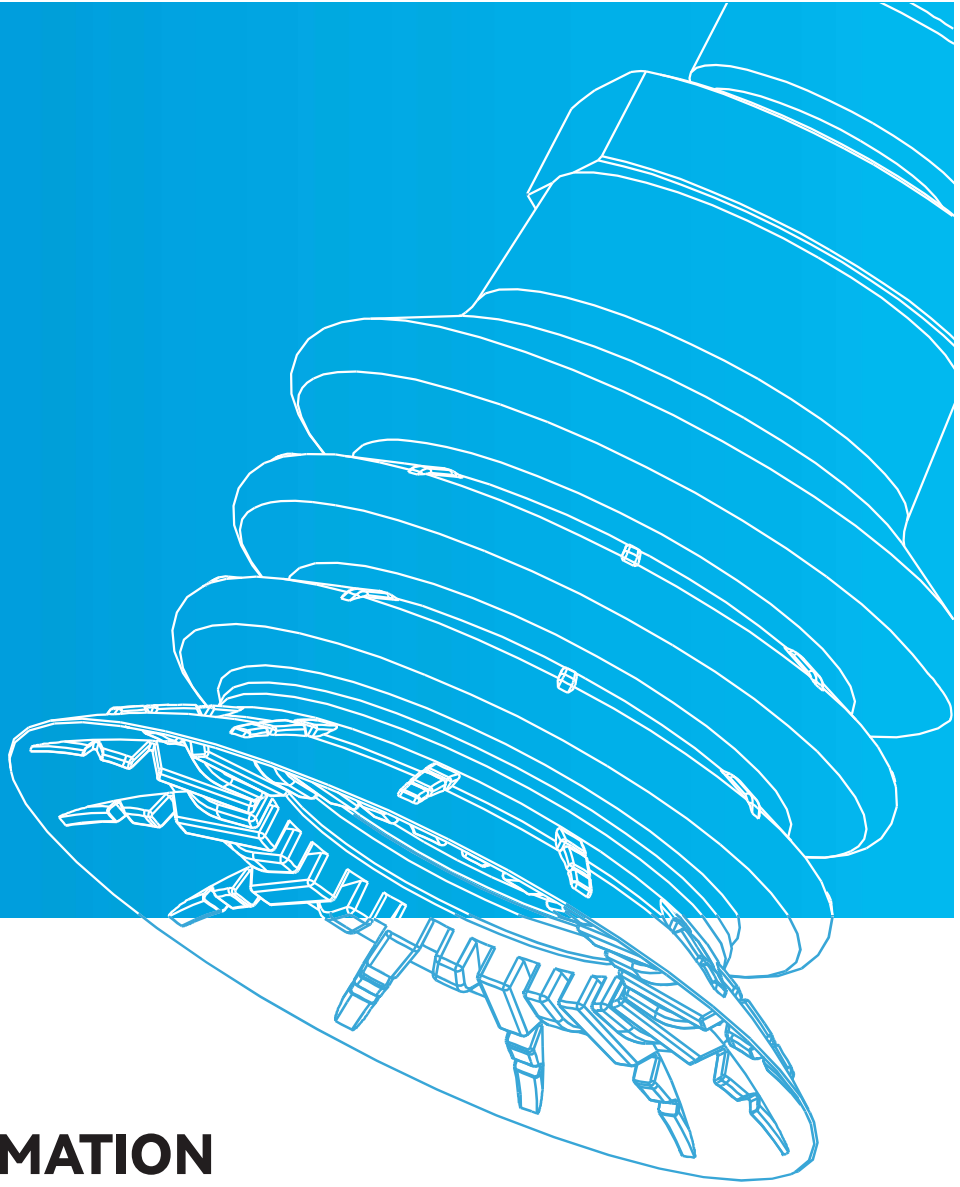


HANVAC



VACUUM AUTOMATION

Comprehensive Samples
Vacuum Components and System Applications

- One-stop solution to the vacuum handling problem
- to provide efficiency for the work

HANVAC GmbH



Now more than 30 distributor partners in different countries

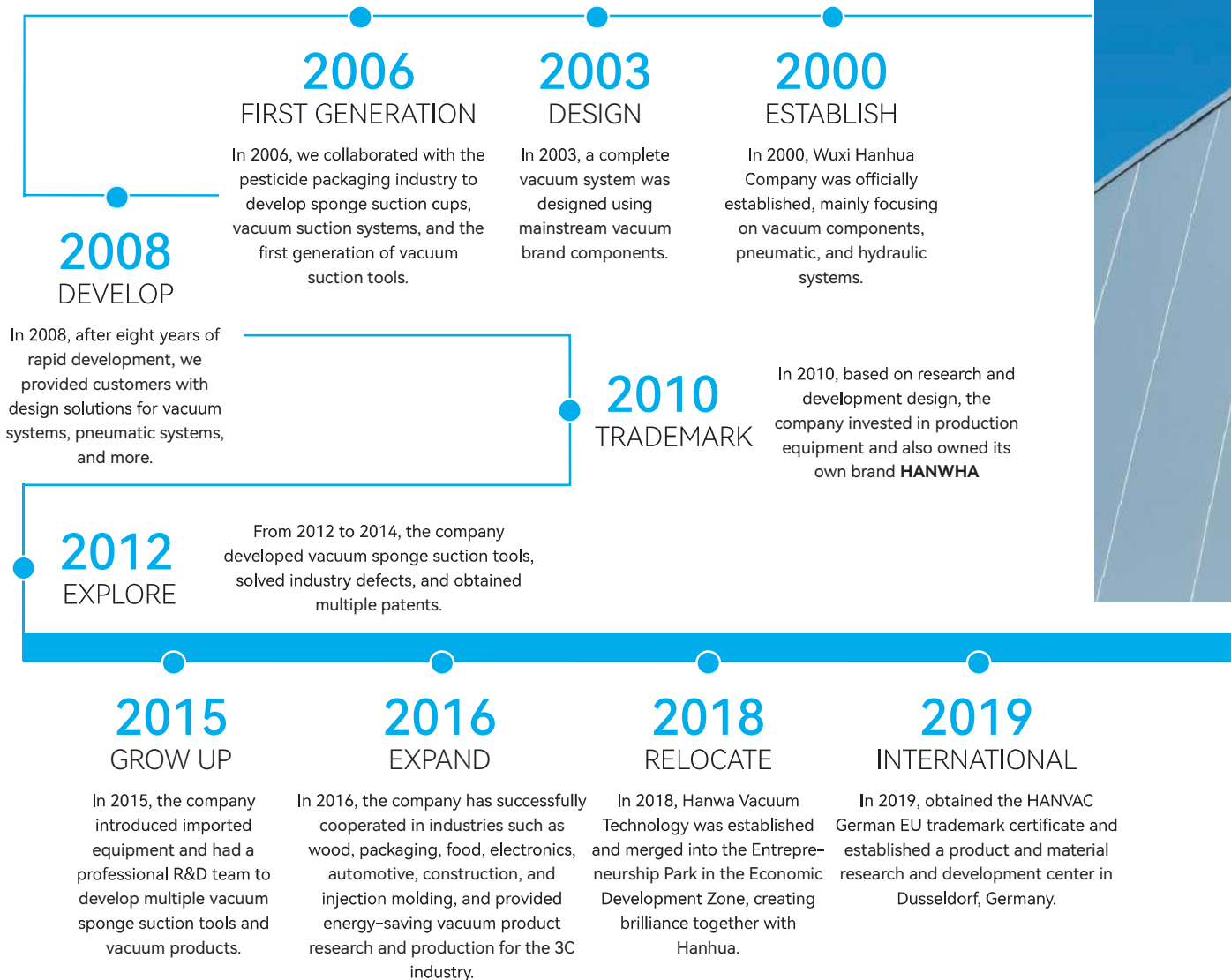
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|  Finland |  Turkey |  China |
|  Russia |  Japan |  Mexico |
|  South Korea |  United States | ... |

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HANVAC Development history



HANWHA, founded in 2000, is a diversified high-tech enterprise that integrates the research and development, production, sales, and other technical services of robot end technology.

Headquartered in Xishan High tech Development Zone, Wuxi, with multiple research and development centers located in Asia and Europe. The main subsidiaries include Wuxi Hanhua Automation Technology Co., Ltd., Hanwa Vacuum Technology (Wuxi) Co., Ltd., and HANVAC GmbH in Germany.

Product series: Vacuum gripper systems,, vacuum suction cups, vacuum generators, and other vacuum components. We have always been committed to customers with perfect quality, high-quality service, and reasonable prices. In order to better improve the company's research and development and manufacturing capabilities, the company has vigorously introduced more advanced technology and equipment from Germany, Japan, South Korea, Taiwan and other places.

Our products are widely used in industries such as woodworking, packaging, electronics, automotive, food, and construction.



2020

HANWHA

After more than 20 years of hard work and perseverance, the company has become a modern enterprise that integrates professional vacuum research and development, design, production, and sales. Become a leader in the domestic industry.

2022

ADVANCED

The company has successfully passed the recognition of a high-tech enterprise with comprehensive strength such as innovation awareness, professional technical level, market development ability, and management level.

2023

HANVAC GmbH

In 2019, obtained the HANVAC German EU trademark certificate and established a product and material research and development center in Dusseldorf, Germany.

In recent years, the company has attached great importance to technological innovation, striving to improve its independent research and development capabilities, and has obtained multiple patented technologies and high praise from customers. The company now has a complete set of core technologies for product research and manufacturing. After passing the special audit of the Quality Certification Center, HANWHA products have officially obtained the ISO9001-2015 Quality Management System Certificate, ISO14001-2015 Environmental Management System Certificate, and EU Trademark Certificate, marking their sales recognition in the European market.

Professional technology and high-quality service to customers stem from dedication, and each recognition embodies the spirit of HANWHA people's hard work and innovation. We will shape the corporate philosophy of "people-oriented, surpassing innovation", pursue endless excellence, keep up with the times, and create the future. With the keen insight of HANWHA people, the attitude of striving for excellence, and the tireless spirit of innovation, the company can develop and grow rapidly and steadily in the continuous process of innovation.

We believe that in the near future, HANWHA will gradually become internationalized brand and become the pride of our HANWHA people.

Introduction	P01-02
Catalog	P03-08
Vacuum technology	P09-19
Vacuum Suction Foams	P20-59
Vacuum Suction Cups	P60-90
Customized products	P91-106
Vacuum Generators	P107-193
Cups	P194-294
Compact Valves	P295-348
Attachment	P349-389

Catalogue

HANVAC

Vacuum Suction Foams



HVGP-60-FA P21-25
Area gripping system with
sealing foam



HVGP-80-FA P26-30
Area gripping system with
sealing foam



HVGP-130-FA P31-35
Area gripping system with
sealing foam



HVGP-200-FA P36-39
Area gripping system with
sealing foam



HVGP-60-FE P40-44
Area gripping system with
sealing foam



HVGP-80-FE P45-49
Area gripping system with
sealing foam



HVGP-130-FE P50-55
Area gripping system with
sealing foam



HVGP-200-FE P56-59
Area gripping system with
sealing foam

Vacuum Suction Cups



HVGP-60-SA P61-63
Area gripping system with
suction cups



HVGP-80-SA P64-67
Area gripping system with
suction cups



HVGP-130-SA P68-71
Area gripping system with
suction cups



HVGP-200-SA P72-75
Area gripping system with
suction cups



HVGP-60-SE P76-78
Area gripping system with
suction cups



HVGP-80-SE P79-82
Area gripping system with
suction cups



HVGP-130-SE P83-86
Area gripping system with
suction cups



HVGP-200-SE P87-90
Area gripping system with
suction cups

Customized products



HVG-104-18 P92-93
Customized vacuum suction tools



HVGP-120-60 P94-96
Customized vacuum suction tools



HVGB-E P97-99
Customized vacuum suction tools



HVGR P100-102
Customized vacuum suction tools



HVGS P103-106
Customized vacuum suction tools

Catalogue

HANVAC

Vacuum Generators



ECG-10H

Integrated generator

P108-110



ECG-10M

Integrated vacuum generation function

P111-112



ECG-10S

Integrated vacuum generation function

P113-114



ECO-200M

Multi-stage vacuum generator

P115-117



ECO-350M

Multi-stage vacuum generator

P118-120



ECO-H40

Transport type vacuum generator

P121-123



ECO-H2010

Multi-stage vacuum generator

P124-126



ECO-H3010

Multi-stage vacuum generator

P127-129



ECO-H3020

Multi-stage vacuum generator

P130-132



ECO-H4005

Lightweight vacuum generator

P133-135



ECO-H4010

Lightweight vacuum generator

P136-138



ECO-H5010

Multi-stage vacuum generator

P139-141



ECO-H6010

High flow vacuum generator

P142-145



ECO-H7010

Multi-stage vacuum generator

P146-148

low as 60 decibels



ECV-180M

Integrated vacuum generator

P149-161



ECV-200M

Integrated vacuum generator

P162-166



ECV-350M

Integrated vacuum generator

P167-171



HCV

Transport type vacuum generator

P172-174



EZL

Multi-stage vacuum generator

P175-191



SECV-10

Blowback vacuum generator

P192-193

Catalogue

HANVAC

Vacuum suction cup



HAB
1.5 fold corrugated suction cup



HAB
1.5 fold elliptical suction cup



HAF
Flat suction cup



HAF
Flat elliptical suction cup



HBX
Special suction cups for slender workpieces



HFA
Plastic film special suction cup



HFB
1.5 fold corrugated suction cup



HMX
Plastic film special suction cup



HMX3
Plastic film special suction cup



HPS
Rim ripple suction cup



HSP
Multi functional corrugated suction cup



HSC
Corrugated suction cup



HSCP
Corrugated suction cup



HSD
Corrugated suction cup



HSE
Special corrugated suction cups for spherical workpieces



HPE4
Rim ripple suction cup



HSBX
Tight fit on uneven workpiece surface



HGX
Special suction cups for thin and crispy bags



HSB
1.5 fold corrugated suction cup



HSA
Flat suction cup



HSA-S
Flat suction cup



HSXA
Flat suction cups in the packaging industry



HSXB
1.5 fold corrugated suction cups in the packaging industry



HXB
Oil based sheet metal 1.5 fold corrugated suction cup

Catalogue

HANVAC

Vacuum suction cup



HXF P285-287
Oil based sheet metal special
flat suction cups



HSN100 P288-289
Needle suction cup



HZN25 P290-291
Needle suction cup



HMP P292-294
Magnetic suction cup

Compact Valves



DVG P296-299
Three way pilot type valve body



DVG P300-308
Five way pilot type valve body



HAKH P309-310
One-way valve



HIVR P311-313
Vacuum pressure regulating valve



HDV P314-315
Vacuum release valve



HKSH P316-318
Internal bearing valve body joint



HKSL P319-321
High speed rotating valve
body joint



HPV P322-324
Vacuum valve



HRV P325-333
Vacuum air valve body



HVHK P334-336
Valve body joint (manual)



SVK/SVKG P337-339
Check valve



OFR P340-342
Filter pressure reducing valve



OR P343-345
Pressure regulating valve



OL P346-348
Oil mist eliminator

Catalogue

HANVAC

Attachment



HHTR P350-351
Ball joint fixing clip



HKA P352-353
Flexible joint



HKB P354-355
Flexible ball joint



HSB P356-358
Suspension type spring buffer rod



HSPA P359-360
Buffer spring rod



HSPB P361-363
Buffer spring rod



HSPE P364-367
Buffer spring rod



HSPL P368-370
Buffer spring rod



链接元件 P371
Spring rod attachment



HSGE P372-374
Stainless steel joint through plate



HVB P375-379
Fan



HCF P380-382
Universal vacuum filter



HJF P383
Filter bucket



Vacuum hose PU P384-386
Anti static polyurethane hose



47Pressure sensor P387-389
Electronic vacuum switch

Vacuum **T***echnology*



Vacuum principle

Industry Application
Identification Description

How to choose vacuum
components

Thread gauge

Precautions for use

Vacuum degree

The difference between standard atmospheric pressure and absolute pressure.

Pressure unit

Positive Pressure Unit Conversion Table

	Pa(N/m ²)	kPa	bar	kg/cm ²	torr	psi(lbf/in ²)	inHg
1 Pa	1	0.001	0.00001	10.1792×10 ⁻⁶	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	1,013	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

Flow

The volume of air passing through a specified cross-section per unit time.

Flow Unit Conversion Table

	m ³ /s	m ³ /h	NL/min	NL/s	ft ³ /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 true cavity, causing negative pressure in the vacuum cavity to form a vacuum.

Material properties

Material quality	Short term contact temperature ° C ≤30s	Long term exposure to temperature ° C > 30s	Wear resistance	Oil resistance	Climate resistance	Resistivity
N - Nitrile rubber	- 20 ~ +110	- 10 ~ +80	◎	◎	○	-
S - Silicon rubber	- 40 ~ +250	- 30 ~ +200	×	×	◎	-
GN - Conductive nitrile rubber	- 10 ~ +100	- 10 ~ +70	◎	◎	○	10 ⁵ -10 ⁹
GS - Conductive silicone rubber	- 30 ~ +200	- 20 ~ +160	×	×	○	10 ⁵ -10 ⁹
GHN - Conductive and traceless nitrile rubber	- 20 ~ +110	- 10 ~ +80	◎	◎	○	10 ⁵ -10 ⁹
TPE - Polyurethane rubber	+10 ~ +60	+10 ~ +40	◎	◎	◎	-
F - Fluororubber	- 10 ~ +350	- 5 ~ +300	◎	○	○	-
HT1 - High temperature/traceless materials	- 10 ~ +180	- 5 ~ +160	◎	◎	◎	-
NR - Natural rubber	- 20 ~ +80	- 10 ~ +60	◎	×	△	-
CR - Chloroprene rubber	- 20 ~ +80	- 10 ~ +60	◎	△	◎	-

◎: Very excellent ○: Excellent △: Commonly ×: Impossible

Vacuum suction cup storage instructions

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.

Illumination

Please store in a dark place and avoid direct sunlight or high-intensity ultraviolet lights.

Radiation

Please avoid products being exposed to ionizing radiation.

Ozone

Ozone will cause serious harm to products.

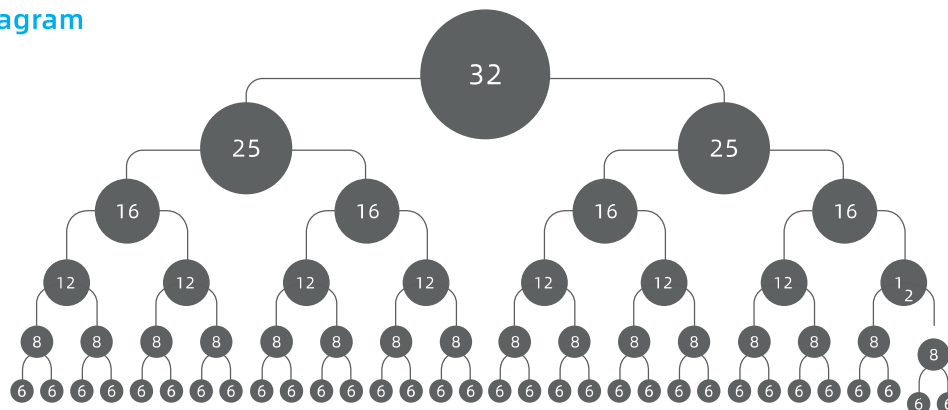
Deformation

The product should be stored under loose conditions to avoid compression.

Inventory turnover

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

Division diagram



Common usage in the Chinese market

- ϕ The specifications of hoses below 6 (including 16) refer to the outer diameter size of the hose, ϕ The hose specifications above 16 refer to the inner diameter size of the hose.
- This diagram is an approximate equivalent calculation based on the actual cross-sectional area of the gas path, using a splitter or hose for gas path diversion. It is not strictly an equivalent diagram and is only for customer selection reference.

