


Type/symbol	A	B	C	D	E
4V220-06	PT1/8	PT1/8	18	76.4	0
4V220-08	PT1/8	PT1/4	21	74.9	3

4V230DIN socket type



4V230DIN outgoing type

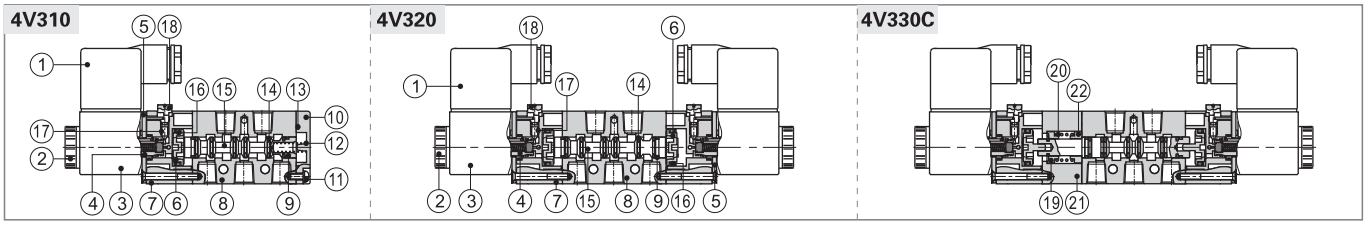


Type/symbol	A	B	C	D	E
4V230-06	PT1/8	PT1/8	18	76.4	0
4V230-08	PT1/8	PT1/4	21	74.9	3

ELECTROMAGNETIC VALVE (FIVE PORT TWO POSITION, FIVE PORT THREE POSITION)

Electromagnetic valve (five port two position, five port three position) 4V100 series

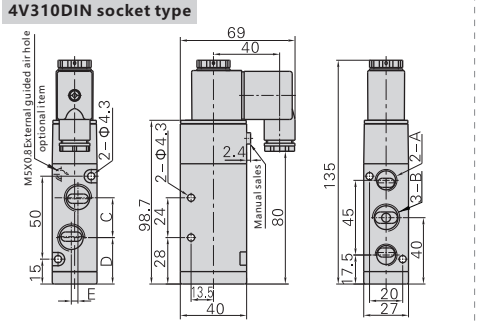
Internal structure of 4V300



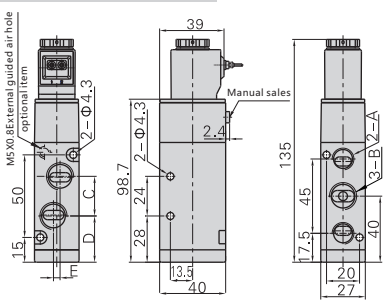
Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name	Serial Number	name
1	terminal	3	coil	5	Fixed iron sheet	7	Guiding Body	9	Wear resistant ring	11	screw	13	Wear resistant ring	15	Spindle	17	Spindle	19	spring	21	side cover
2	arm nut	4	Movable iron	6	piston	8	essence	10	bottom cover	12	spring	14	0 Ling	16	Alien 0 Order	18	Alien 0 Order	20	Manual sales	22	Return to Seat