Industry UI	Industry definition	Simple explanation
	Packaging (cardboard box)	The packaging industry is mainly aimed at the handling, logistics, palletizing, warehousing and other applications of cardboard boxes. Its characteristics include easy deformation of suction workpieces, breathability, moderate weight, and variable sizes, with high requirements for wear resistance of suction cups
	Packaging (plastic bag)	The packaging industry is mainly focused on applications such as grabbing, stacking, and handling plastic bags, shopping bags, cat and dog grain bags, etc. Its characteristics include distinguishing between soft and hard parts, wrinkles, and high requirements for the self deformation and adaptive ability of suction cups
	Glass	The glass industry is mainly aimed at handling and gripping general glass, industrial glass, float glass, etc. Its characteristics are to absorb the weight, smoothness, hardness of workpieces, require large lateral gripping force, and have high safety requirements for suction cup gripping
	Sheet metal stamping and cutting (Metal sheet)	The metal sheet metal industry is mainly aimed at applications such as handling and fixing metal plates. Its characteristics include easy deformation of workpieces, severe surface oil stains, curved sheet metal, heavy weight, large internal support for suction cups, high requirements for anti slip and anti deformation
	Sheet metal stamping and cutting (Metal thick plate)	The metal sheet metal industry is mainly aimed at applications such as handling and fixing metal plates. Its characteristics include large and heavy workpieces, severe surface oil stains, large internal support for suction cups, and high anti slip requirements
	Automobile manufacturing	The automotive industry is mainly aimed at applications such as glass, bent sheet metal, and tire handling. Its characteristics include absorbing uneven and curved surface of workpiece sheet metal, smooth glass surface, heavy weight, etc. It requires high anti slip performance for suction cups
	Wood	The woodworking industry is mainly aimed at applications such as wooden boards, fiberboards, wooden boards, and handicraft handling. Its characteristics are uneven surface, breathability, heavy weight, and the requirement for large internal support and good sealing of suction cups
	Fiber textile	The textile industry is mainly aimed at handling fabrics, gauze, etc. Its characteristics include easy deformation of workpieces, breathability, light weight, overlap, and the requirement for suction cups with a large vacuum flow rate
	composite material	Mainly designed for the handling of composite materials such as leather and fiberboard, its characteristics include breathability of the workpiece, light weight, and overlapping requirements for the suction cup, accompanied by a large vacuum flow rate
	Stone	The stone industry mainly targets the handling of marble, bricks, metal mesh plates, etc. Its characteristic is to absorb uneven surface of workpieces and require large deformation of suction cups
	Injection molding	The injection molding industry is mainly aimed at handling the post injection process, characterized by high temperature resistance, curved workpieces, high temperature resistance for suction cups, and high deformation requirements
	The robotics industry	Robot terminal accessories, combined with robots for gripping and handling, are characterized by fast response speed, integrated wiring saving, and high safety factor system requirements
	mechanical equipment	Mechanical equipment terminal parts, combined with intelligent manufacturing equipment for gripping and handling actions, are characterized by small size, lightweight, space saving, and a majority of metal products
	3C Electronics (Video Film)	The handling of mobile phones, tablets, display screens, etc. is characterized by being scratch free, non deformable, anti slip, and lightweight
	3C Electronics (PCB board)	The electronics industry mainly focuses on the handling of electronic components and other components. Its characteristics include small surface area, light weight, no traces, and high requirements for the conductivity of suction cups
	Biopharmaceuticals	The medical industry mainly focuses on the handling of medical bags, medical devices, etc. Its characteristic is to absorb the surface of workpieces containing alcohol and chemical reagents, and has high requirements for the chemical corrosion resistance of suction cups
	Food industry	The food industry mainly targets the handling of bread, chocolate, milk buns, etc. Its characteristics include irregular surface of workpieces, light weight, plastic flexible packaging, and high requirements for suction cup materials
	New energy (photovoltaic)	The new energy industry is mainly aimed at handling solar panels and circuit boards. Its characteristics include absorbing workpieces that are breathable and fragile, requiring light contact with suction cups, and accompanied by a large vacuum flow rate
	New energy (lithium batteries)	The new energy lithium battery industry is mainly aimed at handling battery packs, batteries, combination batteries, etc. Its characteristics are anti-corrosion, explosion-proof, soft pack absorption, safety and reliability

Performance UI	Feature definition	Simple explanation
	Breathability	Can correspond to breathable workpieces, mainly characterized by using a low vacuum and high flow vacuum generator (usually using composite suction cups) to compensate for the loss of breathability through flow and establish vacuum gripping of workpieces
	Curved surface	It can handle the gripping of workpieces on curved surfaces or certain sloping surfaces, and generally, a folding suction cup can be used for flat compensation
	Anti slip performance	For workpieces with smooth surfaces that need to be prevented from slipping during gripping, flat ribbed or flat internal proprietary patterned suction cups can generally be selected
	Corresponding rough surface	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 small pore compensation for workpiece gripping
	Heavy load type	For high load and workpiece gripping, heavy-duty suction cups and installation accessories are generally used
	Anti rotation	For workpiece grasping with precise positioning and directional requirements, anti rotation function is required
	Food grade safety certification	For workpieces that require safety certification in the food or medical industries, suction cups made of FDA certified food grade white silicone or POM (acetal resin) materials are generally selected for grabbing
	Tubular object	Select specialized concave suction cups for gripping tubular or rod-shaped workpieces
	Strip-shaped object	For the gripping of elongated workpieces, special elliptical suction cups can be selected
	Anti corrosion performance	For corrosion protection needs (such as battery fluid, chemical environment, etc.), fluororubber material or HT1 material suction cups can be selected
	High lifespan	For high wear and tear situations that require a more durable grip than usual, special material TPE can be selected
	Spherical object	For grasping spherical objects, deep conical specialized suction cups need to be selected
	Waterproof and oil proof	For the gripping of oily workpieces, it is necessary to use oil resistant materials and specially designed suction cups
	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
	Anti deformation	For the gripping of anti deformation workpieces, different specifications of suction cups can be selected according to the different situations of different workpieces
	High temperature resistance of 180°C	Items that can withstand high temperatures up to 180 degrees can be grabbed using suction cups made of high-temperature resistant materials
	High temperature resistance of 400°C	Grasping items that can withstand high temperatures up to 400 degrees Celsius

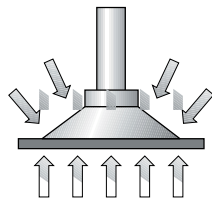
Vacuum suction cup

The suction cup is used to cooperate with mechanical equipment or robots to complete the handling of workpieces. It is not the vacuum suction cup itself that sucks the workpiece, but when the atmospheric pressure is greater than the internal pressure of the suction cup, the air pressure presses the suction cup and the workpiece together.

Connecting the vacuum device to the suction cup and extracting the air between the suction cup and the workpiece forms this pressure difference. If the suction cup has good contact with the surface of the workpiece and there is no air to enter, a vacuum is formed.

The suction force of the suction cup is directly proportional to the pressure difference inside and outside the suction cup. The suction force F is calculated according to the following formula:

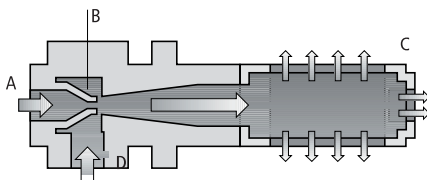
$$F = -p \times A$$



Vacuum generator

The vacuum generator operates based on the Venturi principle. According to the number of nozzles, there are two types: single-stage vacuum generators and multi-stage vacuum generators.

Compressed air enters from the inlet (A) of the single-stage vacuum generator and flows through the Venturi nozzle (B). As the cross-section decreases, the pressure of compressed air increases, and the flow rate also increases. At this point, a vacuum degree is generated in the inlet (D) of the adsorption chamber, causing the surrounding air to be sucked into the vacuum generator. The compressed air flows into the diffusion chamber together to increase the gas flow rate, and finally is sprayed out through the muffler (C).



The HANVAC integrated vacuum generator has two valves that can directly control the "suction" and "blowing" functions. In addition, the integrated vacuum generator also has a vacuum switch for system monitoring and adjustment. The combination of the "suction" valve and vacuum switch achieves automatic throttle function, ensuring that compressed air is only consumed when the vacuum switch measures a vacuum degree below the customer's set value.

The advantages of vacuum generators

- Small footprint and light weight
- Integrated with multiple functions

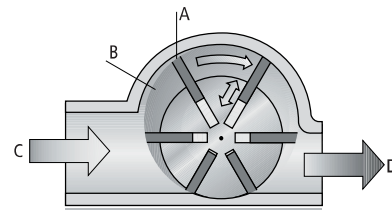
Vacuum pump

There is an eccentric rotor installed inside the vacuum pump, with blades (A) on top. When the rotor rotates, the blades are pushed out by centrifugal force, forming a local seal between the rotor and the inner wall of the pump casing. Due to eccentric installation of the rotor, there are different space volumes (B) between the blades. As the space volume increases, air expands upon entering, causing a decrease in pressure and forming a vacuum. At the air inlet (C), due to the reduction in space volume, the air in that space is compressed. Finally, it is discharged through the exhaust port (D).

There are various types of vacuum pumps, all of which can generate high vacuum and also have high suction capacity.

The advantages of vacuum pumps

- Can achieve a high vacuum degree under high suction capacity conditions
- Can be used as a central vacuum supply solution device



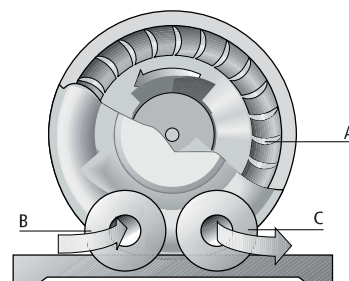
Vacuum blower

The vacuum blower draws external air into the body through blade rotation (A), accelerating and compressing the air, which means that kinetic energy is transferred from the blower rotor to the air. Due to the air being brought in by the blades, a vacuum is generated at the inlet (B), and the compressed air is discharged from the body through the exhaust port (C).

The large diameter air duct and specially shaped blades enable the vacuum blower to have high suction capacity.

The advantages of vacuum blower

- Huge suction rate
- Significant air leakage compensation effect
- Can quickly reach high suction capacity



Statistical steps for vacuum system

In this section, we will gradually introduce the design steps of the vacuum system. To facilitate your understanding, we will use a typical application scenario as an example to illustrate the design of a vacuum system.

The calculation data for this example is as follows:

Workpiece Description

Material : Steel plate, stacked on pallets
 Surface : Smooth, flat and dry
 Specification: Length: Maximum 2500mm
 Width: Maximum 1250mm
 Thickness: Maximum 2.5mm
 Weight: Approximately 60kg

Handling System – Gantry Transfer Machine

Compressed air : 8 bar
 Control voltage : 24 V DC
 Transportation form: The workpiece is placed horizontally and moved horizontally.
 Extract the steel plate from the tray, lift it, move it horizontally, and place it on the machining center.

Maximum acceleration: X-axis and Y-axis: 5m/s^2
 Z-axis: 5m/s^2

Cycle period : 30s
 Planned time : Draw : < 1s
 Release : < 1s

Calculate the weight of the workpiece

Calculating the weight of the workpiece being grabbed is the basis of all calculations. We can calculate it using the following formula:

$$m = L \times B \times H \times \rho$$

m = Weight [kg]
 L = Length [m]
 B = Width [m]
 H = Height [m]
 ρ = Density [kg/m³]

Example:

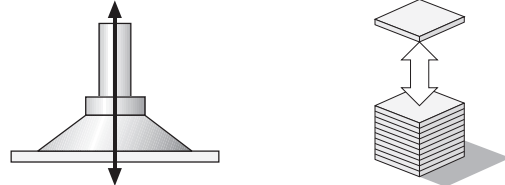
m = $2.5\text{m} \times 1.25\text{m} \times 0.0025\text{m} \times 7,850\text{kg/m}^3$
 m = 61.33 kg

Determine the theoretical suction force required for the suction cup

Calculating suction requires the weight of the workpiece calculated above, and in addition, the vacuum suction cup also needs to withstand the force generated by acceleration. For air tight workpieces with a flat surface, the minimum safety factor is 1.5; For workpieces with uneven or breathable surfaces, as well as workpieces with rough surfaces, the safety factor must be greater than or equal to 2.0. If the acceleration and friction coefficient are unknown or cannot be accurately determined, their safety factor must also be greater than or equal to 2.0.

Load situationI - Vacuum suction cup placed horizontally, subjected to vertical load force

The workpiece (using a steel plate with a size of $2.5 \times 1.25\text{m}$ as an example) is sucked from the tray at a speed of 5m/s^2 . The acceleration is increased (without lateral motion)



The vacuum suction cup is placed horizontally, and the workpiece is lifted vertically.

$$F_{TH} = m \times (g + a) \times S$$

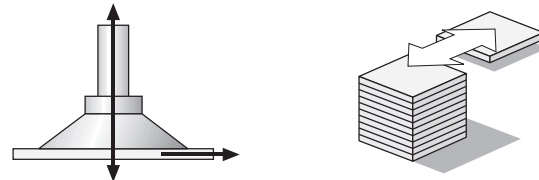
F_{TH} = Theoretical suction [N]
 m = Weight [kg]
 g = Gravitational acceleration [9.81m/s^2]
 a = System acceleration [m/s^2]
 S = Safety factor (minimum value is 1.5, for uneven or breathable materials and rough surface workpieces, the safety factor can be 2.0 or even higher)

Example:

m = $61.33\text{kg} \times (9.81\text{m/s}^2 + 5\text{m/s}^2) \times 1.5$
 m = 1,363 N

Load situationII - The vacuum suction cup is placed horizontally and subjected to both horizontal and vertical load forces

The workpiece (using a steel plate with a size of $2.5 \times 1.25\text{m}$ as an example) is lifted from the pallet and horizontally transported. Acceleration of 5m/s^2 .



The vacuum suction cup is placed horizontally, and the workpiece is lifted vertically before moving horizontally.

$$F_{TH} = m \times (g + a / \mu) \times S$$

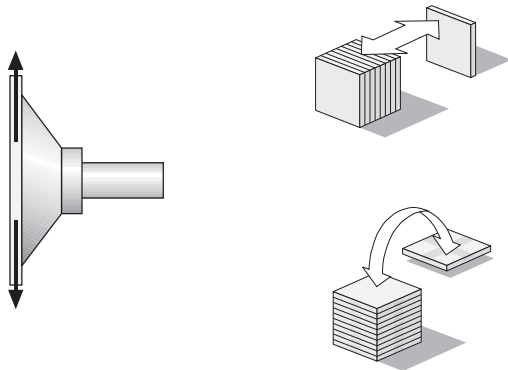
F_{TH} = Theoretical suction [N]
 Fa = Force generated by acceleration = $m \cdot a$
 m = Weight [kg]
 g = Gravitational acceleration [9.81m/s^2]
 a = System acceleration [m/s^2] (Including "emergency stop" situations!)
 μ = Friction coefficient
 = 0.1 oily surface
 = 0.2~0.3 Wet surface
 = 0.5 Wood, metal, glass, and stone surfaces
 = 0.6 Rough surface
 S = Safety factor (minimum value is 1.5, for uneven or breathable materials and rough surface workpieces, the safety factor can be 2.0 or even higher)

Example:

F_{TH} = $61.33\text{kg} \times (9.81\text{m/s}^2 + 5\text{m/s}^2 / 0.5) \times 1.5$
 F_{TH} = 1,822 N

Load situationIII - The vacuum suction cup is placed vertically and subjected to vertical load force

Load situation description: The workpiece (using a steel plate with a size of 2.5x1.25m as an example) is lifted from the tray at a speed of 5m/s². The acceleration is rotated.



The vacuum suction cup is placed horizontally, and the workpiece is lifted vertically before moving horizontally.

$$F_{TH} = (m/\mu) \times (g + a) \times S$$

F_{TH}	=Theoretical suction	[N]
m	=Weight	[kg]
g	=Gravitational acceleration	[9.81m/s ²]
a	=System acceleration	[m/s ²] (Including "emergency stop" situations!)
μ	=Friction coefficient	
	=0.1 oily surface	
	=0.2~0.3 Wet surface	
	=0.5 Wood, metal, glass, and stone surfaces	
	=0.6 Rough surface	
S	=Safety factor (minimum value is 2, for uneven or breathable materials and rough surface workpieces, the safety factor can be taken as 4 or even higher)	

Example:

$$F_{TH} = (61.33 \text{ kg} / 0.5) \times (9.81 \text{ m/s}^2 + 5 \text{ m/s}^2) \times 2$$

$$F_{TH} = 3,633 \text{ N}$$

Comparison:

Based on the handling method we provided earlier, which states that the workpiece is lifted from the tray, it is evident that both the load condition I of only lifting the workpiece and the load condition III of rotating the workpiece do not meet this application, and only load condition II fully meets the given working condition requirements. In this example, the calculated maximum theoretical suction force (F) for horizontal handling of the workpiece is 1822N. The theoretical suction force is the suction force required for the lateral transportation of workpieces by suction cups, and this result can be used as the basis for selecting system components.

Statistical steps for vacuum system

The calculated theoretical suction force is equivalent to the suction force required by the suction cup for safe handling of workpieces.

In this example, we use:

The PFG series of vacuum suction cups, made of NBR material, are ideal for handling smooth and flat workpieces with low economic costs.

When selecting, the calculated theoretical suction force can be applied to one suction cup or distributed to multiple suction cups.

For medium sized (2500x1250mm) thin steel plates, we generally use 6-8 suction cups. The most important criterion for selecting the number of suction cups is the degree of bending of the thin steel plate during transportation.

Calculate the suction force F [N] generated by a single suction cup

$$F_s = F_{TH/n}$$

$$F_s = \text{suction}$$

$$F_{TH} = \text{Theoretical suction [N]}$$

$$n = \text{Number of suction cups}$$

$$\text{Example: } F_s = 1,822\text{N}/6$$

$$F_s = 304 \text{ N}$$

Referring to the technical parameters of vacuum suction cups PFG, 6 PFG 95 NBR suction cups can be selected, each with a diameter of 95mm and a suction force of 350N.

$$F_s = 1,822\text{N}/8$$

$$F_s = 228 \text{ N}$$

Referring to the technical parameters of vacuum suction cups PFG, 8 PFG 80 NBR suction cups can be selected, each with a diameter of 80mm and a suction force of 260N.

In this example, we use:

6 PFG-95-NBR suction cups

For a thin steel plate with a thickness of 2.5mm, 6 suction cups are sufficient to ensure safe handling and the cost is relatively low.

Main points:

- The actual suction force of each suction cup must be greater than the calculated value.

Calculate the suction rate of the vacuum system

Extraction rate under different suction cup diameters		
Sucker diameter ϕ		
To 60mm	0.5 m ³ /h	8.3 l/min
To 120mm	1.0 m ³ /h	16.6 l/min
To 210mm	2.0 m ³ /h	33.3 l/min
To 450mm	4.0 m ³ /h	66.6 l/min

Note: The parameters listed in the above table are applicable to all vacuum generation devices. The recommended vacuum suction rate is only for a single suction cup and is only applicable to smooth and airtight workpiece surfaces. For breathable workpieces, we recommend conducting suction tests before selecting a vacuum generating device.

Vacuum suction rate V [m³/h, L/min] calculation formula

$$V = n \times V_s$$

n = Number of suction cups

V_s = The required suction rate for a single suction cup [m³/h, L/min]

Example:

$$V = 6 \times 16.6 \text{ l/min}$$

$$V = 99.6 \text{ l/min}$$

The integrated vacuum generator MCP20 has a suction rate of 140l/min. The integrated vacuum generator has control valves and status monitoring functions for suction and blowing, ensuring the safety of the handling process.

Calculate the suction time of the vacuum system

To calculate the suction time of a vacuum system, we must first determine the total suction volume of the vacuum system.

$$\dot{V}_G = V_1 + V_2 + V_3 + V_4 + V_5 + \dots$$

$\dot{V}_G$ = Total suction volume of vacuum system [m³]

V_1 = Internal volume of vacuum suction cup [m³] (6x35cm³)

V_2 = Internal volume of vacuum components [m³] (6x9.5cm³)

V_3 = Internal volume of vacuum tube [m³] (6x43cm³)

V_4 = Internal volume of splitter [m³] (38.5cm³)

V_5 = Internal volume of filter (if configured) [m³]

V_6 = Internal volume of solenoid valve (if configured) [m³]

...

Example:

$$\dot{V}_G = 6 \times 35 \text{ cm}^3 + 6 \times 9.5 \text{ cm}^3 + 6 \times 43 \text{ cm}^3 + 1 \times 38.5 \text{ cm}^3$$

$$\dot{V}_G = 564 \text{ cm}^3 = 0.000564 \text{ m}^3$$

Calculate the suction time t [h]

$$t = (\dot{V}_G \times \ln(p_a / p_g) \times 1.3) / V$$

$\dot{V}_G$ = Total suction volume of vacuum system [m³]

$\ln$ = Natural logarithm

p_a = Initial absolute pressure [1013mbar] (1 standard atmospheric pressure)

p_g = Final absolute pressure [mbar]

V = The suction rate of the vacuum generating device [m³/h]

Example:

When the relative vacuum degree is 60%, the absolute pressure is 400mbar

$$t = (0.000564 \text{ m}^3 \times \ln(1,013 \text{ mbar} / 400 \text{ mbar}) \times 1.3) / 6.95 \text{ m}^3$$

$$t = 0.000564 \times 1.208 / 6.95$$

$$t = 0.0000980 \text{ h}$$

$$t = 0.35 \text{ seconds}$$

The suction time of the vacuum system's own volume is 0.35 seconds, making it a low-cost, high-efficiency, and short cycle vacuum system.

Workpiece density

Material of workpiece	Material density	Material of workpiece	Material density
steel	7.900 kg/dm ³	Glass	2.500 kg/dm
aluminium	2.700 kg/dm ³	Acrylic glass	1.200 kg/dm
lead	11.300 kg/dm ³	Rubber	0.800...2.000 kg/dm
bronze	8.830 kg/dm ³	Paper	0.700...1.100 kg/dm
brass	8.500 kg/dm ³	Glass fibre	1.150...1.250 kg/dm
titanium	4.500 kg/dm ³	Gypsum	2.300 kg/dm
copper	8.900 kg/dm ³	Concrete	2.350 kg/dm
gasoline	0.730 kg/dm ³	Natural stone	2.800 kg/dm
diesel oil	0.830 kg/dm ³	Recyclable cardboard	0.750 kg/dm
hot oil	0.830 kg/dm ³	MDF medium density fiberboard	0.900 kg/dm
lubricating oil	0.910 kg/dm ³	Plywood	0.600...0.800 kg/dm
water	0.998 kg/dm ³	Wood	0.450...0.850 kg/dm

Weight = Length × Width × Thickness × Density

[kg]

[m]

[m]

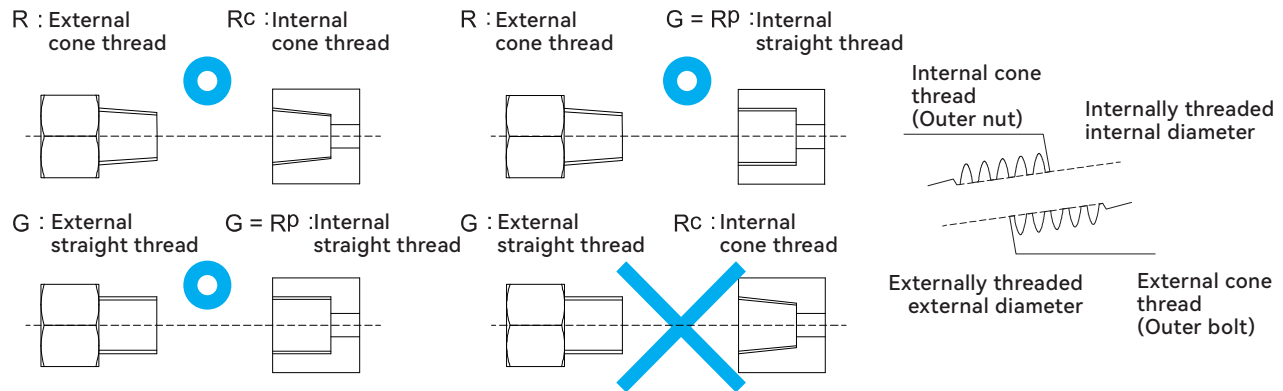
[mm]

[kg/dm³]

Thread gauge

Model	External straight thread	Internal straight thread	External cone thread	Internal cone thread	Outer diameter of external thread	Internal thread outer diameter	Pitch
M3	M3	M3	—	—	3.00 mm	2.46 mm	0.5 mm
M4	M4	M4	—	—	4.00 mm	3.24 mm	0.7 mm
M5	M5	M5	—	—	5.00 mm	4.13 mm	0.8 mm
M6	M6	M6	—	—	6.00 mm	4.92 mm	1.0 mm
1/16"	G1/16	Rp1/16, G1/16	R1/16	Rc1/16	7.72 mm	6.56 mm	0.91 mm
M8	M8	M8	—	—	8.00 mm	6.65 mm	1.25 mm
1/8"	G1/8	Rp1/8, G1/8	R1/8	Rc1/8	9.73 mm	8.57 mm	0.91 mm
M10	M10	M10	—	—	10.00 mm	8.38 mm	1.5 mm
M12	M12	M12	—	—	12.00 mm	10.11 mm	1.75 mm
1/4"	G1/4	Rp1/4, G1/4	R1/4	Rc1/4	13.16 mm	11.45 mm	1.34 mm
M14	M14	M14	—	—	14.00 mm	11.84 mm	2.0 mm
M16	M16	M16	—	—	16.00 mm	13.84 mm	2.0 mm
3/8"	G3/8	Rp3/8, G3/8	R3/8	Rc3/8	16.66 mm	14.95 mm	1.34 mm
M20	M20	M20	—	—	20.00 mm	17.29 mm	2.5 mm
1/2"	G1/2	Rp1/2, G1/2	R1/2	Rc1/2	20.96 mm	18.63 mm	1.81 mm
M24	M24	M24	—	—	24.00 mm	20.75 mm	3.0 mm
3/4"	G3/4	Rp3/4, G3/4	R3/4	Rc3/4	26.44 mm	24.12 mm	1.81 mm
M30	M30	M30	—	—	30.00 mm	26.21 mm	3.5 mm
1"	G1	Rp1, G1	R1	Rc1	33.25 mm	30.29 mm	2.31 mm
1-1/4"	G1-1/4	Rp1-1/4, G1-1/4	R1-1/4	Rc1-1/4	41.91 mm	38.95 mm	2.31 mm
1-1/2"	G1-1/2	Rp1-1/2, G1-1/2	R1-1/2	Rc1-1/2	47.80 mm	44.85 mm	2.31 mm
2"	G2	Rp2, G2	R2	Rc2	59.61 mm	56.66 mm	2.31 mm
2-1/2"	G2-1/2	Rp2-1/2, G2-1/2	R2-1/2	Rc2-1/2	75.18 mm	72.23 mm	2.31 mm
3"	G3	Rp3, G3	R3	Rc3	87.88 mm	84.93 mm	2.31 mm

(1) M thread: JIS B 0205-4:2001, R, RC, RP thread: JIS B 0203-1999, G thread: JIS B 0202-1994.



Matching of external and internal threads

Outer and inner diameters of threads

Applicable environment

Warning

1. In places where there is a risk of falling during operation, certain anti fall measures must be provided to ensure safety.
2. Avoid using vacuum pipelines when subjected to long-term pressure of 0.1MPa or above. Due to the lack of explosion-proof joints in vacuum devices, the use of these devices 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 do not allow vacuum systems to inhale such substances.
5. Avoid the use of vacuum generator port blockage or increased exhaust resistance, as this careless use can easily 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.

Maintenance

Warning

1. The silencing components of the muffler and the filter element of the filter should be regularly maintained and tested. 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 oil mist eliminators 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. For pipeline connections on the vacuum circuit (especially those with joint connections), please avoid using raw tape. The raw tape is prone to detachment and blockage of internal pipelines, resulting in a decrease in the performance of the vacuum generator.

Design/Setting

Attention

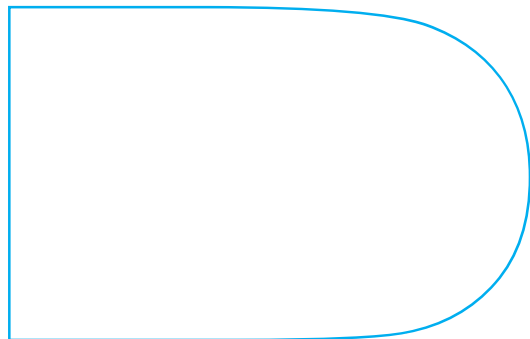
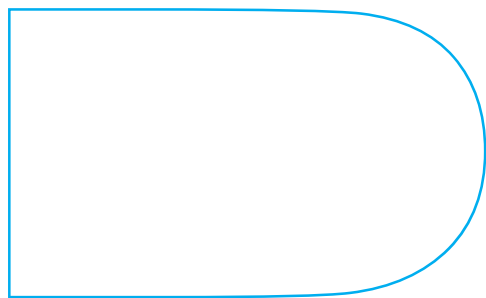
1. Note that a decrease in vacuum pressure caused by air supply or power supply failure may cause the workpiece to fall. Therefore, there must be sufficient preventive measures.
2. Manually inspect and mark the vacuum generator port on the main body, incorrect pipeline connections can damage the equipment.
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, it indicates poor suction. In situations where the piping is long or thick. The increase in piping volume results in a longer suction response time.
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. The effective cross-sectional area of the supply side piping should be selected based on the maximum air consumption of the vacuum generator.

Install

Warning

1. Avoid the use of vacuum generator port blockage or increased exhaust resistance, as this careless use can easily cause flow loss or vacuum reduction.
2. Do not lift the resin shell with rotatability, force it to swing or rotate, which may cause resin damage or leakage.
3. Do not use equipment in places with flammable and explosive solid or gaseous gases, as it may cause fires or explosions.

Vacuum Suction Foams



HVGP-60-FA

Foam hole type customization

HVGP-80-FA

Standard vacuum system

HVGP-130-FA

Built in high flow vacuum generator

HVGP-200-FA

Modular structure

HVGP-60-FE(fan pump)

External vacuum generator or fan

HVGP-80-FE(fan pump)

High suction force

HVGP-130-FE(fan pump)

Built in high flow vacuum generator

HVGP-200-FE(fan pump)

Suitable for different industries

Vacuum Suction Foams HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC



General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Adopting lightweight and tough high-strength aluminum profiles
- * Design of external vacuum source
- * Adopting HANWHA's unique valve body technology
- * Different pass techniques are suitable for a wider range of workpiece applications
- * Original imported sealed foam pads from Europe, with longer service life



Product structure

- * (1) Compressed air intake
- * (2) Exhaust hole with noise reduction function
- * (3) Aluminum profile can be customized
- * (4) Various types of imported foams can be customized



Product advantages

- * Rigid workpieces
- * Standard are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different gaskets can absorb and carry different types of workpieces



foams absorb HVGP shaped strips of wood

Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 60mmX wide and long (customizable)



HVGP Order Code

HVGP 1	60 2	520 3	V 4	3 5	F 6	
15 7	A 8					

1-Series HVGP	Foam suction	2-Width 60	60mm	3-Length 520	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	1	PB01	F	Foam
L	Flow valve	2	PB02		
S	High speed valve	3	PB03		
		4	PB04		
		5	PB05		
7-Size and type of foam		8-Vacuum source configuration			
15	15mm	A	Generator		
10F10	Filtering function	E	Fan pump		
15F15	Filtering function				
F	Filter type				
M	Traceless type				
D	Anti-static				

* Please contact us for special requirements



HVGP60 Foam Order Code

	HVGP 60 Standards Type:PB01 Need to be customized		HVGP 60 Standards Type:PB02 Need to be customized
	HVGP 60 Standards Type:PB03 General purpose		HVGP 60 Standards Type:PB04 Need to be customized
	HVGP 60 Customization Type:PB05 General purpose		

Vacuum Suction Foams HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC


General

HVGP 1	—	60 2	—	520 3	—	PB03 4	—	15 5	—	FM 6
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1-Series		2-Width		3-Length	
HVGP	Foam suction	60	60mm	520	Customizable

4-Hole type		5-Thickness		6-Function	
PB01		15	15mm		Basic type
PB02				F	Filter type
PB03				M	Traceless type
PB04				D	Anti-static
PB05					

* Please contact us for special requests



HVGP60 Technical parameters

Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP60-320V-3F**-A	PB03	0.4~0.6	45	200	-60	700	243	1.4
HVGP60-420V-3F**-A	PB03	0.4~0.6	60	200	-60	700	324	1.6
HVGP60-520V-3F**-A	PB03	0.4~0.6	75	200	-60	700	405	1.8
HVGP60-620V-3F**-A	PB03	0.4~0.6	90	200	-60	700	486	2.0
HVGP60-720V-3F**-A	PB03	0.4~0.6	105	200	-60	700	567	2.3
HVGP60-820V-3F**-A	PB03	0.4~0.6	120	400	-60	1400	648	2.5
HVGP60-920V-3F**-A	PB03	0.4~0.6	135	400	-60	1400	729	2.7
HVGP60-1020V-3F**-A	PB03	0.4~0.6	150	400	-60	1400	811	3.0
HVGP60-1120V-3F**-A	PB03	0.4~0.6	165	400	-60	1400	892	3.2
HVGP60-1220V-3F**-A	PB03	0.4~0.6	180	400	-60	1400	973	3.4
HVGP60-1320V-3F**-A	PB03	0.4~0.6	195	400	-60	1400	1054	3.7
HVGP60-1420V-3F**-A	PB03	0.4~0.6	210	400	-60	1400	1135	3.9
HVGP60-1520V-3F**-A	PB03	0.4~0.6	225	400	-60	1400	1216	4.1

* PB03

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values



Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 60mmX wide and long (customizable)

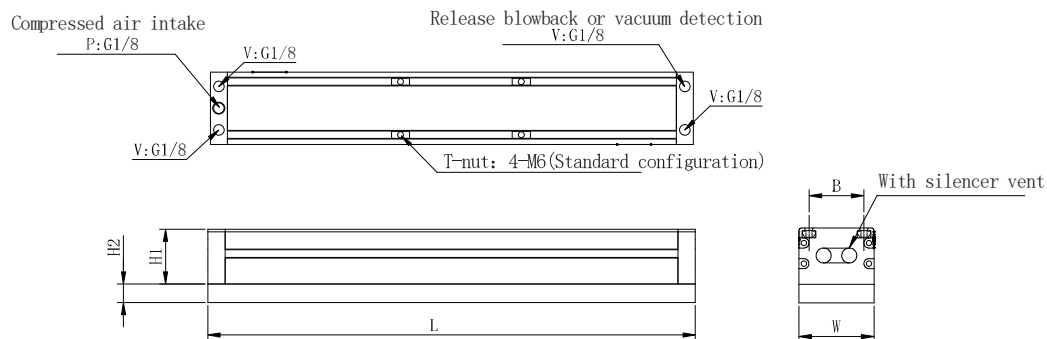
Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP60-320V-5F**-A	PB05	0.4~0.6	73	200	-60	700	220	1.4
HVGP60-420V-5F**-A	PB05	0.4~0.6	98	200	-60	700	296	1.6
HVGP60-520V-5F**-A	PB05	0.4~0.6	123	200	-60	700	371	1.8
HVGP60-620V-5F**-A	PB05	0.4~0.6	148	200	-60	700	446	2.0
HVGP60-720V-5F**-A	PB05	0.4~0.6	173	200	-60	700	522	2.3
HVGP60-820V-5F**-A	PB05	0.4~0.6	198	400	-60	1400	597	2.5
HVGP60-920V-5F**-A	PB05	0.4~0.6	223	400	-60	1400	673	2.7
HVGP60-1020V-5F**-A	PB05	0.4~0.6	248	400	-60	1400	748	3.0
HVGP60-1120V-5F**-A	PB05	0.4~0.6	273	400	-60	1400	823	3.2
HVGP60-1220V-5F**-A	PB05	0.4~0.6	298	400	-60	1400	899	3.4
HVGP60-1320V-5F**-A	PB05	0.4~0.6	323	400	-60	1400	974	3.7
HVGP60-1420V-5F**-A	PB05	0.4~0.6	348	400	-60	1400	1050	3.9
HVGP60-1520V-5F**-A	PB05	0.4~0.6	373	400	-60	1400	1125	4.1

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PB05



HVGP60 Design parameters


www.hanvac.de

Vacuum Suction Foams HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC


General

Size[mm]

Models	B	H1	H2[**]			W	L
HVGP60-320V-3F**-A	44	45	10	20		60	320
HVGP60-420V-3F**-A	44	45	10	20		60	420
HVGP60-520V-3F**-A	44	45	10	20		60	520
HVGP60-620V-3F**-A	44	45	10	20		60	620
HVGP60-720V-3F**-A	44	45	10	20		60	720
HVGP60-820V-3F**-A	44	45	10	20		60	820
HVGP60-920V-3F**-A	44	45	10	20		60	920
HVGP60-1020V-3F**-A	44	45	10	20		60	1020
HVGP60-1120V-3F**-A	44	45	10	20		60	1120
HVGP60-1220V-3F**-A	44	45	10	20		60	1220
HVGP60-1320V-3F**-A	44	45	10	20		60	1320
HVGP60-1420V-3F**-A	44	45	10	20		60	1420
HVGP60-1520V-3F**-A	44	Models	45	10	20	60	1520

* PB03

Size[mm]

Models	B	H1	H2[**]			W	L
HVGP60-320V-5F**-A	44	45	10	15	20	60	320
HVGP60-420V-5F**-A	44	45	10	15	20	60	420
HVGP60-520V-5F**-A	44	45	10	15	20	60	520
HVGP60-620V-5F**-A	44	45	10	15	20	60	620
HVGP60-720V-5F**-A	44	45	10	15	20	60	720
HVGP60-820V-5F**-A	44	45	10	15	20	60	820
HVGP60-920V-5F**-A	44	45	10	15	20	60	920
HVGP60-1020V-5F**-A	44	45	10	15	20	60	1020
HVGP60-1120V-5F**-A	44	45	10	15	20	60	1120
HVGP60-1220V-5F**-A	44	45	10	15	20	60	1220
HVGP60-1320V-5F**-A	44	45	10	15	20	60	1320
HVGP60-1420V-5F**-A	44	45	10	15	20	60	1420
HVGP60-1520V-5F**-A	44	45	10	15	20	60	1520

* PB05

Vacuum Suction Foams HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC



General

Product characteristics

- *Medium sized standardized design
- *Convenient and simple maintenance and repair
- *Using lightweight and tough high-strength aluminum profiles
- *Built in multi-stage vacuum generator module
- *Adopting HANWHA's unique valve body technology
- *Different hole techniques are suitable for a wider range of workpiece applications
- *European original imported sealing sponge pad, with a longer service life



Product structure

- *(1) Compressed air intake
- *(2) Exhaust hole with noise reduction function
- *(3) Aluminum profiles, customizable
- *(4) Various imported sponge types can be customized



Product advantages

- *Improve the handling speed of wood, pallets, and box components
- *Handling materials with through-holes, uneven surfaces, rough and twisted surfaces
- *Suitable for high-strength application environments in industries such as woodworking, furniture, and packaging
- *Can be used for palletizing and unstacking workpieces



HVGP Extract sheet metal parts

Vacuum Suction Foams

HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC


General



HVGP80 Order Code

HVGP 1	80 2	576 3	V 4	2 5	F 6	
15 7	A 8					
1-Series		2-Width		3-Lengt		
HVGP	Foam suction	80	80mm	576	Customizable	
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material		
V	Self-closing valve	1	PB01	F	Foam	
L	Flow valve	2	PB02			
S	High speed valve	3	PB03			
		4	PB04			
7-Size and type of foam		8-Vacuum source configuration				
15	15mm	A	Generator			
10F10	Filtering function	E	Fan pump			
15F15	Filtering function					
F	Filter type					
M	Traceless type					
D	Anti-static					

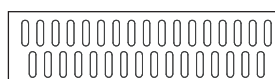
* Please contact us for special requirements



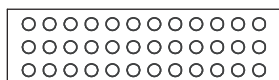
HVGP80 Foam Order Code



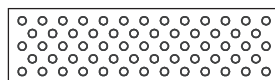
HVGP 80 Standards
Type:PB01
Need to be customized



HVGP 80 Standards
Type:PB02
General purpose



HVGP 80 Standards
Type:PB03
Need to be customized



HVGP 80 Standards
Type:PB04
Need to be customized



Vacuum Suction Foams

HVGP (Generator)

HANVAC


General

Suction size: 80mmX wide and long (customizable)

HVGP	80	576	PB02	15	F
1	2	3	4	5	6

1-Series	2-Width	3-Length
HVGP	80	576
Foam suction	80mm	Customizable

4-Hole type	5-Thickness	6-Function
PB01	15	Basic type
PB02	15mm	Filter type
PB03		Traceless type
PB04		Anti-static

* Please contact us for special requests



HVGP80 Technical parameters

Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP80-256V-2F*-A	PB02	0.4~0.6	28	300	-60	1050	277	1.2
HVGP80-320V-2F*-A	PB02	0.4~0.6	36	300	-60	1050	357	1.4
HVGP80-384V-2F*-A	PB02	0.4~0.6	44	300	-60	1050	436	1.7
HVGP80-480V-2F*-A	PB02	0.4~0.6	56	300	-60	1050	555	2.0
HVGP80-576V-2F*-A	PB02	0.4~0.6	68	300	-60	1050	674	2.4
HVGP80-672V-2F*-A	PB02	0.4~0.6	80	300	-60	1050	793	2.7
HVGP80-768V-2F*-A	PB02	0.4~0.6	92	300	-60	1050	912	3.1
HVGP80-864V-2F*-A	PB02	0.4~0.6	104	600	-60	2100	1031	3.7
HVGP80-960V-2F*-A	PB02	0.4~0.6	116	600	-60	2100	1150	4.0
HVGP80-1056V-2F*-A	PB02	0.4~0.6	128	600	-60	2100	1269	4.4
HVGP80-1152V-2F*-A	PB02	0.4~0.6	140	600	-60	2100	1387	4.7
HVGP80-1248V-2F*-A	PB02	0.4~0.6	152	600	-60	2100	1506	5.1
HVGP80-1344V-2F*-A	PB02	0.4~0.6	164	600	-60	2100	1625	5.4
HVGP80-1440V-2F*-A	PB02	0.4~0.6	176	600	-60	2100	1744	5.8
HVGP80-1536V-2F*-A	PB02	0.4~0.6	188	600	-60	2100	1863	6.1

 *Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
 please refer to the actual vacuum source performance values