4V300 external specifications

4V310DIN socket type

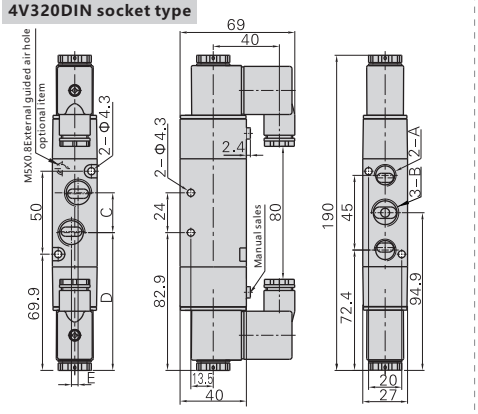


4V310DIN outgoing type

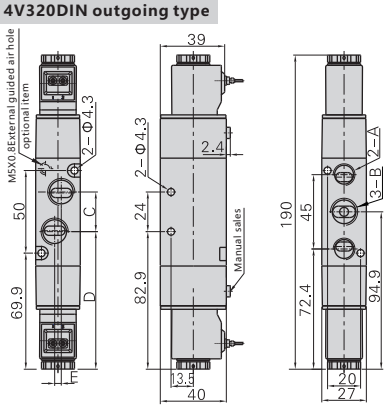


Type/symbol	A	B	C	D	E
4V310－08	PT1/4	PT1/4	22	29	0
4V310－10	PT1/4	PT3/8	24	28	4

4V320DIN socket type

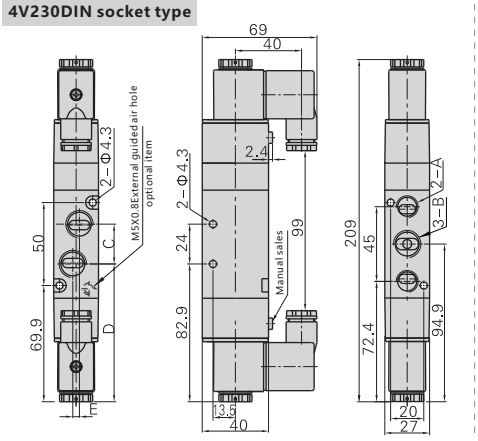


4V320DIN outgoing type

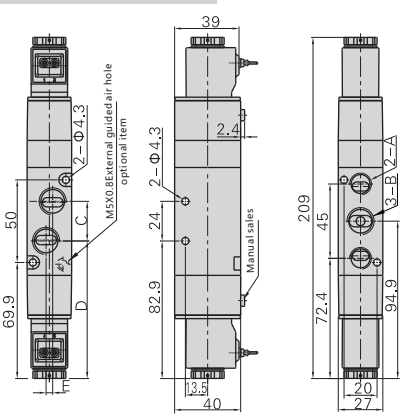


Type/symbol	A	B	C	D	E
4V320－08	PT1/4	PT1/4	22	83.9	0
4V320－10	PT1/4	PT3/8	24	82.9	4

4V230DIN socket type



4V230DIN outgoing type



Type/symbol	A	B	C	D	E
4V330－08	PT1/4	PT1/4	22	83.9	0
4V330－10	PT1/4	PT3/8	24	82.9	4

VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC



metal plate packaging timber composite material

characteristic

- Multi stage nozzle series, gradually reducing pressure and increasing speed, maximizing suction efficiency
- Large vacuum and high flow rate
- Modular combination, can stack modules according to traffic flow, and flexibly match requirements
- There are various specifications for gas supply and vacuum ports
- Can be equipped with energy-saving control device
- Engineering plastic/aluminum alloy shell, resistant to impact and corrosion



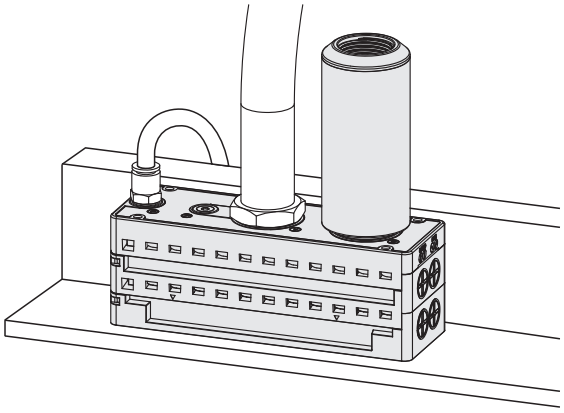
advantage



Fast pumping with low cost | High flow and high vacuum | Compact size | Low consumption of compressed air

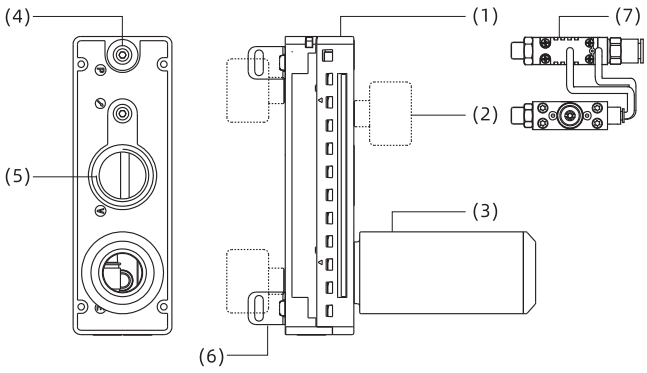
application

- Automated handling (3C/automotive/home appliances)
- Packaging industry (food/pharmaceutical/daily chemical)
- Printing/papermaking/textile
- Electronic/semiconductor chips
- Logistics/Warehousing/E-commerce
- Other



structure

- (1) Main body
- (2) Pressure gauge
- (3) Silencer
- (4) Gas supply port
- (5) Vacuum port
- (6) L-shaped installation bracket
- (7) ES energy-saving system



VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC

Specification and model representation

CCV-VTMD-25-L-AA-V-ES

① ② ③ ④ ⑤ ⑥

① Product Series	② specification	③ performance
VTMD	25 50 75 100 125 150	H-Vacuum type (-95kPa) L-flow type (-75kPa)

④ Connection board specifications	⑤ Selection of check valve	⑥ control device
AA BA CA DB CC	Blank - Default Specification No check valve V-belt check valve	Blank - Default Specification No control device ES Energy saving System

◇ Note: When using - V check valve or - ES energy-saving system, the vacuum port should be matched with a filter for use

Appendix of Connection Plate Specifications

Connection board specifications	Gas supply port(1)	Vacuum port(2)	exhaust vent(3)	Suitable generator models
AA	G1/8	G3/4	G1"	VTMD25、50
BA	NPSF1/8	G3/4	G1"	VTMD25、50
CA	G1/4	G3/4	G1"	VTMD25、50、75、100
DB	NPT1/4	NPT3/4	G1"	VTMD25、50、75、100
CC	G1/4	G1"	G1"	VTMD25、50、75、100、125、150

Selection Specification - L (Flow Type)

Model	25	50	75	100	125	150
VTMDL-AA	VTMD25L-AA	VTMD50L-AA	-	-	-	-
VTMDL-AA-V	VTMD25L-AA-V	VTMD50L-AA-V	-	-	-	-
VTMDL-AA-V-ES	VTMD25L-AA-V-ES	VTMD50L-AA-V-ES	-	-	-	-
VTMDL-BA	VTMD25L-BA	VTMD50L-BA	-	-	-	-
VTMDL-BA-V	VTMD25L-BA-V	VTMD50L-BA-V	-	-	-	-
VTMDL-CA	VTMD25L-CA	VTMD50L-CA	VTMD75L-CA	VTMD100L-CA	-	-
VTMDL-CA-V	VTMD25L-CA-V	VTMD50L-CA-V	VTMD75L-CA-V	VTMD100L-CA-V	-	-
VTMDL-CA-V-ES	-	-	VTMD75L-CA-V-ES	VTMD100L-CA-V-ES	-	-
VTMDL-DB	VTMD25L-DB	VTMD50L-DB	VTMD75L-DB	VTMD100L-DB	-	-
VTMDL-DB-V	VTMD25L-DB-V	VTMD50L-DB-V	VTMD75L-DB-V	VTMD100L-DB-V	-	-
VTMDL-CC	VTMD25L-CC	VTMD50L-CC	VTMD75L-CC	VTMD100L-CC	VTMD125L-CC	VTMD150L-CC
VTMDL-CC-V	VTMD25L-CC-V	VTMD50L-CC-V	VTMD75L-CC-V	VTMD100L-CC-V	VTMD125L-CC-V	VTMD150L-CC-V
VTMDL-CC-V-ES	VTMD25L-CC-V-ES	VTMD50L-CC-V-ES	VTMD75L-CC-V-ES	VTMD100L-CC-V-ES	VTMD125L-CC-V-ES	VTMD150L-CC-V-ES

VTMDSERIES

Multi-stage vacuum generator

Cobot Care VAC

Selection specification - H (vacuum type)