*PB02


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Vacuum Suction Foams

HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

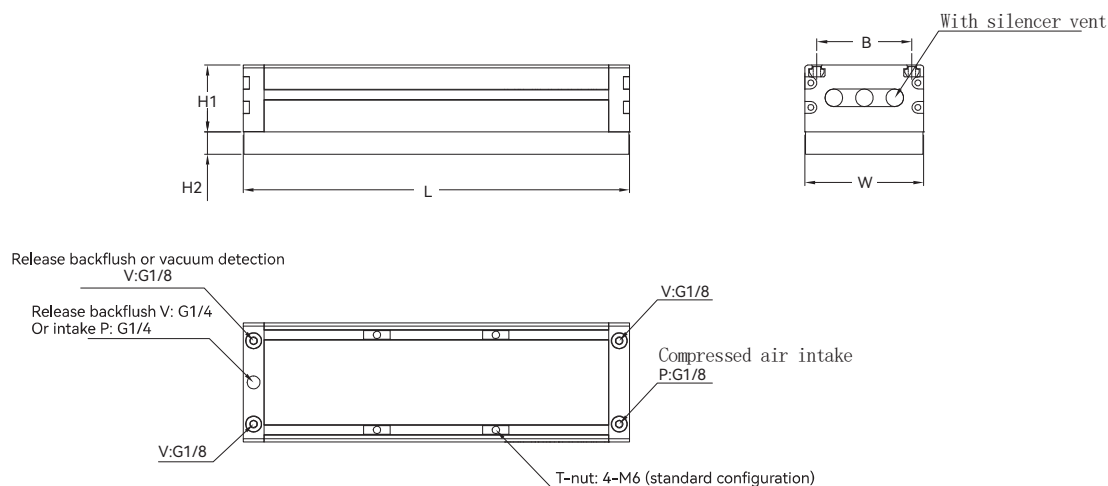
Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP80-260V-3F*-A	PB03	0.4~0.6	36	300	-60	1050	207	1.21
HVGP80-320V-3F*-A	PB03	0.4~0.6	45	300	-60	1050	259	1.43
HVGP80-380V-3F*-A	PB03	0.4~0.6	54	300	-60	1050	311	1.65
HVGP80-480V-3F*-A	PB03	0.4~0.6	69	300	-60	1050	398	2.01
HVGP80-580V-3F*-A	PB03	0.4~0.6	84	300	-60	1050	484	2.38
HVGP80-680V-3F*-A	PB03	0.4~0.6	99	300	-60	1050	571	2.75
HVGP80-780V-3F*-A	PB03	0.4~0.6	114	600	-60	1050	657	3.37
HVGP80-880V-3F*-A	PB03	0.4~0.6	129	600	-60	2100	743	3.74
HVGP80-980V-3F*-A	PB03	0.4~0.6	144	600	-60	2100	830	4.10
HVGP80-1080V-3F*-A	PB03	0.4~0.6	159	600	-60	2100	916	4.47
HVGP80-1180V-3F*-A	PB03	0.4~0.6	174	600	-60	2100	1003	4.84
HVGP80-1280V-3F*-A	PB03	0.4~0.6	189	600	-60	2100	1089	5.21
HVGP80-1380V-3F*-A	PB03	0.4~0.6	204	600	-60	2100	1176	5.57
HVGP80-1480V-3F*-A	PB03	0.4~0.6	219	600	-60	2100	1262	5.94
HVGP80-1580V-3F*-A	PB03	0.4~0.6	234	600	-60	2100	1349	6.31

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

*PB03



HVGP80 Design parameters



Vacuum Suction Foams

HVGP (Generator)

HANVAC


General

Suction size: 80mmX wide and long (customizable)

SIZE[mm]							
Models	B	H1	H2[**]			W	L
HVGP80-256V-2F**-A	64	45	10	15	20	80	256
HVGP80-320V-2F**-A	64	45	10	15	20	80	320
HVGP80-384V-2F**-A	64	45	10	15	20	80	384
HVGP80-480V-2F**-A	64	45	10	15	20	80	480
HVGP80-576V-2F**-A	64	45	10	15	20	80	576
HVGP80-672V-2F**-A	64	45	10	15	20	80	672
HVGP80-768V-2F**-A	64	45	10	15	20	80	768
HVGP80-864V-2F**-A	64	45	10	15	20	80	864
HVGP80-960V-2F**-A	64	45	10	15	20	80	960
HVGP80-1056V-2F**-A	64	45	10	15	20	80	1056
HVGP80-1152V-2F**-A	64	45	10	15	20	80	1152
HVGP80-1248V-2F**-A	64	45	10	15	20	80	1248
HVGP80-1344V-2F**-A	64	45	10	15	20	80	1344
HVGP80-1440V-2F**-A	64	45	10	15	20	80	1440
HVGP80-1536V-2F**-A	64	45	10	15	20	80	1536

*PB02

SIZE[mm]							
Models	B	H1	H2[**]			W	L
HVGP80-260V-3F**-A	64	45	10	15	20	80	260
HVGP80-320V-3F**-A	64	45	10	15	20	80	320
HVGP80-380V-3F**-A	64	45	10	15	20	80	380
HVGP80-480V-3F**-A	64	45	10	15	20	80	480
HVGP80-580V-3F**-A	64	45	10	15	20	80	580
HVGP80-680V-3F**-A	64	45	10	15	20	80	680
HVGP80-780V-3F**-A	64	45	10	15	20	80	780
HVGP80-880V-3F**-A	64	45	10	15	20	80	880
HVGP80-980V-3F**-A	64	45	10	15	20	80	980
HVGP80-1080V-3F**-A	64	45	10	15	20	80	1080
HVGP80-1180V-3F**-A	64	45	10	15	20	80	1180
HVGP80-1280V-3F**-A	64	45	10	15	20	80	1280
HVGP80-1380V-3F**-A	64	45	10	15	20	80	1380
HVGP80-1480V-3F**-A	64	45	10	15	20	80	1480
HVGP80-1580V-3F**-A	64	45	10	15	20	80	1580

*PB03

Vacuum Suction Foams HVGP (Generator)

Suction size: 130mmX wide and long (customizable)

HANVAC



General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Compressed air intake
- * (2) Exhaust hole with noise reduction function
- * (3) Aluminum profile can be customized
- * (4) Various types of imported foams can be customized



Product advantages

- * Rigid workpieces
- * Standard foams are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different gaskets can absorb and carry different types of workpieces



Foam suction HVGP suction with packing carton

Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 130mmX wide and long (customizable)



HVGP130 Order Code

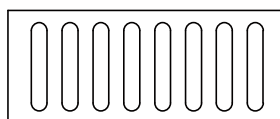
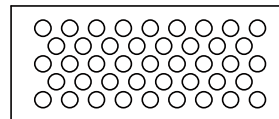
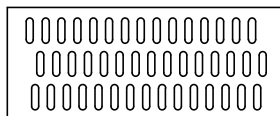
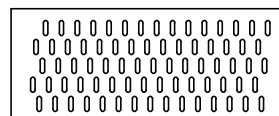
HVGP 1	130 2	1234 3	V 4	3 5	F 6
20 7	C 8	A 9			

1-Series HVGP	Foam suction	2-Width 130	130mm	3-Length 262	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	3	PA03	F	Foam
L	Flow valve	4	PA04		
S	High speed valve	5	PA05		
		1	PA01		
7-Size and type of foam		8-Save Energy		9-Vacuum source configuration	
20	20mm	C	Save Energy	A	Generator
30	30mm	Blank	No energy saving	E	Fan pump
10F10	filtering function				
15F15	filtering function				
F	Filter type				
M	Traceless type				

*Please contact us for special requirements



HVGP130 Foam Order Code


 HVGP 130 Customization
Type:PA01
Need to be customized

 HVGP 130 Customization
Type:PA04
Need to be customized

 HVGP 130 Customization
Type:PA03
General purpose

 HVGP 130 Customization
Type:PA05
Need to be customized

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Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 130mmX wide and long (customizable)

HVGP 1	—	130 2	—	1234 3	—	PA03 4	—	20 5	—	FM 6
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1-Series		2-Width		3-Length	
HVGP	Foam suction	130	130mm	1234	1234mm

4-Hole shape		5-Thickness		6-Type	
PA01		20	20mm		Basic type
PA03				F	Filter type
PA04				M	Traceless type
PA05					

*Please contact us for special requirements



HVGP130 Technical parameters

Models	Type	Number of foam pores	air supply pressure [Bar]	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction* [N(-60KPA)]	Weight KG
HVGP130-262V-3F**-A	PA03	36	4~6	100	-60	350	393	2.5
HVGP130-316V-3F**-A	PA03	45	4~6	100	-60	350	491	2.7
HVGP130-352V-3F**-A	PA03	51	4~6	100	-60	350	557	2.9
HVGP130-442V-3F**-A	PA03	66	4~6	200	-60	600	721	3.3
HVGP130-550V-3F**-A	PA03	84	4~6	200	-60	600	917	3.7
HVGP130-640V-3F**-A	PA03	99	4~6	300	-60	1050	1081	4.1
HVGP130-712V-3F**-A	PA03	111	4~6	300	-60	1050	1212	4.5
HVGP130-838V-3F**-A	PA03	132	4~6	300	-60	1050	1441	5.1
HVGP130-910V-3F**-A	PA03	144	4~6	400	-60	1400	1572	5.4
HVGP130-1000V-3F**-A	PA03	159	4~6	400	-60	1400	1736	5.7
HVGP130-1234V-3F**-A	PA03	198	4~6	600	-60	2100	2162	7.3
HVGP130-1432V-3F**-A	PA03	231	4~6	600	-60	2100	2522	8.6

* PA03

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)

please refer to the actual vacuum source performance values



Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 130mmX wide and long (customizable)

Size[mm] Models	Type	Design number	air supply pressure [Bar]	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [N(-60KPA)]	Weight KG
HVGP130-295V-4F**-A	PA04	53	4~6	100	-60	350	490	2.6
HVGP130-434V-4F**-A	PA04	83	4~6	200	-60	600	767	3.3
HVGP130-572V-4F**-A	PA04	113	4~6	300	-60	1050	1044	3.8
HVGP130-711V-4F**-A	PA04	143	4~6	300	-60	1050	1321	4.5
HVGP130-849V-4F**-A	PA04	173	4~6	400	-60	1400	1598	5.2
HVGP130-988V-4F**-A	PA04	203	4~6	400	-60	1400	1875	5.6
HVGP130-1126V-4F**-A	PA04	233	4~6	600	-60	2100	2152	7.0
HVGP130-1265V-4F**-A	PA04	263	4~6	-600	-60	2450	2429	7.4
HVGP130-1403V-4F**-A	PA04	293	4~6	-600	-60	2450	2606	8.5
HVGP130-1542V-4F**-A	PA04	323	4~6	800	-60	2800	2983	9.1

* PA04

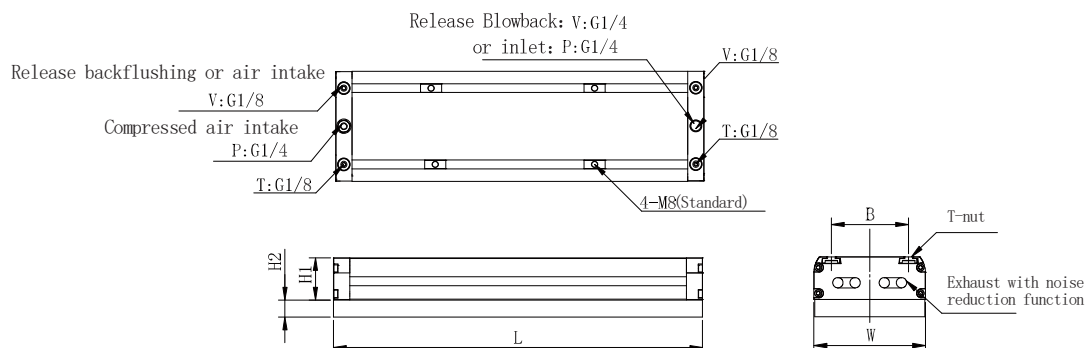
Size[mm] Models	Type	Number of foam pores	air supply pressure [Bar]	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [N(-60KPA)]	Weight KG
HVGP130-262V-5F**-A	PA05	60	4~6	100	-60	350	287	2.5
HVGP130-316V-5F**-A	PA05	75	4~6	200	-60	600	358	2.7
HVGP130-352V-5F**-A	PA05	85	4~6	200	-60	600	406	2.9
HVGP130-442V-5F**-A	PA05	110	4~6	300	-60	1050	526	3.3
HVGP130-550V-5F**-A	PA05	140	4~6	400	-60	1400	669	3.7
HVGP130-640V-5F**-A	PA05	165	4~6	400	-60	1400	788	4.1
HVGP130-712V-5F**-A	PA05	185	4~6	400	-60	1400	884	4.5
HVGP130-838V-5F**-A	PA05	220	4~6	400	-60	1400	1051	5.1
HVGP130-910V-5F**-A	PA05	245	4~6	600	-60	2100	1171	5.4
HVGP130-1000V-5F**-A	PA05	265	4~6	600	-60	2450	1266	5.7
HVGP130-1234V-5F**-A	PA05	330	4~6	800	-60	2800	1577	7.3
HVGP130-1432V-5F**-A	PA05	385	4~6	800	-60	2800	1840	8.6

 *Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PA05



HVGP130 Design parameters





Vacuum Suction Foams HVGP (Generator)

Suction size: 130mmX wide and long (customizable)

Size[mm]

Models	B	H1	H2[**]			W	L
HVGP130-262V-3F**-A	90	50	10	15	20	130	262
HVGP130-316V-3F**-A	90	50	10	15	20	130	316
HVGP130-352V-3F**-A	90	50	10	15	20	130	352
HVGP130-442V-3F**-A	90	50	10	15	20	130	442
HVGP130-550V-3F**-A	90	50	10	15	20	130	550
HVGP130-640V-3F**-A	90	50	10	15	20	130	640
HVGP130-712V-3F**-A	90	50	10	15	20	130	712
HVGP130-838V-3F**-A	90	50	10	15	20	130	838
HVGP130-910V-3F**-A	90	50	10	15	20	130	910
HVGP130-1000V-3F**-A	90	50	10	15	20	130	1000
HVGP130-1234V-3F**-A	90	50	10	15	20	130	1234
HVGP130-1432V-3F**-A	90	50	10	15	20	130	1432

* PA03

Size[mm]

Models	B	H1	H2[**]			W	L
HVGP130-295V-4F**-A	90	50	10	15	20	130	295
HVGP130-434V-4F**-A	90	50	10	15	20	130	434
HVGP130-572V-4F**-A	90	50	10	15	20	130	572
HVGP130-711V-4F**-A	90	50	10	15	20	130	711
HVGP130-849V-4F**-A	90	50	10	15	20	130	849
HVGP130-988V-4F**-A	90	50	10	15	20	130	988
HVGP130-1126V-4F**-A	90	50	10	15	20	130	1126
HVGP130-1265V-4F**-A	90	50	10	15	20	130	1265
HVGP130-1403V-4F**-A	90	50	10	15	20	130	1403
HVGP130-1542V-4F**-A	90	50	10	15	20	130	1542

* PA04

Size[mm]

Models	B	H1	H2[**]			W	L
HVGP130-262V-5F**-A	90	50	10	15	20	130	262
HVGP130-316V-5F**-A	90	50	10	15	20	130	316
HVGP130-352V-5F**-A	90	50	10	15	20	130	352
HVGP130-442V-5F**-A	90	50	10	15	20	130	442
HVGP130-550V-5F**-A	90	50	10	15	20	130	550
HVGP130-640V-5F**-A	90	50	10	15	20	130	640
HVGP130-712V-5F**-A	90	50	10	15	20	130	712
HVGP130-838V-5F**-A	90	50	10	15	20	130	838
HVGP130-910V-5F**-A	90	50	10	15	20	130	910
HVGP130-1000V-5F**-A	90	50	10	15	20	130	1000
HVGP130-1234V-5F**-A	90	50	10	15	20	130	1234
HVGP130-1432V-5F**-A	90	50	10	15	20	130	1432

* PA05

Vacuum Suction Foams HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General

Product characteristics

- * Medium sized standardized design
- * Convenient and simple maintenance
- * Adopting lightweight and tough high-strength aluminum profiles
- * Design of external vacuum source
- * Adopting HANWHA's unique valve body technology
- * Different pass techniques are suitable for a wider range of workpiece applications
- * Original imported sealed foam pads from Europe, with longer service life



Product structure

- * (1) P: G1/4 screw thread, air inlet
- * (2) V: G1/8 screw thread, back blowing/vacuum detection
- * (3) Aluminum profile can be customized
- * (4) Various types of imported foams can be customized



Product advantages

- * Rigid workpieces
- * Standard are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different sealing pads can absorb and carry different types of workpieces



Foam suction HVGP absorbs packaging carton

Vacuum Suction Foams HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Order Code

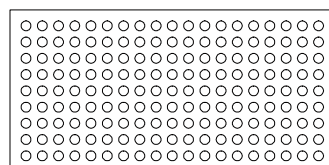
HVGP 1	—	200 2	—	1000 3	—	V 4	—	3 5	—	F 6	—
20 7	—	E 8									

1-Series		2-Width		3-Length	
HVGP	Foam suction	200	200mm	1000	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	2	PD02	F	Foam
L	Flow valve	3	PD03		
S	High speed valve				
7-Size and type of foam		8-Vacuum source configuration			
20	20mm	A	Generator		
25	25mm	E	Fan pump		
30	30mm				
10F10	With filtering				
15F15	With filtering				
M	No trace				

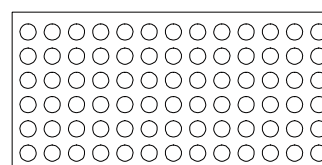
*Please contact us for special requirements



HVGP200 Foam Order Code



HVGP 200 Customization
Type:PD02
General purpose



HVGP 200 Customization
Type:PD03
General purpose



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Vacuum Suction Foams HVGP (Generator)

HANVAC


General

Suction size: 200mmX wide and long (customizable)

HVGP 1	—	200 2	—	1000 3	—	PD02 4	—	20 5	—	FM 6
1-Series				2-Width				3-Length		
HVGP		Foam suction		200		200mm		1000		Customizable
4-Hole shape				5-Size and type of foam				6-Foam type		
PD02				20		20mm				Basic type
PD03				25		25mm		F		Filter type
				30		30mm		M		Traceless type

*Please contact us for special requirements



HVGP200 Technical parameters

Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-50KPA]	Weight [KG]
HVGP200-300V-2F**-A	PD02	0.4~0.6	126	300	-50	1050	712	3.2
HVGP200-400V-2F**-A	PD02	0.4~0.6	171	300	-50	1050	966	3.8
HVGP200-500V-2F**-A	PD02	0.4~0.6	216	400	-50	1400	1221	4.4
HVGP200-600V-2F**-A	PD02	0.4~0.6	261	400	-50	1400	1475	5.0
HVGP200-700V-2F**-A	PD02	0.4~0.6	306	400	-50	1400	1730	5.6
HVGP200-800V-2F**-A	PD02	0.4~0.6	351	500	-50	1750	1984	6.2
HVGP200-900V-2F**-A	PD02	0.4~0.6	396	500	-50	1750	2238	6.8
HVGP200-1000V-2F**-A	PD02	0.4~0.6	441	600	-50	2100	2493	7.4
HVGP200-1100V-2F**-A	PD02	0.4~0.6	486	600	-50	2100	2747	8.0
HVGP200-1200V-2F**-A	PD02	0.4~0.6	531	600	-50	2100	3001	8.6

* PD02

Models	Type	Inlet pressure [Mpa]	Number of foam pores	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-50KPA]	Weight [KG]
HVGP200-260V-3F**-A	PD03	0.4~0.6	48	200	-50	700	482	3.0
HVGP200-410V-3F**-A	PD03	0.4~0.6	78	200	-50	700	784	3.9
HVGP200-560V-3F**-A	PD03	0.4~0.6	108	300	-50	1050	1085	4.8
HVGP200-710V-3F**-A	PD03	0.4~0.6	138	300	-50	1050	1387	5.6
HVGP200-860V-3F**-A	PD03	0.4~0.6	168	400	-50	1400	1688	6.5
HVGP200-1010V-3F**-A	PD03	0.4~0.6	198	400	-50	1400	1990	7.4
HVGP200-1160V-3F**-A	PD03	0.4~0.6	228	700	-50	1400	2291	8.3

* PD03

 *Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

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Vacuum Suction Foams HVGP (Generator)

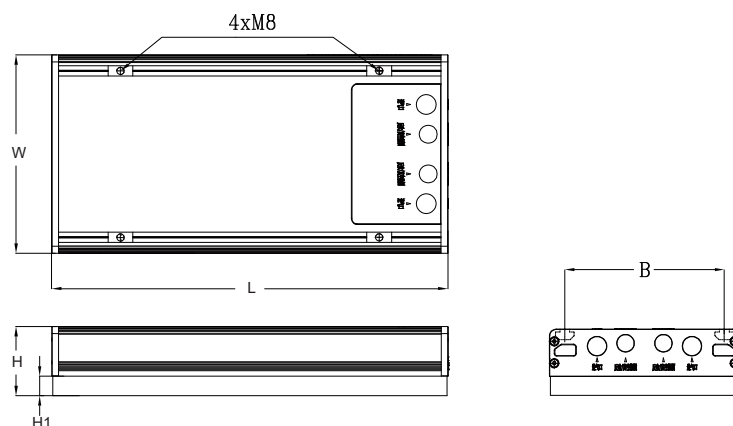
Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Design parameters



Size[mm]

Models	B	L	W	H	H1
HVGP200-300V-2F**-A	168	300	200	70	20
HVGP200-400V-2F**-A	168	400	200	70	20
HVGP200-500V-2F**-A	168	500	200	70	20
HVGP200-600V-2F**-A	168	600	200	70	20
HVGP200-700V-2F**-A	168	700	200	70	20
HVGP200-800V-2F**-A	168	800	200	70	20
HVGP200-900V-2F**-A	168	900	200	70	20
HVGP200-1000V-2F**-A	168	1000	200	70	20
HVGP200-1100V-2F**-A	168	1100	200	70	20
HVGP200-1200V-2F**-A	168	1200	200	70	20

* PD02

Size[mm]

Models	B	L	W	H	H1
HVGP200-260V-3F**-A	168	260	200	70	20
HVGP200-410V-3F**-A	168	410	200	70	20
HVGP200-560V-3F**-A	168	560	200	70	20
HVGP200-710V-3F**-A	168	710	200	70	20
HVGP200-860V-3F**-A	168	860	200	70	20
HVGP200-1010V-3F**-A	168	1010	200	70	20
HVGP200-1160V-3F**-A	168	1160	200	70	20

* PD03


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Vacuum Suction Foams HVGP (fan pump)

Suction size: 60mmX wide and long (customizable)

HANVAC


General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Adopting lightweight and tough high-strength aluminum profiles
- * Design of external vacuum source
- * Adopting HANVHA's unique valve body technology
- * Different pass techniques are suitable for a wider range of workpiece applications
- * Original imported sealed foam pads from Europe, with longer service life



Product structure

- * (1) Compressed air intake
- * (2) Exhaust hole with noise reduction function
- * (3) Aluminum profile can be customized
- * (4) Various types of imported foams can be customized
- * (5) Fan pump



Product advantages

- * Rigid workpieces
- * Standard are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different gaskets can absorb and carry different types of workpieces



foams sucker HVGP takes glass tubule

Vacuum Suction Foams HVGP (fan pump)

Suction size: 60mmX wide and long (customizable)

HANVAC


General



HVGP Order Code

HVGP 1	60 2	520 3	V 4	3 5	F 6	
15 7	E 8					

1-Series		2-Width		3-Lengt	
HVGP	Foam suction	60	60mm	520	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	1	PB01	F	Foam
L	Flow valve	2	PB02		
S	High speed valve	3	PB03		
		4	PB04		
		5	PB05		
7-Size and type of foam		8-Vacuum source configuration			
15	15mm	A	Generator		
10F10	Filtering function	E	Fan pump		
15F15	Filtering function				
F	Filter type				
M	Traceless type				
D	Anti-static				

* Please contact us for special requirements



HVGP60 Foam Order Code

	HVGP 60 Standards Type:PB01 Need to be customized		HVGP 60 Standards Type:PB02 Need to be customized
	HVGP 60 Standards Type:PB03 General purpose		HVGP 60 Standards Type:PB04 Need to be customized
	HVGP 60 Customization Type:PB05 General purpose		



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Vacuum Suction Foams HVGP (fan pump)

HANVAC


General

Suction size: 60mmX wide and long (customizable)

HVGP 1	—	60 2	—	520 3	—	PB03 4	—	15 5	—	FM 6
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1-Series		2-Width		3-Length	
HVGP	Foam suction	60	60mm	520	Customizable

4-Hole type		5-Thickness		6-Function	
PB01		15	15mm		Basic type
PB02				F	Filter type
PB03				M	Traceless type
PB04				D	Anti-static
PB05					

* Please contact us for special requests



HVGP Technical parameters

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction* [N(-40KPA)]	Weight [KG]
HVGP60-320V-3F**-E	PB03	45	150	-40	162	1.0
HVGP60-420V-3F**-E	PB03	60	300	-40	216	1.2
HVGP60-520V-3F**-E	PB03	75	390	-40	270	1.4
HVGP60-620V-3F**-E	PB03	90	450	-40	324	1.7
HVGP60-720V-3F**-E	PB03	105	510	-40	378	1.9
HVGP60-820V-3F**-E	PB03	120	510	-40	432	2.1
HVGP60-920V-3F**-E	PB03	135	600	-40	486	2.4
HVGP60-1020V-3F**-E	PB03	150	750	-40	540	2.6
HVGP60-1120V-3F**-E	PB03	165	900	-40	594	2.8
HVGP60-1220V-3F**-E	PB03	180	900	-40	648	3.1
HVGP60-1320V-3F**-E	PB03	195	900	-40	702	3.3
HVGP60-1420V-3F**-E	PB03	210	1050	-40	756	3.5
HVGP60-1520V-3F**-E	PB03	225	1250	-40	811	3.7

* PB03

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values


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Vacuum Suction Foams HVGP (fan pump)

Suction size: 60mmX wide and long (customizable)

HANVAC


General



HVGP60 Technical parameters

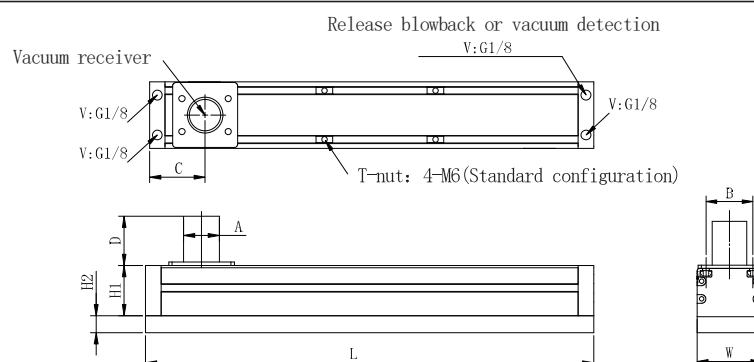
Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP60-320V-5F**-E	PB05	73	150	-40	147	1.0
HVGP60-420V-5F**-E	PB05	98	300	-40	197	1.2
HVGP60-520V-5F**-E	PB05	123	390	-40	247	1.4
HVGP60-620V-5F**-E	PB05	148	450	-40	298	1.7
HVGP60-720V-5F**-E	PB05	173	510	-40	348	1.9
HVGP60-820V-5F**-E	PB05	198	510	-40	398	2.1
HVGP60-920V-5F**-E	PB05	223	600	-40	448	2.4
HVGP60-1020V-5F**-E	PB05	248	750	-40	499	2.6
HVGP60-1120V-5F**-E	PB05	273	900	-40	549	2.8
HVGP60-1220V-5F**-E	PB05	298	900	-40	599	3.1
HVGP60-1320V-5F**-E	PB05	323	900	-40	649	3.3
HVGP60-1420V-5F**-E	PB05	348	1050	-40	700	3.5
HVGP60-1520V-5F**-E	PB05	373	1250	-40	750	3.7

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PB05



HVGP Design parameters



Vacuum Suction Foams HVGP (fan pump)

HANVAC


General

Suction size: 60mmX wide and long (customizable)

Size[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP60-320V-3F**-E	32	44	50	44	45	10	15	20	60	320
HVGP60-420V-3F**-E	32	44	50	44	45	10	15	20	60	420
HVGP60-520V-3F**-E	32	44	50	44	45	10	15	20	60	520
HVGP60-620V-3F**-E	32	44	50	44	45	10	15	20	60	620
HVGP60-720V-3F**-E	32	44	50	44	45	10	15	20	60	720
HVGP60-820V-3F**-E	32	44	50	44	45	10	15	20	60	820
HVGP60-920V-3F**-E	32	44	50	44	45	10	15	20	60	920
HVGP60-1020V-3F**-E	32	44	50	44	45	10	15	20	60	1020
HVGP60-1120V-3F**-E	32	44	50	44	45	10	15	20	60	1120
HVGP60-1220V-3F**-E	32	44	50	44	45	10	15	20	60	1220
HVGP60-1320V-3F**-E	32	44	50	44	45	10	15	20	60	1320
HVGP60-1420V-3F**-E	32	44	50	44	45	10	15	20	60	1420
HVGP60-1520V-3F**-E	32	44	50	44	45	10	15	20	60	1520

* PB03

Size[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP60-320V-5F**-E	32	44	50	44	45	10	15	20	60	320
HVGP60-420V-5F**-E	32	44	50	44	45	10	15	20	60	420
HVGP60-520V-5F**-E	32	44	50	44	45	10	15	20	60	520
HVGP60-620V-5F**-E	32	44	50	44	45	10	15	20	60	620
HVGP60-720V-5F**-E	32	44	50	44	45	10	15	20	60	720
HVGP60-820V-5F**-E	32	44	50	44	45	10	15	20	60	820
HVGP60-920V-5F**-E	32	44	50	44	45	10	15	20	60	920
HVGP60-1020V-5F**-E	32	44	50	44	45	10	15	20	60	1020
HVGP60-1120V-5F**-E	32	44	50	44	45	10	15	20	60	1120
HVGP60-1220V-5F**-E	32	44	50	44	45	10	15	20	60	1220
HVGP60-1320V-5F**-E	32	44	50	44	45	10	15	20	60	1320
HVGP60-1420V-5F**-E	32	44	50	44	45	10	15	20	60	1420
HVGP60-1520V-5F**-E	32	44	50	44	45	10	15	20	60	1520

* PB05

Vacuum Suction Foams

HVGP (fan pump)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

Product characteristics

- *Medium sized standardized design
- *Convenient and simple maintenance and repair
- *Using lightweight and tough high-strength aluminum profiles
- *Built in multi-stage vacuum generator module
- *Adopting HANWHA's unique valve body technology
- *Different hole techniques are suitable for a wider range of workpiece applications
- *European original imported sealing sponge pad, with a longer service life



Product structure

- *(1) Fan pump
- *(2) Compressed air intake
- *(3) Exhaust hole with noise reduction function
- *(4) Aluminum profiles, customizable
- *(5) Various imported sponge types can be customized



Product advantages

- *Improve the handling speed of wood, pallets, and box components
- *Handling materials with through-holes, uneven surfaces, rough and twisted surfaces
- *Suitable for high-strength application environments in industries such as woodworking, furniture, and packaging
- *Can be used for palletizing and unstacking workpieces



* HVGP Absorb flexible packaging

Vacuum Suction Foams

HVGP (fan pump)

Suction size: 80mmX wide and long (customizable)

HANVAC


General



HVGP80 Order Code

HVGP 1	—	80 2	—	576 3	—	V 4	—	2 5	—	F 6	—
15 7	—	E 8									

1-Series	2-Width	3-Length
HVGP	80	576
Foam suction	80mm	Customizable

4-Vacuum valve specifications

V	Self-closing valve
L	Flow valve
S	High speed valve

5-Hole shape

1	PB01
2	PB02
3	PB03
4	PB04

6-Vacuum material

F	Foam
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7-Size and type of foam

15	15mm
10F10	Filtering function
15F15	Filtering function
F	Filter type
M	Traceless type
D	Anti-static

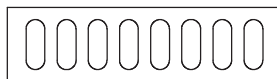
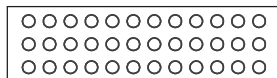
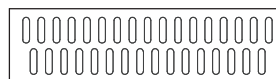
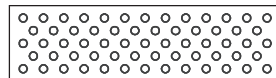
8-Vacuum source configuration

A	Generator
E	Fan pump

* Please contact us for special requirements



HVGP80 Order Code


HVGP80 Customization
Type:PB01
Need to be customized

HVGP80 Customization
Type:PB03
Need to be customized

HVGP80 Customization
Type:PB02
General purpose

HVGP80 Customization
Type:PB04
Need to be customized

Vacuum Suction Foams

HVGP (fan pump)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

HVGP	80	576	PB02	15	FM
1	2	3	4	5	6

1-Series	2-Width	3-Lengt
HVGP	80	576
Foam suction	80mm	Customizable

4-Hole type	5-Thickness	6-Function
PB01	15	Basic type
PB02	15mm	F Filter type
PB03		M Traceless type
PB04		D Anti-static

* Please contact us for special requirements



HVGP80 Technical parameters

Models	Type	Number of foam pores	Gascon sumption* [L/min]	Vacuum* [Kpa]	Suction N* [N(-40KPA)]	Weight [KG]
HVGP80-256V-2F*-E	PB02	28	160	-40	185	1.1
HVGP80-320V-2F*-E	PB02	36	200	-40	238	1.4
HVGP80-384V-2F*-E	PB02	44	240	-40	291	1.7
HVGP80-480V-2F*-E	PB02	56	300	-40	370	2.1
HVGP80-576V-2F*-E	PB02	68	360	-40	449	2.5
HVGP80-672V-2F*-E	PB02	80	420	-40	529	2.9
HVGP80-768V-2F*-E	PB02	92	480	-40	608	3.3
HVGP80-864V-2F*-E	PB02	104	540	-40	687	3.7
HVGP80-960V-2F*-E	PB02	116	600	-40	766	4.1
HVGP80-1056V-2F*-E	PB02	128	660	-40	846	4.6
HVGP80-1152V-2F*-E	PB02	140	720	-40	925	5.0
HVGP80-1248V-2F*-E	PB02	152	780	-40	1004	5.4
HVGP80-1344V-2F*-E	PB02	164	840	-40	1084	5.8
HVGP80-1440V-2F*-E	PB02	176	900	-40	1163	6.2
HVGP80-1536V-2F*-E	PB02	188	960	-40	1242	6.6

*Vacuum degree as reference value - Kpa of vacuum suction tool (external vacuum source), please refer to the actual performance value of vacuum source

*PB02



Vacuum Suction Foams

HVGP (fan pump)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

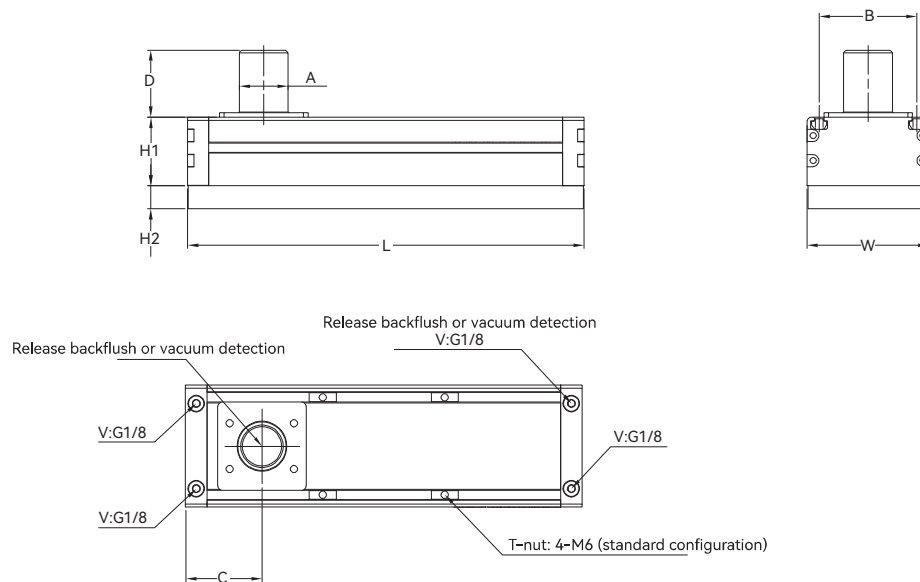
Models	Type	Number of foam pores	Gas consumption* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP80-260V-3F*-E	PB03	36	163	-40	207	1.1
HVGP80-320V-3F*-E	PB03	45	200	-40	259	1.4
HVGP80-380V-3F*-E	PB03	54	238	-40	311	1.6
HVGP80-480V-3F*-E	PB03	69	300	-40	398	2.1
HVGP80-580V-3F*-E	PB03	84	363	-40	484	2.5
HVGP80-680V-3F*-E	PB03	99	425	-40	571	2.9
HVGP80-780V-3F*-E	PB03	114	488	-40	657	3.4
HVGP80-880V-3F*-E	PB03	129	550	-40	743	3.8
HVGP80-980V-3F*-E	PB03	144	613	-40	830	4.2
HVGP80-1080V-3F*-E	PB03	159	675	-40	916	4.7
HVGP80-1180V-3F*-E	PB03	174	738	-40	1003	5.1
HVGP80-1280V-3F*-E	PB03	189	800	-40	1089	5.5
HVGP80-1380V-3F*-E	PB03	204	863	-40	1176	6.0
HVGP80-1480V-3F*-E	PB03	219	925	-40	1262	6.4
HVGP80-1580V-3F*-E	PB03	234	988	-40	1349	6.8

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

*PB03



HVGP80 Design parameters



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Vacuum Suction Foams

HVGP (fan pump)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

SIZE[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP80-256V-2F*-E	32	64	50	44	45	10	15	20	60	256
HVGP80-320V-2F*-E	32	64	50	44	45	10	15	20	60	320
HVGP80-384V-2F*-E	32	64	50	44	45	10	15	20	60	384
HVGP80-480V-2F*-E	32	64	50	44	45	10	15	20	60	480
HVGP80-576V-2F*-E	32	64	50	44	45	10	15	20	60	576
HVGP80-672V-2F*-E	32	64	50	44	45	10	15	20	60	672
HVGP80-768V-2F*-E	32	64	50	44	45	10	15	20	60	768
HVGP80-864V-2F*-E	32	64	50	44	45	10	15	20	60	864
HVGP80-960V-2F*-E	32	64	50	44	45	10	15	20	60	960
HVGP80-1056V-2F*-E	32	64	50	44	45	10	15	20	60	1056
HVGP80-1152V-2F*-E	32	64	50	44	45	10	15	20	60	1152
HVGP80-1248V-2F*-E	32	64	50	44	45	10	15	20	60	1248
HVGP80-1344V-2F*-E	32	64	50	44	45	10	15	20	60	1344
HVGP80-1440V-2F*-E	32	64	50	44	45	10	15	20	60	1440
HVGP80-1536V-2F*-E	32	64	50	44	45	10	15	20	60	1536

*PB02

SIZE[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP80-260V-3F*-E	32	64	50	44	45	10	15	20	60	260
HVGP80-320V-3F*-E	32	64	50	44	45	10	15	20	60	320
HVGP80-380V-3F*-E	32	64	50	44	45	10	15	20	60	380
HVGP80-480V-3F*-E	32	64	50	44	45	10	15	20	60	480
HVGP80-580V-3F*-E	32	64	50	44	45	10	15	20	60	580
HVGP80-680V-3F*-E	32	64	50	44	45	10	15	20	60	680
HVGP80-780V-3F*-E	32	64	50	44	45	10	15	20	60	780
HVGP80-880V-3F*-E	32	64	50	44	45	10	15	20	60	880
HVGP80-980V-3F*-E	32	64	50	44	45	10	15	20	60	980
HVGP80-1080V-3F*-E	32	64	50	44	45	10	15	20	60	1080
HVGP80-1180V-3F*-E	32	64	50	44	45	10	15	20	60	1180
HVGP80-1280V-3F*-E	32	64	50	44	45	10	15	20	60	1280
HVGP80-1380V-3F*-E	32	64	50	44	45	10	15	20	60	1380
HVGP80-1480V-3F*-E	32	64	50	44	45	10	15	20	60	1480
HVGP80-1580V-3F*-E	32	64	50	44	45	10	15	20	60	1580

*PB03

Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Fan bump
- * (2) Compressed air intake
- * (3) Exhaust hole with silencer function
- * (4) Aluminum profile can be customized
- * (5) Various types of imported foams can be customized



Product advantages

- * Rigid workpieces
- * Standard are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different gaskets can absorb and carry different types of workpieces



Foam suction HVGP absorbs wood

Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP130 Order Code

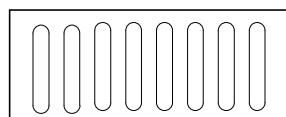
HVGP 1	—	130 2	—	1234 3	—	V 4	—	3 5	—	F 6	—
20 7	—	C 8	—	E 9							

1-Series		2-Width		3-Lengt	
HVGP	Foam suction	130	130mm	1234	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	1	PB01	F	Foam
L	Flow valve	3	PB03		
S	High speed valve	4	PB04		
		5	PB05		
7-Size and type of foam		8-energy conservation			
20	20mm	lank	Standard non-energy saving		
15	15mm	C	Energy conservation		
10F10	Filtering function	9-Vacuum source configuration			
15F15	Filtering function	A	Generator		
F	Filter type	E	Fan pump		
M	Traceless type				

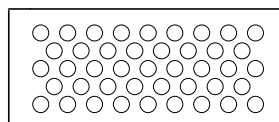
* Please contact us for special requirements



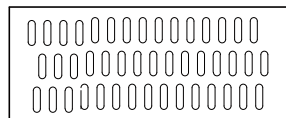
HVGP130 Foam Order Code



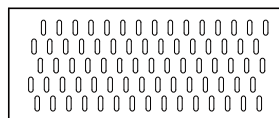
HVGP 130 Customization
Type:PA01
Need to be customized



HVGP 130 Customization
Type:PA04
Need to be customized



HVGP 130 Customization
Type:PA03
General purpose



HVGP 130 Customization
Type:PA05
Need to be customized

Vacuum Suction Foams HVGP (fan pump)

HANVAC


General

Suction size: 130mmX wide and long (customizable)

HVGP 1	—	130 2	—	1234 3	—	PA03 4	—	20 5	—	FM 6
1-Series		2-Width		3-Length						
HVGP		foam suction		130		130mm		1234		Customizable
4-Hole type		5-Thickness		6-Function						
PB01		15		15mm						Basic type
PB03								F		Filter type
PB04								M		Traceless type
PB05										