Model	25	50	75	100	125	150
VTMDH-AA	VTMD25H-AA	VTMD50H-AA	-	-	-	-
VTMDH-AA-V	VTMD25H-AA-V	VTMD50H-AA-V	-	-	-	-
VTMDH-AA-V-ES	VTMD25H-AA-V-ES	VTMD50H-AA-V-ES	-	-	-	-
VTMDH-BA	VTMD25H-BA	VTMD50H-BA	-	-	-	-
VTMDH-BA-V	VTMD25H-BA-V	VTMD50H-BA-V	-	-	-	-
VTMDH-CA	VTMD25H-CA	VTMD50H-CA	VTMD75H-CA	VTMD100H-CA	-	-
VTMDH-CA-V	VTMD25H-CA-V	VTMD50H-CA-V	VTMD75H-CA-V	VTMD100H-CA-V	-	-
VTMDH-CA-V-ES	-	-	VTMD75H-CA-V-ES	VTMD100H-CA-V-ES	-	-
VTMDH-DB	VTMD25H-DB	VTMD50H-DB	VTMD75H-DB	VTMD100H-DB	-	-
VTMDH-DB-V	VTMD25H-DB-V	VTMD50H-DB-V	VTMD75H-DB-V	VTMD100H-DB-V	-	-
VTMDH-CC	VTMD25H-CC	VTMD50H-CC	VTMD75H-CC	VTMD100H-CC	VTMD125H-CC	VTMD150H-CC
VTMDH-CC-V	VTMD25H-CC-V	VTMD50H-CC-V	VTMD75H-CC-V	VTMD100H-CC-V	VTMD125H-CC-V	VTMD150H-CC-V
VTMDH-CC-V-ES	VTMD25H-CC-V-ES	VTMD50H-CC-V-ES	VTMD75H-CC-V-ES	VTMD100H-CC-V-ES	VTMD125H-CC-V-ES	VTMD150H-CC-V-ES

performance parameters

Product model	Rated gas supply pressure bar	Maximum vacuum degree - kPa	Maximum vacuum flow rate NL/min	Air consumption : NL/min	Noise dB (A)	Working temperature ° C	Single weight G	Vacuum chamber volume cm^3	Recommended hose diameter mm	
									Gas supply port P	Vacuum port V
VTMD25L	6.0	75	360	130	63~68	-10~80	430	140	ϕ8	ϕ25
VTMD50L	6.0	75	710	260	63~68	-10~80	435	140	ϕ8	ϕ25
VTMD75L	6.0	75	1,050	390	63~68	-10~80	625	245	ϕ10	ϕ32
VTMD100L	6.0	75	1,410	520	63~68	-10~80	630	245	ϕ10	ϕ32
VTMD125L	6.0	75	1,500	650	63~68	-10~80	825	352	ϕ12	ϕ32
VTMD150L	6.0	75	1,690	780	63~68	-10~80	830	352	ϕ12	ϕ32
VTMD25H	5.0	95	354	135	63~68	-10~80	430	140	ϕ8	ϕ25
VTMD50H	5.0	95	700	270	63~68	-10~80	435	140	ϕ8	ϕ25
VTMD75H	5.0	95	980	405	63~68	-10~80	625	245	ϕ10	ϕ32
VTMD100H	5.0	95	1,380	540	63~68	-10~80	630	245	ϕ10	ϕ32
VTMD125H	5.0	95	1,480	675	63~68	-10~80	825	352	ϕ12	ϕ32
VTMD150H	5.0	95	1,650	810	63~68	-10~80	830	352	ϕ12	ϕ32

Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	0	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
VTMD25L	6.0	130	360	210	156	102	54	36	30	21	75
VTMD50L	6.0	260	710	420	312	204	108	72	60	42	75
VTMD75L	6.0	390	1,050	630	468	306	162	108	90	66	75
VTMD100L	6.0	520	1,410	840	624	408	216	144	120	84	75
VTMD125L	6.0	650	1,500	948	744	510	270	180	150	126	75
VTMD150L	6.0	780	1,690	1,074	888	612	324	216	180	132	75