* Please contact us for special requests



HVGP130 Technical parameters

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction* [N(-40KPA)]	Weight [KG]
HVGP130-262V-3F**-E	PA03	36	110	-40	262	2.2
HVGP130-316V-3F**-E	PA03	45	150	-40	328	2.4
HVGP130-352V-3F**-E	PA03	51	220	-40	371	2.6
HVGP130-442V-3F**-E	PA03	66	300	-40	480	3.0
HVGP130-550V-3F**-E	PA03	84	390	-40	611	3.4
HVGP130-640V-3F**-E	PA03	99	450	-40	721	3.8
HVGP130-712V-3F**-E	PA03	111	510	-40	808	4.2
HVGP130-838V-3F**-E	PA03	132	600	-40	961	4.8
HVGP130-910V-3F**-E	PA03	144	680	-40	1048	4.9
HVGP130-1000V-3F**-E	PA03	159	750	-40	1157	5.2
HVGP130-1234V-3F**-E	PA03	198	900	-40	1441	6.8
HVGP130-1432V-3F**-E	PA03	231	1050	-40	1682	8.1

* PA03

 *Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction* [N(-40KPA)]	Weight [KG]
HVGP130-295V-4F**-E	PA04	53	150	-40	326	2.6
HVGP130-434V-4F**-E	PA04	83	300	-40	511	3.3
HVGP130-572V-4F**-E	PA04	113	400	-40	696	3.8
HVGP130-711V-4F**-E	PA04	143	510	-40	881	4.5
HVGP130-849V-4F**-E	PA04	173	600	-40	1065	5.2
HVGP130-988V-4F**-E	PA04	203	750	-40	1250	5.6
HVGP130-1126V-4F**-E	PA04	233	850	-40	1435	7.0
HVGP130-1265V-4F**-E	PA04	263	950	-40	1619	7.4
HVGP130-1403V-4F**-E	PA04	293	1050	-40	1804	8.5
HVGP130-1542V-4F**-E	PA04	323	1250	-40	1989	9.1

* PA04

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction* [N(-40KPA)]	Weight [KG]
HVGP130-262V-5F**-E	PA05	60	110	-40	191	2.2
HVGP130-316V-5F**-E	PA05	75	150	-40	239	2.4
HVGP130-352V-5F**-E	PA05	85	220	-40	271	2.6
HVGP130-442V-5F**-E	PA05	110	300	-40	350	3.0
HVGP130-550V-5F**-E	PA05	140	390	-40	446	3.4
HVGP130-640V-5F**-E	PA05	165	450	-40	526	3.8
HVGP130-712V-5F**-E	PA05	185	510	-40	589	4.2
HVGP130-838V-5F**-E	PA05	220	600	-40	701	4.8
HVGP130-910V-5F**-E	PA05	245	680	-40	780	4.9
HVGP130-1000V-5F**-E	PA05	265	750	-40	844	5.2
HVGP130-1234V-5F**-E	PA05	330	900	-40	1051	6.8
HVGP130-1432V-5F**-E	PA05	385	1050	-40	1226	8.1

* PA05

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

Vacuum Suction Foams HVGP (fan pump)

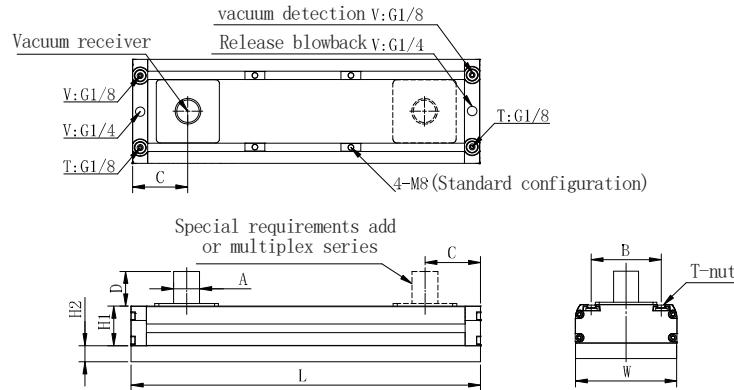
HANVAC


General

Suction size: 130mmX wide and long (customizable)



HVGP130 Design parameters



Size[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP130-262V-3F**-E	60(32)	90	69	54	50	10	15	20	130	262
HVGP130-316V-3F**-E	60(32)	90	69	54	50	10	15	20	130	316
HVGP130-352V-3F**-E	60(32)	90	69	54	50	10	15	20	130	352
HVGP130-442V-3F**-E	60(32)	90	69	54	50	10	15	20	130	442
HVGP130-550V-3F**-E	60(32)	90	69	54	50	10	15	20	130	550
HVGP130-640V-3F**-E	60(32)	90	69	54	50	10	15	20	130	640
HVGP130-712V-3F**-E	60(32)	90	69	54	50	10	15	20	130	712
HVGP130-838V-3F**-E	60(32)	90	69	54	50	10	15	20	130	838
HVGP130-910V-3F**-E	60(32)	90	69	54	50	10	15	20	130	910
HVGP130-1000V-3F**-E	60(32)	90	69	54	50	10	15	20	130	1000
HVGP130-1234V-3F**-E	60(32)	90	69	54	50	10	15	20	130	1234
HVGP130-1432V-3F**-E	60(32)	90	69	54	50	10	15	20	130	1432

* PA03

Size[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP130-295V-4F**-E	60(32)	90	69	54	50	10	15	20	130	295
HVGP130-434V-4F**-E	60(32)	90	69	54	50	10	15	20	130	434
HVGP130-572V-4F**-E	60(32)	90	69	54	50	10	15	20	130	572
HVGP130-711V-4F**-E	60(32)	90	69	54	50	10	15	20	130	711
HVGP130-849V-4F**-E	60(32)	90	69	54	50	10	15	20	130	849
HVGP130-988V-4F**-E	60(32)	90	69	54	50	10	15	20	130	988
HVGP130-1126V-4F**-E	60(32)	90	69	54	50	10	15	20	130	1126
HVGP130-1265V-4F**-E	60(32)	90	69	54	50	10	15	20	130	1265
HVGP130-1403V-4F**-E	60(32)	90	69	54	50	10	15	20	130	1403
HVGP130-1542V-4F**-E	60(32)	90	69	54	50	10	15	20	130	1542

* PA04

Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General

Size[mm]

Models	A	B	C	D	H1	H2[**]			W	L
HVGP130-262V-5F**-E	60(32)	90	69	54	50	10	15	20	130	262
HVGP130-316V-5F**-E	60(32)	90	69	54	50	10	15	20	130	316
HVGP130-352V-5F**-E	60(32)	90	69	54	50	10	15	20	130	352
HVGP130-442V-5F**-E	60(32)	90	69	54	50	10	15	20	130	442
HVGP130-550V-5F**-E	60(32)	90	69	54	50	10	15	20	130	550
HVGP130-640V-5F**-E	60(32)	90	69	54	50	10	15	20	130	640
HVGP130-712V-5F**-E	60(32)	90	69	54	50	10	15	20	130	712
HVGP130-838V-5F**-E	60(32)	90	69	54	50	10	15	20	130	838
HVGP130-910V-5F**-E	60(32)	90	69	54	50	10	15	20	130	910
HVGP130-1000V-5F**-E	60(32)	90	69	54	50	10	15	20	130	1000
HVGP130-1234V-5F**-E	60(32)	90	69	54	50	10	15	20	130	1234
HVGP130-1432V-5F**-E	60(32)	90	69	54	50	10	15	20	130	1432

* PA05

Vacuum Suction Foams HVGP (fan pump)

Suction size: 200mmX wide and long (customizable)

HANVAC


General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Adopting lightweight and tough high-strength aluminum profiles
- * Design of external vacuum source
- * Adopting HANWHA's unique valve body technology
- * Different pass techniques are suitable for a wider range of workpiece applications
- * Original imported sealed foam pads from Europe, with longer service life



Product structure

- * (1) P: G1/4 screw thread, air inlet
- * (2) V: G1/8 screw thread, back blowing/vacuum detection
- * (3) Aluminum profile can be customized
- * (4) Various types of imported foams can be customized
- * (5) Fan pump



Product advantages

- * Rigid workpieces
- * Standard are used for wooden boards, pallets, aluminum profiles, and patterned steel
- * Different gaskets can absorb and carry different types of workpieces



Foam suction HVGP absorbs packaging carton

Vacuum Suction Foams HVGP (fan pump)

Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Order Code

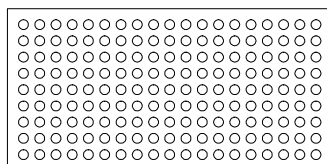
HVGP 1	—	200 2	—	1000 3	—	V 4	—	3 5	—	F 6	—
20 7	—	E 8									

1-Series		2-Width		3-Length	
HVGP	Foam suction	200	200mm	1000	Customizable
4-Vacuum valve specifications		5-Hole shape		6-Vacuum material	
V	Self-closing valve	2	PD02	F	Foam
L	Flow valve	3	PD03		
S	High speed valve				
7-Size and type of foam		8-Vacuum source configuration			
20	20mm	A	Generator		
25	25mm	E	Fan pump		
30	30mm				
10F10	With filtering				
15F15	With filtering				
M	No trace				

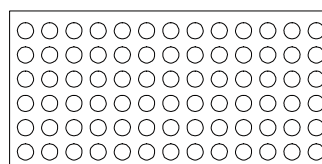
*Please contact us for special requirements



HVGP200 Foam Order Code



HVGP 200 Customization
Type:PD02
General purpose



HVGP 200 Customization
Type:PD03
General purpose



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Vacuum Suction Foams HVGP (fan pump)

Suction size: 200mmX wide and long (customizable)

HANVAC


General

HVGP 1	—	200 2	—	1000 3	—	PD02 4	—	20 5	—	FM 6
1-Series										
HVGP		Foam suction		200		200mm		1000		Customizable
4-Hole shape				5-Size and type of foam				6-Foam type		
PD02				20		20mm				Basic type
PD03				25		25mm		F		Filter type
				30		30mm		M		Traceless type

*Please contact us for special requirements



HVGP200Technical Data

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP200-300V-2F**-E	PD02	126	500	-30~-40	570	2.7
HVGP200-400V-2F**-E	PD02	171	700	-30~-40	773	3.3
HVGP200-500V-2F**-E	PD02	216	900	-30~-40	977	3.9
HVGP200-600V-2F**-E	PD02	261	1050	-30~-40	1180	4.5
HVGP200-700V-2F**-E	PD02	306	1250	-30~-40	1384	5.1
HVGP200-800V-2F**-E	PD02	351	1400	-30~-40	1587	5.7
HVGP200-900V-2F**-E	PD02	396	1600	-30~-40	1791	6.3
HVGP200-1000V-2F**-E	PD02	441	1800	-30~-40	1994	6.9
HVGP200-1100V-2F**-E	PD02	486	2000	-30~-40	2197	7.5
HVGP200-1200V-2F**-E	PD02	531	2150	-30~-40	2401	8.1

* PD02

Models	Type	Number of foam pores	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP200-260V-3F**-E	PD03	48	220	-30~-40	386	2.5
HVGP200-410V-3F**-E	PD03	78	355	-30~-40	627	3.4
HVGP200-560V-3F**-E	PD03	108	500	-30~-40	868	4.3
HVGP200-710V-3F**-E	PD03	138	630	-30~-40	1109	5.1
HVGP200-860V-3F**-E	PD03	168	760	-30~-40	1350	6.0
HVGP200-1010V-3F**-E	PD03	198	900	-30~-40	1592	6.9
HVGP200-1160V-3F**-E	PD03	228	1050	-30~-40	1833	7.8

* PD03

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values


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Vacuum Suction Foams HVGP (fan pump)

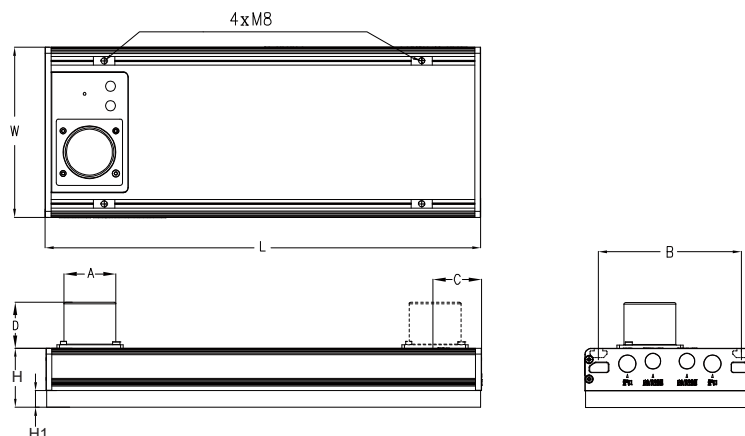
Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200Design parameters



Size[mm]

Models	A	B	C	D	L	W	H	H1
HVGP200-300V-2F**-E	60 (32)	168	69	54	300	200	70	20
HVGP200-400V-2F**-E	60 (32)	168	69	54	400	200	70	20
HVGP200-500V-2F**-E	60 (32)	168	69	54	500	200	70	20
HVGP200-600V-2F**-E	60 (32)	168	69	54	600	200	70	20
HVGP200-700V-2F**-E	60 (32)	168	69	54	700	200	70	20
HVGP200-800V-2F**-E	60 (32)	168	69	54	800	200	70	20
HVGP200-900V-2F**-E	60 (32)	168	69	54	900	200	70	20
HVGP200-1000V-2F**-E	60 (32)	168	69	54	1000	200	70	20
HVGP200-1100V-2F**-E	60 (32)	168	69	54	1100	200	70	20
HVGP200-1200V-2F**-E	60 (32)	168	69	54	1200	200	70	20

* PD02

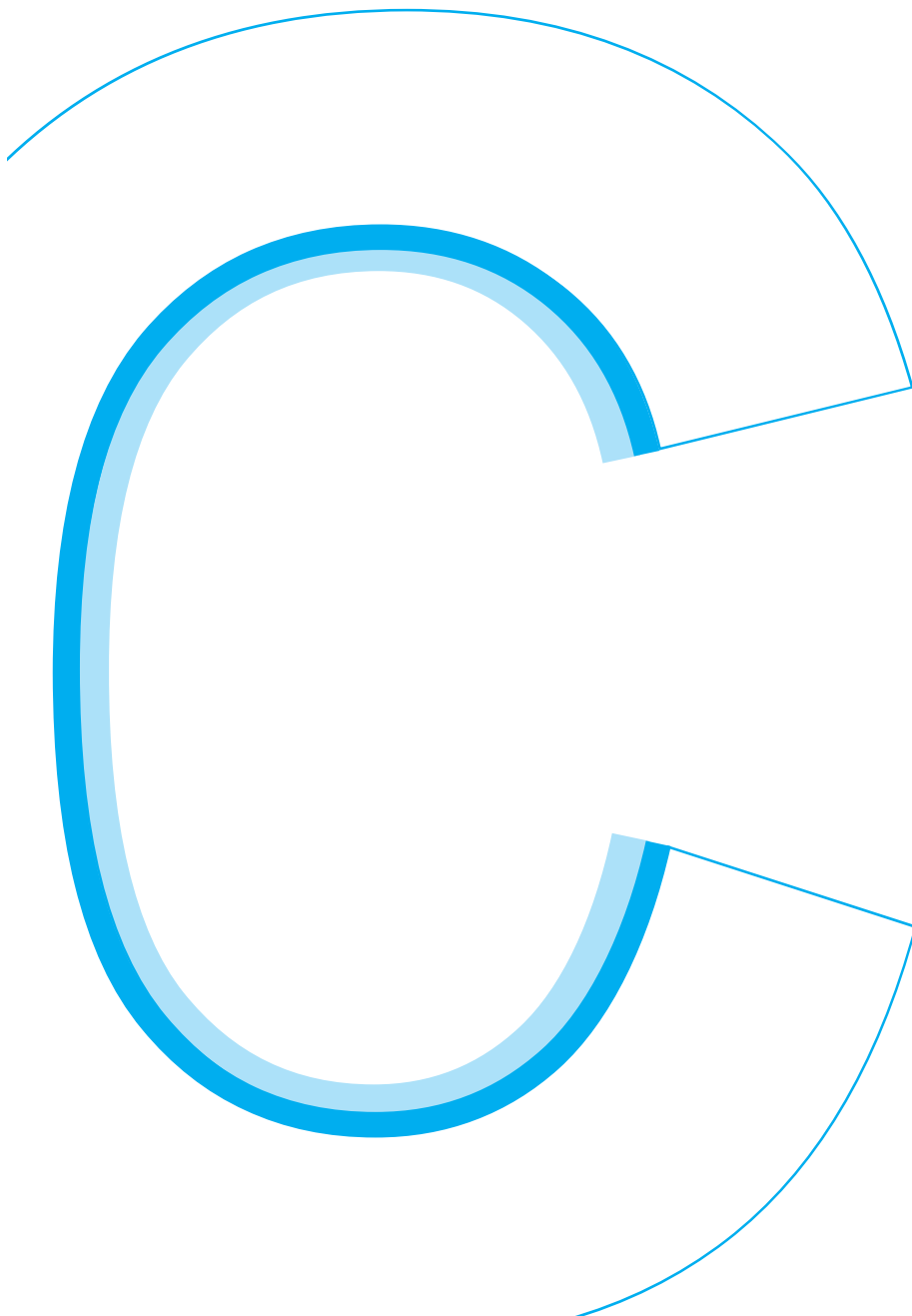
Size[mm]

Models	A	B	C	D	L	W	H	H1
HVGP200-260V-3F**-E	60 (32)	168	69	54	260	200	70	20
HVGP200-410V-3F**-E	60 (32)	168	69	54	410	200	70	20
HVGP200-560V-3F**-E	60 (32)	168	69	54	560	200	70	20
HVGP200-710V-3F**-E	60 (32)	168	69	54	710	200	70	20
HVGP200-860V-3F**-E	60 (32)	168	69	54	860	200	70	20
HVGP200-1010V-3F**-E	60 (32)	168	69	54	1010	200	70	20
HVGP200-1160V-3F**-E	60 (32)	168	69	54	1160	200	70	20

* PD03


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Vacuum Suction Cups



HVGP-60-SA

Optional suction cups

HVGP-80-SA

Standard vacuum system

HVGP-130-SA

Built in high flow vacuum generator

HVGP-200-SA

Modular structure

HVGP-60-SE(fan pump)

External vacuum generator or fan

HVGP-80-SE(fan pump)

High suction force

HVGP-130-SE(fan pump)

Built in high flow vacuum generator

HVGP-200-SE(fan pump)

Suitable for different industries

Vacuum Suction Cups HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC



General

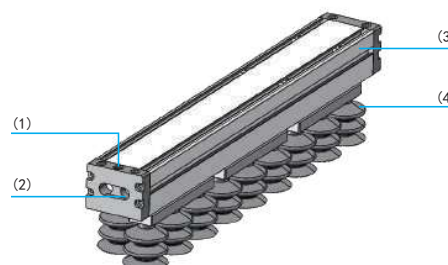
Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Compressed air intake
- * (2) Exhaust hole with noise reduction function
- * (3) Aluminum profile can be customized
- * (4) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece



Product advantages

- * High strength and light weight
- * Fast response time
- * Suitable for grabbing products from different industries
- * Can meet the requirements of grabbing products of various specifications



Example of suction cup suction device
HVGP suction box packaging

Vacuum Suction Cups HVGP (Generator)

HANVAC


General

Suction size: 60mmX wide and long (customizable)



HVGP60 Order Code

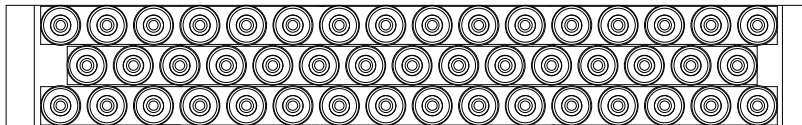
HVGP 1	60 2	355 3	V 4	3 5	S 6	
20 7	A 8					

1-Series		2-Width		3-Length	
HVGP	Cups suction	60	60mm	355	Customizable
4-Vacuum valve specifications		5-Arrangement type		6-Vacuum material	
V	Self-closing valve	3	PX03	S	Suction cup
L	Flow valve				
S	High speed valve				
7-Size Type		8-Vacuum source configuration			
20	20mm	A	Generator		
S	Silicon rubber	E	Fan pump		
SI-RR	High-performance				

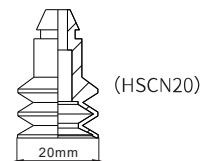
*Please contact us for special requirements