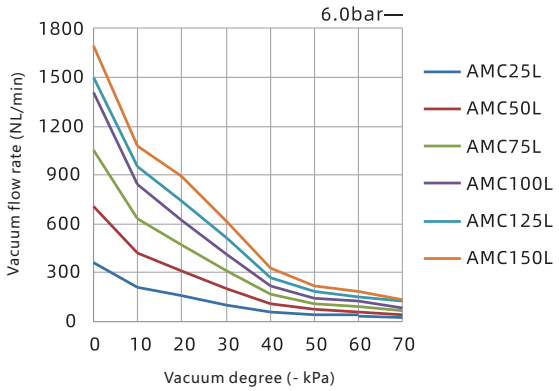
VTMDSERIES

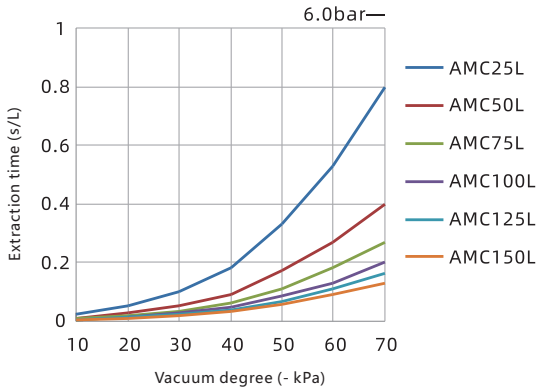
Multi-stage vacuum generator

Cobot Care VAC

Extraction time (s/L) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	10	20	30	40	50	60	70	Maximum vacuum degree - kPa
VTMD25L	6.0	130	0.020	0.050	0.100	0.180	0.330	0.530	0.800	75
VTMD50L	6.0	260	0.010	0.025	0.050	0.090	0.170	0.270	0.400	75
VTMD75L	6.0	390	0.007	0.017	0.033	0.060	0.110	0.180	0.270	75
VTMD100L	6.0	520	0.005	0.013	0.025	0.045	0.083	0.130	0.200	75
VTMD125L	6.0	650	0.005	0.012	0.022	0.036	0.066	0.110	0.160	75
VTMD150L	6.0	780	0.004	0.010	0.018	0.030	0.055	0.090	0.130	75





Vacuum flow rate (NL/min) at different vacuum levels (- kPa)

Product model	Gas supply pressure bar	Air consump-tionNL/min	0	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMD25H	5.0	135	354	180	120	78	43.8	34.8	25.8	19.2	10.8	1.8	95
VTMD50H	5.0	270	700	360	240	156	87.6	69.6	51.6	38.4	21.6	3.6	95
VTMD75H	5.0	405	980	540	360	234	131.4	104.4	77.4	57.6	32.4	5.4	95
VTMD100H	5.0	540	1,380	720	480	312	175.2	139.2	103.2	76.8	43.2	7.2	95
VTMD125H	5.0	675	1,480	810	570	390	219.0	174.0	129.0	96.0	54.0	9.0	95
VTMD150H	5.0	810	1,650	918	684	468	262.8	206.4	154.8	115.2	64.8	10.8	95

Extraction time (s/L) at different vacuum levels (- kPa)

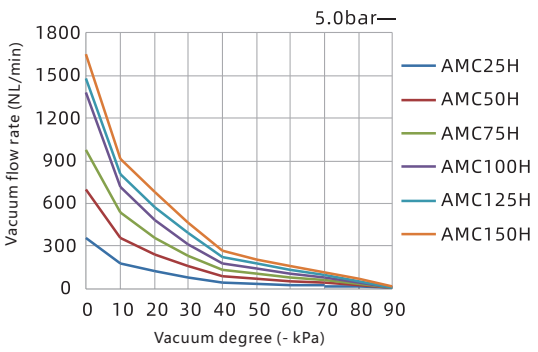
Product model	Gas supply pressure bar	Air consump-tionNL/min	10	20	30	40	50	60	70	80	90	Maximum vacuum degree - kPa
VTMD25H	5.0	135	0.022	0.062	0.120	0.220	0.37	0.57	0.84	1.20	2.20	95
VTMD50H	5.0	270	0.011	0.031	0.060	0.110	0.19	0.29	0.42	0.60	1.10	95
VTMD75H	5.0	405	0.007	0.021	0.040	0.070	0.12	0.19	0.28	0.40	0.73	95
VTMD100H	5.0	540	0.006	0.016	0.030	0.055	0.09	0.14	0.21	0.30	0.55	95
VTMD125H	5.0	675	0.005	0.014	0.026	0.044	0.07	0.11	0.17	0.24	0.44	95
VTMD150H	5.0	810	0.005	0.012	0.022	0.040	0.06	0.10	0.14	0.20	0.37	95

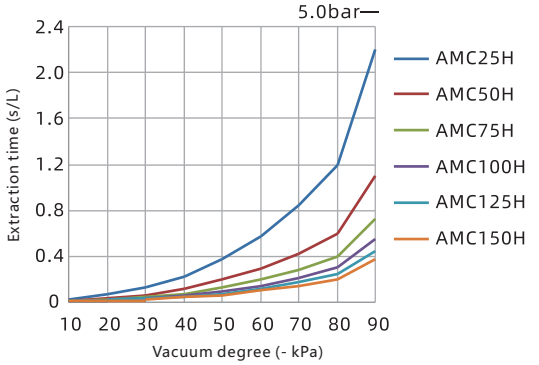
VTMDSERIES

Multi-stage vacuum generator

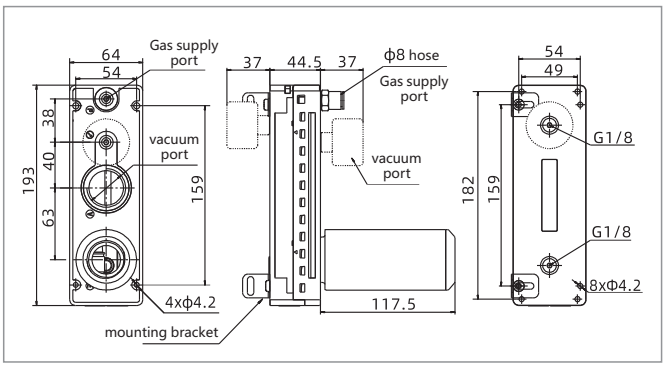
Cobot Care VAC

Extraction time (s/L) at different vacuum levels (- kPa)

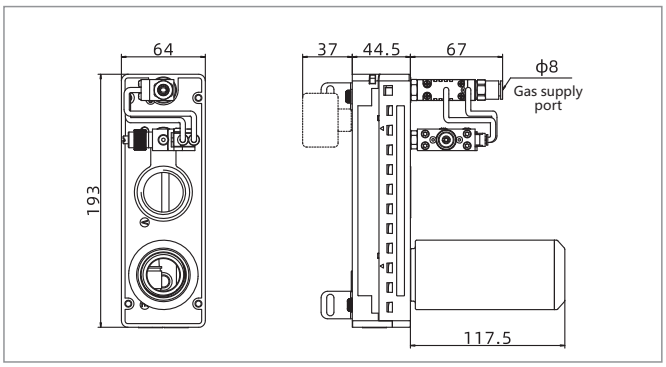




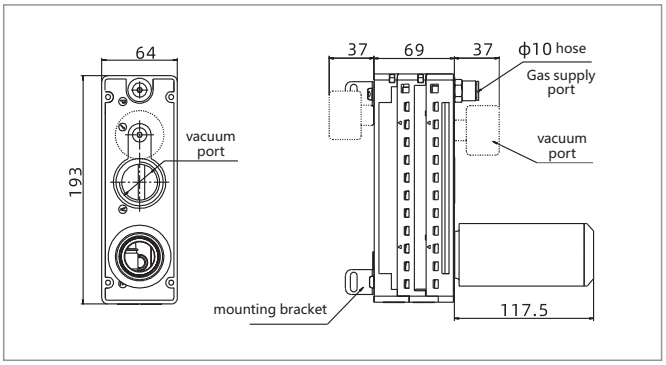
Size specifications (mm)