HVGP60 Vacuum suction cup specifications



HVGP60(HSCN20)SUCKER DIAMETER 20MM
3-row arrangement
types of: PX03



Vacuum Suction Cups

HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC


General



HVGP60 Technical parameters

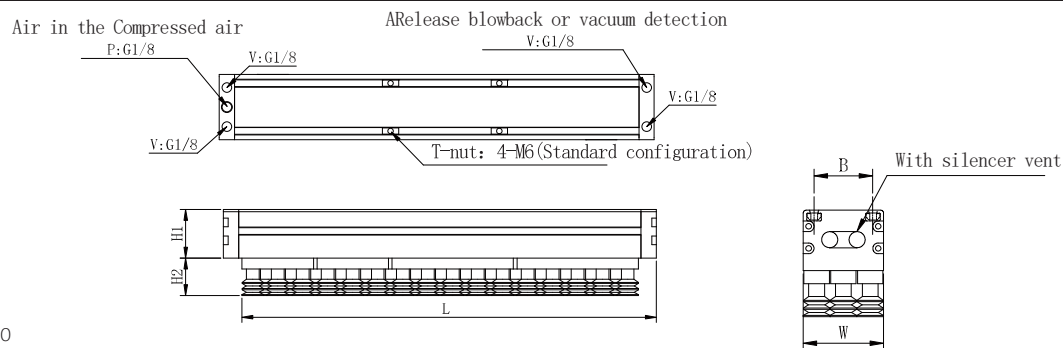
Models	Type	Inlet pressure [Mpa]	Number of cups	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [kg]
HVGP60-285V-3S20-A	PX03	0.4~0.6	32	200	-60	700	167	1.0
HVGP60-355V-3S20-A	PX03	0.4~0.6	41	200	-60	700	214	1.5
HVGP60-410V-3S20-A	PX03	0.4~0.6	47	200	-60	700	246	1.6
HVGP60-516V-3S20-A	PX03	0.4~0.6	62	200	-60	700	324	1.9
HVGP60-608V-3S20-A	PX03	0.4~0.6	74	200	-60	700	387	2.2
HVGP60-710V-3S20-A	PX03	0.4~0.6	86	200	-60	700	449	2.4
HVGP60-816V-3S20-A	PX03	0.4~0.6	101	400	-60	1400	528	2.7
HVGP60-909V-3S20-A	PX03	0.4~0.6	113	400	-60	1400	591	2.9
HVGP60-1001V-3S20-A	PX03	0.4~0.6	125	400	-60	1400	653	3.2
HVGP60-1117V-3S20-A	PX03	0.4~0.6	140	400	-60	1400	732	3.5
HVGP60-1209V-3S20-A	PX03	0.4~0.6	152	400	-60	1400	794	3.7
HVGP60-1301V-3S20-A	PX03	0.4~0.6	164	400	-60	1400	857	3.9

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator) please refer to the actual vacuum source performance values

* PX03



HVGP60 Design parameters



HVGP60

Size[mm]

Models	B	H1	H2	W	L
HVGP60-285V-3S20-A	44	45	31	60	285
HVGP60-355V-3S20-A	44	45	31	60	355
HVGP60-410V-3S20-A	44	45	31	60	401
HVGP60-516V-3S20-A	44	45	31	60	516
HVGP60-608V-3S20-A	44	45	31	60	608
HVGP60-710V-3S20-A	44	45	31	60	701
HVGP60-816V-3S20-A	44	45	31	60	816
HVGP60-909V-3S20-A	44	45	31	60	909
HVGP60-1001V-3S20-A	44	45	31	60	1001
HVGP60-1117V-3S20-A	44	45	31	60	1117
HVGP60-1209V-3S20-A	44	45	31	60	1209
HVGP60-1301V-3S20-A	44	45	31	60	1301



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* PX03

Vacuum Suction Cups HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC



General

Product characteristics

- *Medium sized standardized design
- *Convenient and simple maintenance and repair
- *Using lightweight and tough high-strength aluminum profiles
- *Built in multi-stage vacuum generator module
- *Adopting HANWHA's unique valve body technology
- *Different suction cup specifications are suitable for a wider range of workpiece applications
- *High performance imported materials with longer service life



Product structure

- *(1) Compressed air intake
- *(2) Exhaust hole with noise reduction function
- *(3) Aluminum profiles, customizable
- *(4) A sturdy and wear-resistant 2.5-fold suction cup, with a flexible and flexible material that easily fits the workpiece



Product advantages

- *Handling wooden boards, cardboard boxes, metal sheets, glass, plastics, etc
- *Handling uneven and perforated parts
- *Handling and picking workpieces without fixed positions
- *Handling sensitive parts such as display screen glass



HVGP Taking Example of Paper Box Packaging

Vacuum Suction Cups

HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC


General



HVGP80 Order Code

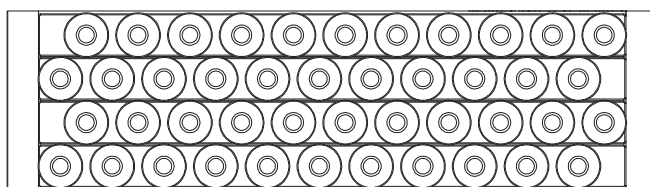
HVGP 1	80 2	336 3	V 4	4 5	S 6	
20 7	A 8					

1-Series		2-Width		3-Length	
HVGP		Cups suction	80	80mm	336
				Customizable	
4-Vacuum valve specifications		5-Arrangement		6-Vacuum material	
V		Self-closing valve	2	PS02	S
L		Flow valve	4	PS04	Suction cup
S		High speed valve			
7-Size Type		8-Vacuum source configuration			
20		20mm	A	Generator	
40		40mm	E	Fan pump	
S		silicon rubber			
SI-RR		High performance (rose red)			
*Please contact us for special requirement					

*Please contact us for special requirements

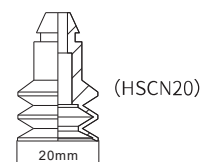


HVGP80 Vacuum suction cup specifications



HVGP80 (HSCN20) suction cup diameter 20MM

There are 4 rows of suction tools in use
type:PS04



Vacuum Suction Cups HVGP (Generator)

HANVAC


General

Suction size: 80mmX wide and long (customizable)



HVGP80 Technical parameters

Models	Type	nlet pressure [Mpa]	Number of cups	Gascon sumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [kg]
HVGP80-290V-4S20-A	PS04	0.4~0.6	44	300	-60	1050	230	1.6
HVGP80-336V-4S20-A	PS04	0.4~0.6	52	300	-60	1050	271	1.9
HVGP80-382V-4S20-A	PS04	0.4~0.6	60	300	-60	1050	313	2.1
HVGP80-428V-4S20-A	PS04	0.4~0.6	68	300	-60	1050	355	2.3
HVGP80-474V-4S20-A	PS04	0.4~0.6	76	300	-60	1050	397	2.5
HVGP80-520V-4S20-A	PS04	0.4~0.6	84	300	-60	1050	438	2.7
HVGP80-566V-4S20-A	PS04	0.4~0.6	92	300	-60	1050	480	2.9
HVGP80-612V-4S20-A	PS04	0.4~0.6	100	600	-60	2100	522	3.2
HVGP80-658V-4S20-A	PS04	0.4~0.6	108	600	-60	2100	564	3.4
HVGP80-704V-4S20-A	PS04	0.4~0.6	116	600	-60	2100	605	3.6
HVGP80-750V-4S20-A	PS04	0.4~0.6	124	600	-60	2100	647	3.8
HVGP80-796V-4S20-A	PS04	0.4~0.6	132	600	-60	2100	689	4.0
HVGP80-842V-4S20-A	PS04	0.4~0.6	140	600	-60	2100	731	4.3
HVGP80-888V-4S20-A	PS04	0.4~0.6	148	600	-60	2100	772	4.5
HVGP80-934V-4S20-A	PS04	0.4~0.6	156	600	-60	2100	814	4.7
HVGP80-980V-4S20-A	PS04	0.4~0.6	164	600	-60	2100	856	4.9
HVGP80-1026V-4S20-A	PS04	0.4~0.6	172	600	-60	2100	898	5.1
HVGP80-1072V-4S20-A	PS04	0.4~0.6	180	600	-60	2100	939	5.4
HVGP80-1118V-4S20-A	PS04	0.4~0.6	188	600	-60	2100	981	5.6
HVGP80-1164V-4S20-A	PS04	0.4~0.6	196	600	-60	2100	1023	5.8
HVGP80-1210V-4S20-A	PS04	0.4~0.6	204	600	-60	2100	1065	6.0
HVGP80-1256V-4S20-A	PS04	0.4~0.6	212	600	-60	2100	1106	6.2
HVGP80-1302V-4S20-A	PS04	0.4~0.6	220	600	-60	2100	1148	6.5
HVGP80-1348V-4S20-A	PS04	0.4~0.6	228	600	-60	2100	1190	6.7
HVGP80-1394V-4S20-A	PS04	0.4~0.6	236	600	-60	2100	1232	6.9
HVGP80-1440V-4S20-A	PS04	0.4~0.6	244	600	-60	2100	1273	7.1

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator) please refer to the actual vacuum source performance values

*PS04


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Vacuum Suction Cups

HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

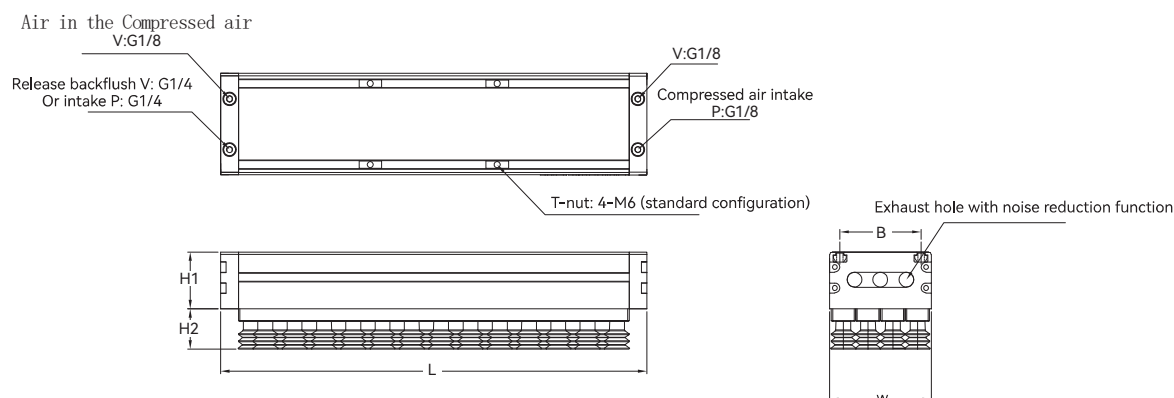
HANVAC



General



HVGP80 Design parameters



HVGP80

Size [mm]

model	B	H1	H2	W	L
HVGP80-290V-4S20-A	64	45	31	80	290
HVGP80-336V-4S20-A	64	45	31	80	336
HVGP80-382V-4S20-A	64	45	31	80	382
HVGP80-428V-4S20-A	64	45	31	80	428
HVGP80-474V-4S20-A	64	45	31	80	474
HVGP80-520V-4S20-A	64	45	31	80	520
HVGP80-566V-4S20-A	64	45	31	80	566
HVGP80-612V-4S20-A	64	45	31	80	612
HVGP80-658V-4S20-A	64	45	31	80	658
HVGP80-704V-4S20-A	64	45	31	80	704
HVGP80-750V-4S20-A	64	45	31	80	750
HVGP80-796V-4S20-A	64	45	31	80	796
HVGP80-842V-4S20-A	64	45	31	80	842
HVGP80-888V-4S20-A	64	45	31	80	888
HVGP80-934V-4S20-A	64	45	31	80	934
HVGP80-980V-4S20-A	64	45	31	80	980
HVGP80-1026V-4S20-A	64	45	31	80	1026
HVGP80-1072V-4S20-A	64	45	31	80	1072
HVGP80-1118V-4S20-A	64	45	31	80	1118
HVGP80-1164V-4S20-A	64	45	31	80	1164
HVGP80-1210V-4S20-A	64	45	31	80	1210
HVGP80-1256V-4S20-A	64	45	31	80	1256
HVGP80-1302V-4S20-A	64	45	31	80	1302
HVGP80-1348V-4S20-A	64	45	31	80	1348
HVGP80-1394V-4S20-A	64	45	31	80	1394
HVGP80-1440V-4S20-A	64	45	31	80	1440

*PS04



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Vacuum Suction Cups HVGP (Generator)

Suction size: 130mmX wide and long (customizable)

HANVAC



General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Compressed air intake
- * (2) Exhaust hole with silencer function
- * (3) Aluminum profile can be customized
- * (4) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece



Product advantages

- * Suitable for corrugated board, plywood, iron plate and other general workpieces



Suction Cups HVGP absorbs the carton packaging

Vacuum Suction Cups HVGP (Generator)

Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP Order Code

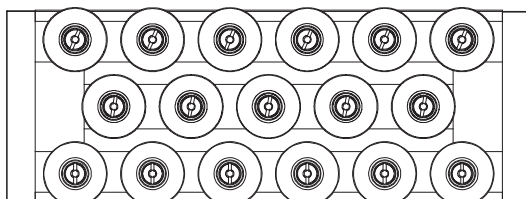
HVGP 1	130 2	1265 3	V 4	3 5	S 6	
20 7	A 8					

1-Series	2-Width	3-Length
HVGP	130	1265
Cups suction	130mm	Customizable
4-Vacuum valve specifications	5-Design type	6-Vacuum material
V	3	S
L	5	Cup
S	PS03	
	PS05	
7-Size and type	8-Vacuum source configuration	
20	A	Generator
40	E	Fan pump
S		
SI-RR		

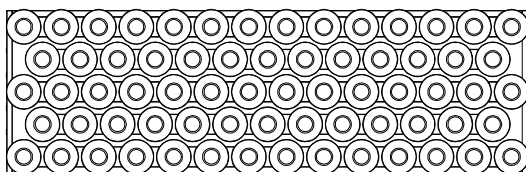
* Please contact us for special requirements



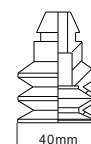
HVGP130 Cup Selection Specification



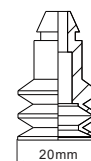
typePS03
The number of rows in use is 3
HVGP130(HSCN40)cup diameter 40MM



typePS05
The number of rows in use is 5
HVGP130(HSCN40)cup diameter 20MM



(HSCN40)



(HSCN20)



Vacuum Suction Cups HVGP (Generator)

HANVAC


General

Suction size: 130mmX wide and long (customizable)



HVGP130P Technical parameters

Models	Type	Inlet pressure [Mpa]	Number of cups	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP130-295V-3S40-A	PS03	0.4~0.6	17	200	-60	600	296	3
HVGP130-434V-3S40-A	PS03	0.4~0.6	26	200	-60	600	452	3.8
HVGP130-572V-3S40-A	PS03	0.4~0.6	35	200	-60	600	608	4.5
HVGP130-711V-3S40-A	PS03	0.4~0.6	44	300	-60	1050	765	5.3
HVGP130-849V-3S40-A	PS03	0.4~0.6	53	400	-60	1400	921	6.2
HVGP130-988V-3S40-A	PS03	0.4~0.6	62	400	-60	1400	1078	7.2
HVGP130-1126V-3S40-A	PS03	0.4~0.6	71	600	-60	2100	1234	8.1
HVGP130-1265V-3S40-A	PS03	0.4~0.6	80	600	-60	2100	1391	8.9
HVGP130-1403V-3S40-A	PS03	0.4~0.6	89	800	-60	2800	1547	9.7
HVGP130-1542V-3S40-A	PS03	0.4~0.6	98	800	-60	2800	1604	10.5

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS03

Models	Type	Inlet pressure [Mpa]	Number of cups	Gas consumption* [L/min]	Vacuum* [Kpa]	Vacuum flow* [L/min]	Suction N* [-60KPA]	Weight [KG]
HVGP130-295V-5S20-A	PS05	0.4~0.6	53	200	-60	700	277	3
HVGP130-434V-5S20-A	PS05	0.4~0.6	83	300	-60	1050	434	3.8
HVGP130-572V-5S20-A	PS05	0.4~0.6	113	400	-60	1400	591	4.5
HVGP130-711V-5S20-A	PS05	0.4~0.6	143	400	-60	1400	747	5.3
HVGP130-849V-5S20-A	PS05	0.4~0.6	173	600	-60	2100	904	6.2
HVGP130-988V-5S20-A	PS05	0.4~0.6	203	600	-60	2100	1061	7.2
HVGP130-1126V-5S20-A	PS05	0.4~0.6	233	800	-60	2800	1218	8.1
HVGP130-1265V-5S20-A	PS05	0.4~0.6	263	800	-60	2800	1375	8.9
HVGP130-1403V-5S20-A	PS05	0.4~0.6	293	800	-60	2800	1531	9.7
HVGP130-1542V-5S20-A	PS05	0.4~0.6	323	800	-60	2800	1688	10.5

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS05


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Vacuum Suction Cups HVGP (Generator)

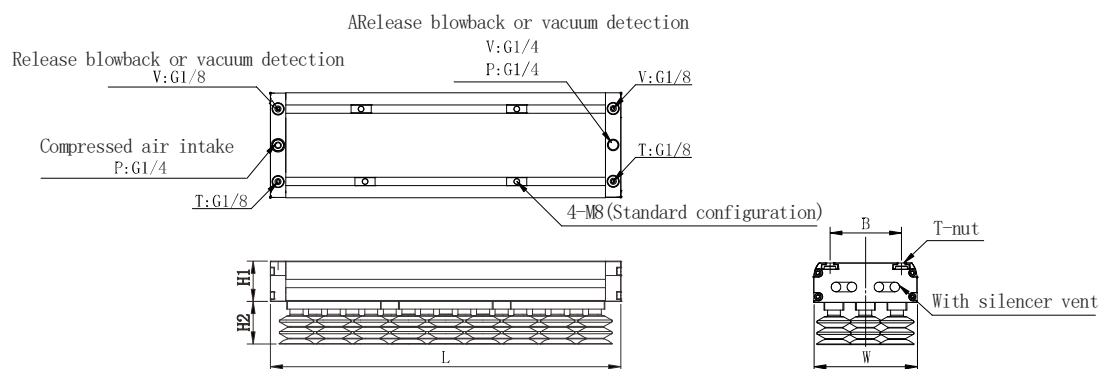
Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP130 Design Parameters



HVGP130

Size[mm]

Models	B	H1	H2	W	L
HVGP130-295V-3S40-A	90	50	33	130	295
HVGP130-434V-3S40-A	90	50	33	130	434
HVGP130-572V-3S40-A	90	50	33	130	572
HVGP130-711V-3S40-A	90	50	33	130	711
HVGP130-849V-3S40-A	90	50	33	130	849
HVGP130-988V-3S40-A	90	50	33	130	988
HVGP130-1126V-3S40-A	90	50	33	130	1126
HVGP130-1265V-3S40-A	90	50	33	130	1265
HVGP130-1403V-3S40-A	90	50	33	130	1403
HVGP130-1542V-3S40-A	90	50	33	130	1542

* PS03

Size[mm]

Models	B	H1	H2	W	L
HVGP130-295V-5S20-A	90	50	31	130	295
HVGP130-434V-5S20-A	90	50	31	130	434
HVGP130-572V-5S20-A	90	50	31	130	572
HVGP130-711V-5S20-A	90	50	31	130	711
HVGP130-849V-5S20-A	90	50	31	130	849
HVGP130-988V-5S20-A	90	50	31	130	988
HVGP130-1126V-5S20-A	90	50	31	130	1126
HVGP130-1265V-5S20-A	90	50	31	130	1265
HVGP130-1403V-5S20-A	90	50	31	130	1403
HVGP130-1542V-5S20-A	90	50	31	130	1542

* PS05



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Vacuum Suction Cups HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General

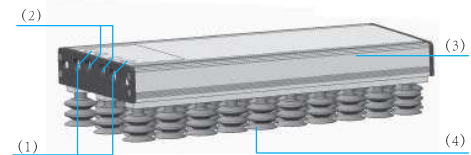
Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) P: G1/4 screw thread, air inlet
- * (2) V: G1/8screw thread, Blowback/vacuum detection
- * (3) Aluminum profile can be customized
- * (4) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece



Product advantages

- * Suitable for corrugated board, plywood, iron plate and other general workpieces



Suction Cups HVGP absorbs the carton packaging

Vacuum Suction Cups HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Order Code

HVGP 1	200 2	400 3	V 4	5 5	S 6	
20 7	A 8					

1-Series	2-Width	3-Length
HVGP Cups suction	200 200mm	400 Customizable

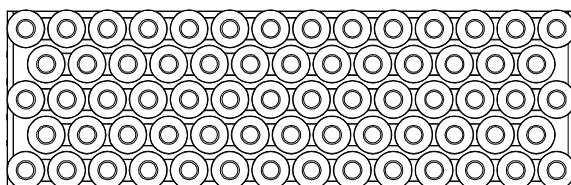
4-Vacuum valve specifications	5-Design type	6-Vacuum material
V Self-closing valve	5 PS05	S Cup
L Flow valve	9 PS09	
S High speed valve		

7-Size and type	8-Vacuum source configuration
20 20mm	A Generator
40 40mm	E Fan pump
SI Silicone rubber	
SI-RR High-performance (rose red)	

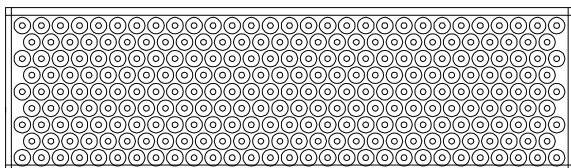
* Please contact us for special requirements



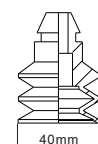
HVGP200 Cup Selection Specification



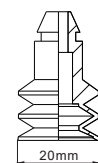
typePS05
The number of rows in use is 5
HVGP200(HSCN40)cup diameter 40MM



typePS09
The number of rows in use is 9
HVGP200(HSCN20)cup diameter 20MM



(HSCN40)