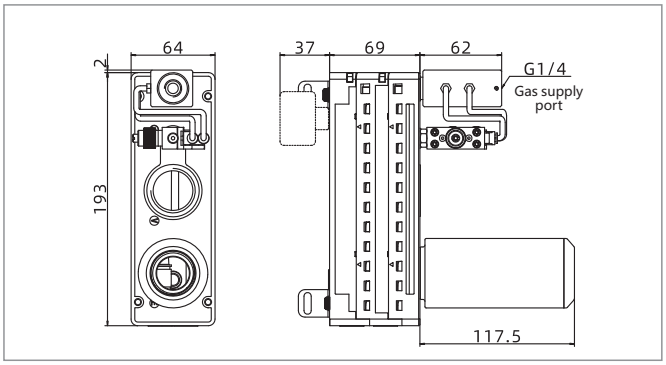
VTMD25-50



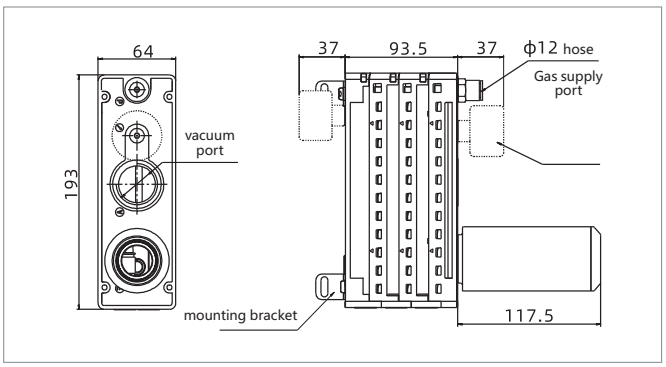
VTMD25□-□-V-ES VTMD50□-□-V-ES



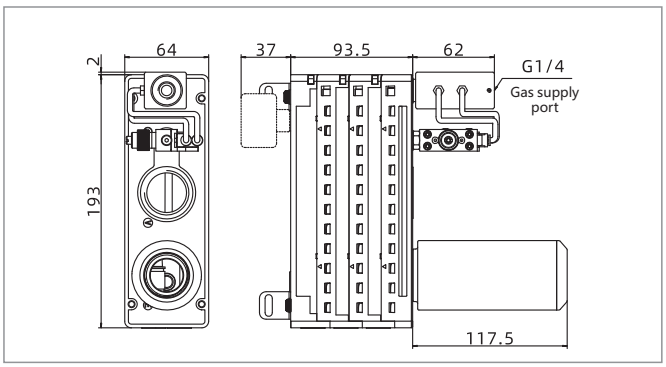
VTMD75-100



VTMD75□-□-V-ES VTMD100□-□-V-ES



VTMD125-150



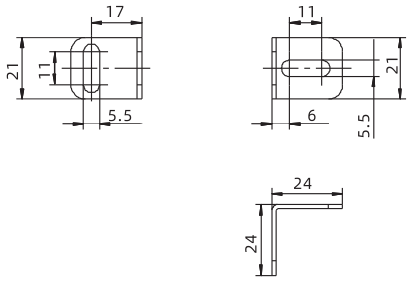
VTMD125□-□-V-ES VTMD150□-□-V-ES

VTMDSERIES

Multi-stage vacuum generator

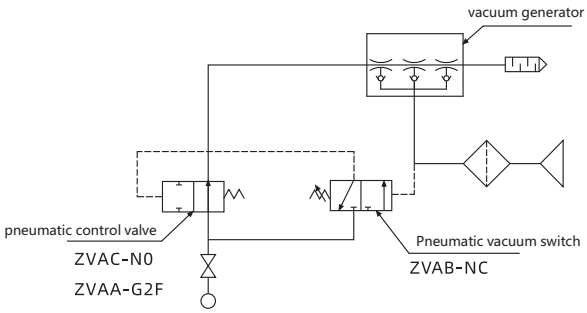
Cobot Care VAC

Size specifications (mm)



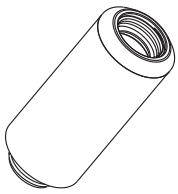
L-shaped installation bracket

pneumatic circuit diagram



ES energy-saving system

Accessory selection specifications

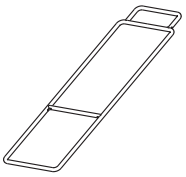


silencer

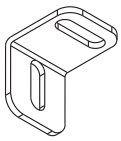


vacuum gauge

Install the attachment



sealing element



L-shaped installation bracket

Install the attachment

name	model	remark
silencer	ZSA-G8M	-
vacuum gauge	ZPMR-V	-
sealing ring	AMC50-R6	AMC25、50/1只，AMC75、100/2只，
Install accessory package	AMC50-R (2 brackets+4 screws+1 8-pin quick connector)	AMC125、150/3只 AMC25、50-AA
Install accessory package	AMC100-R (2 brackets+4 screws+1 medium 10 quick connector)	AMC25、50、75、100-CA / AMC25、
Install accessory package	AMC150-R (2 brackets+4 screws+1 mid-range 12 quick connector)	50、75、100-CC AMC125、150-CC

◇ Note: The connection board specifications are BA and DB, and the installation accessory package includes 2 L-shaped brackets and 4 screws.



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Request a quotation via the website form