(HSCN20)



Vacuum Suction Cups HVGP (Generator)

HANVAC


General

Suction size: 200mmX wide and long (customizable)



HVGP200 Technical parameters

Modles	Type	Inlet pressure [Mpa]	Number of cups	Gascon sumption* [L/Min]	Vacuum* [Kpa]	Vacuum flow* [L/Min]	Suction N* [-60KPA]	Weight [KG]
HVGP200-273V-5S40-A	PS05	0.4~0.6	28	100	-60	350	418	3.3
HVGP200-458V-5S40-A	PS05	0.4~0.6	48	300	-60	1050	716	4.4
HVGP200-550V-5S40-A	PS05	0.4~0.6	58	400	-60	1400	866	5.0
HVGP200-643V-5S40-A	PS05	0.4~0.6	68	400	-60	1400	1015	5.5
HVGP200-735V-5S40-A	PS05	0.4~0.6	78	400	-60	1400	1164	6.1
HVGP200-828V-5S40-A	PS05	0.4~0.6	88	400	-60	1400	1313	6.7
HVGP200-920V-5S40-A	PS05	0.4~0.6	98	500	-60	1750	1462	7.2
HVGP200-1012V-5S40-A	PS05	0.4~0.6	108	500	-60	1750	1612	7.7
HVGP200-1243V-5S40-A	PS05	0.4~0.6	133	600	-60	2100	1985	9.1
HVGP200-1428V-5S40-A	PS05	0.4~0.6	153	600	-60	2100	2283	10.2

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS05

Models	Type	Inlet pressure [Mpa]	Number of cups	Gascon sumption* [L/Min]	Vacuum* [Kpa]	Vacuum flow* [L/Min]	Suction N* [-60KPA]	Weight [KG]
HVGP200-273V-9S20-A	PS09	0.4~0.6	95	200	-60	700	475	3.3
HVGP200-458V-9S20-A	PS09	0.4~0.6	167	300	-60	1050	835	4.4
HVGP200-550V-9S20-A	PS09	0.4~0.6	203	400	-60	1400	1015	5.0
HVGP200-643V-9S20-A	PS09	0.4~0.6	239	400	-60	1400	1195	5.5
HVGP200-735V-9S20-A	PS09	0.4~0.6	275	500	-60	1750	1375	6.1
HVGP200-828V-9S20-A	PS09	0.4~0.6	311	600	-60	2100	1555	6.7
HVGP200-920V-9S20-A	PS09	0.4~0.6	347	600	-60	2100	1735	7.2
HVGP200-1012V-9S20-A	PS09	0.4~0.6	383	600	-60	2100	1915	7.7
HVGP200-1243V-9S20-A	PS09	0.4~0.6	473	800	-60	2800	2365	9.1
HVGP200-1428V-9S20-A	PS09	0.4~0.6	545	800	-60	2800	2725	10.2

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS09


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Vacuum Suction Cups HVGP (Generator)

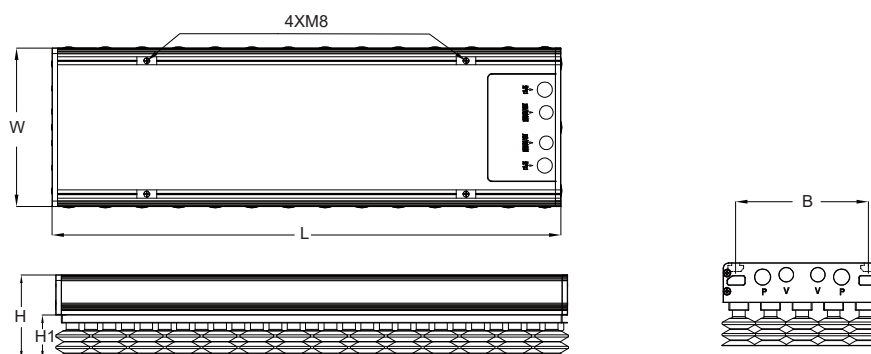
Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Design Parameters



HVGP200

Size[mm]

Modles	B	L	W	H	H1
HVGP200-273V-5S40-A	168	273	200	105	55
HVGP200-458V-5S40-A	168	458	200	105	55
HVGP200-550V-5S40-A	168	550	200	105	55
HVGP200-643V-5S40-A	168	643	200	105	55
HVGP200-735V-5S40-A	168	735	200	105	55
HVGP200-828V-5S40-A	168	828	200	105	55
HVGP200-920V-5S40-A	168	920	200	105	55
HVGP200-1012V-5S40-A	168	1012	200	105	55
HVGP200-1243V-5S40-A	168	1243	200	105	55
HVGP200-1428V-5S40-A	168	1428	200	105	55

* PS05

Size[mm]

Modles	B	L	W	H	H1
HVGP200-273V-9S20-A	168	273	200	105	55
HVGP200-458V-9S20-A	168	458	200	105	55
HVGP200-550V-9S20-A	168	550	200	105	55
HVGP200-643V-9S20-A	168	643	200	105	55
HVGP200-735V-9S20-A	168	735	200	105	55
HVGP200-828V-9S20-A	168	828	200	105	55
HVGP200-920V-9S20-A	168	920	200	105	55
HVGP200-1012V-9S20-A	168	1012	200	105	55
HVGP200-1243V-9S20-A	168	1243	200	105	55
HVGP200-1428V-9S20-A	168	1428	200	105	55

* PS09



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Vacuum Suction Cups HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC


General

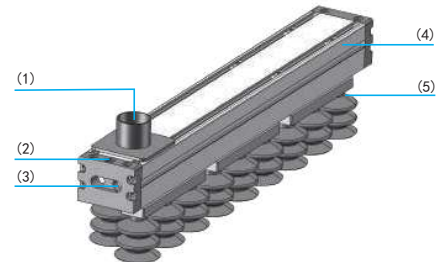
Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Fan bump
- * (2) Compressed air intake
- * (3) Exhaust hole with silencer function
- * (4) Aluminum profile can be customized
- * (5) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece



Product advantages

- * Suitable for corrugated board, plywood, iron plate and other general workpieces



Example of suction cup suction device
HVGP suction box packaging

Vacuum Suction Cups

HVGP (Generator)

Suction size: 60mmX wide and long (customizable)

HANVAC


General



HVGP60 Order Code

HVGP 1	60 2	516 3	V 4	3 5	S 6	
20 7	E 8					

1-Series	2-Width	3-Length
HVGP Cups suction	60 60mm	355 Customizable

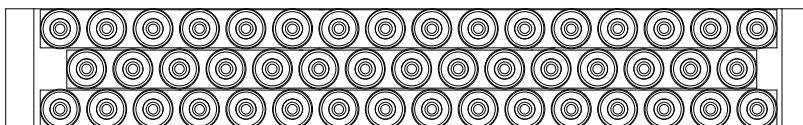
4-Vacuum valve specifications	5-Arrangement type	6-Vacuum material
V Self-closing valve	3 PX03	S Suction cup
L Flow valve		
S High speed valve		

7-Size Type	8-Vacuum source configuration
20 20mm	A Generator
S silicon rubber	E Fan pump
SI-RR high-performance	

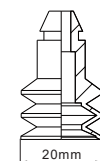
*Please contact us for special requirements



HVGP60 Vacuum suction cup specifications



HVGP60(HSCN20)SUCKER DIAMETER 20MM
3-row arrangement
types of: PX03



(HSCN20)



Vacuum Suction Cups

HVGP (Generator)

HANVAC


General

Suction size: 60mmX wide and long (customizable)



HVGP60 Technical parameters

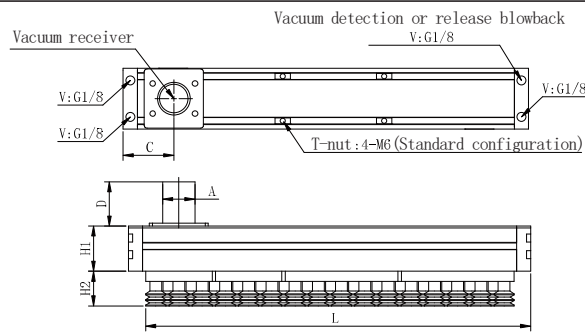
Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP60-285V-3S20-E	PX03	32	160	-40	167	1.0
HVGP60-355V-3S20-E	PX03	41	200	-40	214	1.1
HVGP60-410V-3S20-E	PX03	47	220	-40	246	1.3
HVGP60-516V-3S20-E	PX03	62	300	-40	324	1.6
HVGP60-608V-3S20-E	PX03	74	340	-40	387	1.8
HVGP60-710V-3S20-E	PX03	86	400	-40	449	2.0
HVGP60-816V-3S20-E	PX03	101	460	-40	528	2.3
HVGP60-909V-3S20-E	PX03	113	520	-40	591	2.6
HVGP60-1001V-3S20-E	PX03	125	600	-40	653	2.8
HVGP60-1117V-3S20-E	PX03	140	650	-40	732	3.1
HVGP60-1209V-3S20-E	PX03	152	700	-40	794	3.3
HVGP60-1301V-3S20-E	PX03	164	750	-40	857	3.6

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PX03



HVGP60 Design parameters



HVGP60

尺寸[mm]

Models	A	B	C	D	H1	H2	W	L
HVGP60-285V-3S20-E	32	44	50	44	45	31	60	285
HVGP60-355V-3S20-E	32	44	50	44	45	31	60	355
HVGP60-410V-3S20-E	32	44	50	44	45	31	60	401
HVGP60-516V-3S20-E	32	44	50	44	45	31	60	516
HVGP60-608V-3S20-E	32	44	50	44	45	31	60	608
HVGP60-710V-3S20-E	32	44	50	44	45	31	60	701
HVGP60-816V-3S20-E	32	44	50	44	45	31	60	816
HVGP60-909V-3S20-E	32	44	50	44	45	31	60	909
HVGP60-1001V-3S20-E	32	44	50	44	45	31	60	1001
HVGP60-1117V-3S20-E	32	44	50	44	45	31	60	1117
HVGP60-1209V-3S20-E	32	44	50	44	45	31	60	1209
HVGP60-1301V-3S20-E	32	44	50	44	45	31	60	1301


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* PX03

Vacuum Suction Cups HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC


General

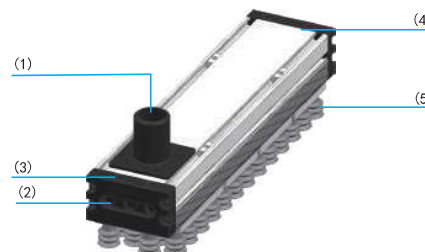
Product characteristics

- *Medium sized standardized design
- *Convenient and simple maintenance and repair
- *Using lightweight and tough high-strength aluminum profiles
- *External vacuum source design
- *Adopting HANWHA's unique valve body technology
- *Different suction cup specifications are suitable for a wider range of workpiece applications
- *High performance imported materials with longer service life



Product structure

- *(1) Fan pump
- *(2) Exhaust hole with noise reduction function
- *(3) Compressed air intake
- *(4) Aluminum profiles, customizable
- *(5) A sturdy and wear-resistant 2.5-fold suction cup, with a flexible and flexible material that easily fits the workpiece



Product advantages

- *Handling wooden boards, cardboard boxes, metal sheets, glass, plastics, etc
- *Handling uneven and perforated parts
- *Handling and picking workpieces without fixed positions
- *Handling sensitive parts such as display screen glass



HVGP Learn packaging examples

Vacuum Suction Cups

HVGP (Generator)

HANVAC


General

Suction size: 80mmX wide and long (customizable)



HVGP80 Order Code

HVGP 1	80 2	336 3	V 4	4 5	S 6	
20 7	E 8					

1-Series	2-Width	3-Length
HVGP	80	336
Cups suction	80mm	Customizable

4-Vacuum valve specifications

V	Self-closing valve
L	Flow valve
S	High speed valve

5-Arrangement

2	PS02
4	PS04

6-Vacuum material

S	Suction cup
---	-------------

7-Size Type

20	20mm
40	40mm
S	silicon rubber
SI-RR	High performance (rose red)

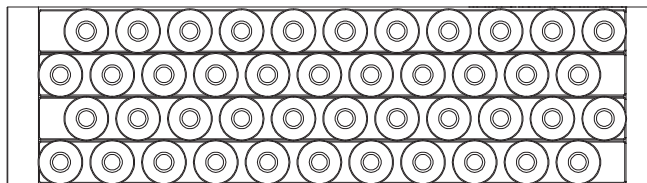
8-Vacuum source configuration

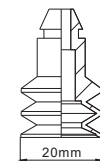
A	Generator
E	Fan pump

*Please contact us for special requirements



HVGP80 Vacuum suction cup specifications


HVGP80 (HSCN20) suction cup diameter 20MM

 There are 4 rows of suction tools in use
type:PS04


(HSCN20)


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Vacuum Suction Cups

HVGP (Generator)

Suction size: 80mmX wide and long (customizable)

HANVAC


General



HVGP80 Technical parameters

Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP80-290V-4S20-E	PS04	44	177	-40	153	1.5
HVGP80-336V-4S20-E	PS04	52	204	-40	181	1.8
HVGP80-382V-4S20-E	PS04	60	230	-40	209	2.0
HVGP80-428V-4S20-E	PS04	68	257	-40	237	2.2
HVGP80-474V-4S20-E	PS04	76	283	-40	264	2.4
HVGP80-520V-4S20-E	PS04	84	310	-40	292	2.6
HVGP80-566V-4S20-E	PS04	92	336	-40	320	2.8
HVGP80-612V-4S20-E	PS04	100	363	-40	348	3.1
HVGP80-658V-4S20-E	PS04	108	389	-40	376	3.3
HVGP80-704V-4S20-E	PS04	116	416	-40	404	3.5
HVGP80-750V-4S20-E	PS04	124	442	-40	431	3.7
HVGP80-796V-4S20-E	PS04	132	469	-40	459	3.9
HVGP80-842V-4S20-E	PS04	140	495	-40	487	4.2
HVGP80-888V-4S20-E	PS04	148	522	-40	515	4.4
HVGP80-934V-4S20-E	PS04	156	548	-40	543	4.6
HVGP80-980V-4S20-E	PS04	164	575	-40	571	4.8
HVGP80-1026V-4S20-E	PS04	172	601	-40	598	5.0
HVGP80-1072V-4S20-E	PS04	180	628	-40	626	5.3
HVGP80-1118V-4S20-E	PS04	188	655	-40	654	5.5
HVGP80-1164V-4S20-E	PS04	196	681	-40	682	5.7
HVGP80-1210V-4S20-E	PS04	204	708	-40	710	5.9
HVGP80-1256V-4S20-E	PS04	212	734	-40	738	6.1
HVGP80-1302V-4S20-E	PS04	220	761	-40	765	6.4
HVGP80-1348V-4S20-E	PS04	228	787	-40	793	6.6
HVGP80-1394V-4S20-E	PS04	236	814	-40	821	6.8
HVGP80-1440V-4S20-E	PS04	244	840	-40	849	6.9

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator) please refer to the actual vacuum source performance values

*PS04

Vacuum Suction Cups

HVGP (Generator)

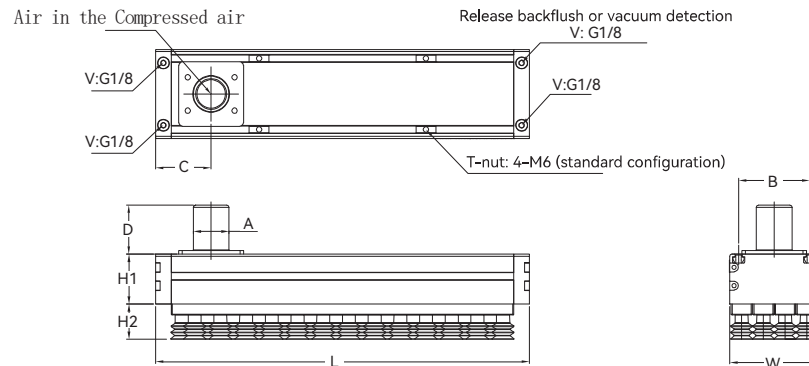
HANVAC


General

Suction size: 80mmX wide and long (customizable)



HVGP80 Design parameters



HVGP80

Size [mm]

Models	A	B	C	D	H1	H2	W	L
HVGP80-290V-4S20-E	32	64	50	44	45	31	80	290
HVGP80-336V-4S20-E	32	64	50	44	45	31	80	336
HVGP80-382V-4S20-E	32	64	50	44	45	31	80	382
HVGP80-428V-4S20-E	32	64	50	44	45	31	80	428
HVGP80-474V-4S20-E	32	64	50	44	45	31	80	474
HVGP80-520V-4S20-E	32	64	50	44	45	31	80	520
HVGP80-566V-4S20-E	32	64	50	44	45	31	80	566
HVGP80-612V-4S20-E	32	64	50	44	45	31	80	612
HVGP80-658V-4S20-E	32	64	50	44	45	31	80	658
HVGP80-704V-4S20-E	32	64	50	44	45	31	80	704
HVGP80-750V-4S20-E	32	64	50	44	45	31	80	750
HVGP80-796V-4S20-E	32	64	50	44	45	31	80	796
HVGP80-842V-4S20-E	32	64	50	44	45	31	80	842
HVGP80-888V-4S20-E	32	64	50	44	45	31	80	888
HVGP80-934V-4S20-E	32	64	50	44	45	31	80	934
HVGP80-980V-4S20-E	32	64	50	44	45	31	80	980
HVGP80-1026V-4S20-E	32	64	50	44	45	31	80	1026
HVGP80-1072V-4S20-E	32	64	50	44	45	31	80	1072
HVGP80-1118V-4S20-E	32	64	50	44	45	31	80	1118
HVGP80-1164V-4S20-E	32	64	50	44	45	31	80	1164
HVGP80-1210V-4S20-E	32	64	50	44	45	31	80	1210
HVGP80-1256V-4S20-E	32	64	50	44	45	31	80	1256
HVGP80-1302V-4S20-E	32	64	50	44	45	31	80	1302
HVGP80-1348V-4S20-E	32	64	50	44	45	31	80	1348
HVGP80-1394V-4S20-E	32	64	50	44	45	31	80	1394
HVGP80-1440V-4S20-E	32	64	50	44	45	31	80	1440

*PS04


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Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC



General

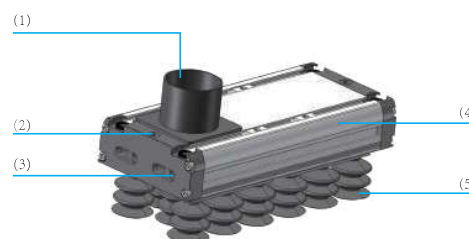
Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) Fan bump
- * (2) Compressed air intake
- * (3) Exhaust hole with silencer function
- * (4) Aluminum profile can be customized
- * (5) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece



Product advantages

- * Suitable for corrugated board, plywood, iron plate and other general workpieces



Suction Cups HVGP absorbs the carton packaging

Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP Order Code

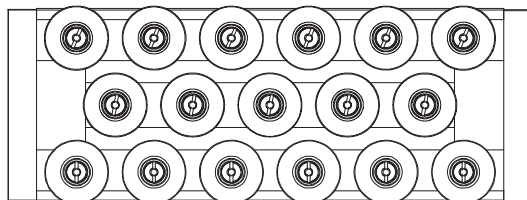
HVGP 1	—	130 2	—	1265 3	—	V 4	—	3 5	—	S 6	—
20 7	—	A 8									

1-Series		2-Width		3-Length	
HVGP	Cups suction	130	130mm	1265	Customizable
4-Vacuum valve specifications		5-Design type		6-Vacuum material	
V	Self-closing valve	3	PS03	S	Cup
L	Flow valve	5	PS05		
S	High speed valve				
7-Size and type		8-Vacuum source configuration			
20	20mm	A	Generator		
40	40mm	E	Fan pump		
S	Silicone rubber				
SI-RR	High-performance (rose red)				
* Please contact us for special requirements					

* Please contact us for special requirements

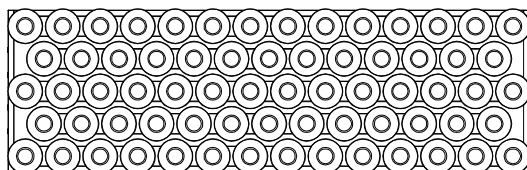


HVGP130 Cup Selection Specification



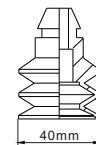
typePS03

The number of rows in use is 3
HVGP130(HSCN40)cup diameter 40MM

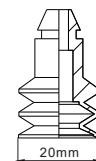


typePS05

The number of rows in use is 5
HVGP130(HSCN40)cup diameter 20MM



(HSCN40)



(HSCN20)



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Vacuum Suction Foams HVGP (fan pump)

Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP130P Technical parameters

Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP130-295V-3S40-E	PS03	17	150	-40	296	2.8
HVGP130-434V-3S40-E	PS03	26	300	-40	452	3.6
HVGP130-572V-3S40-E	PS03	35	400	-40	608	4.3
HVGP130-711V-3S40-E	PS03	44	510	-40	765	5.1
HVGP130-849V-3S40-E	PS03	53	600	-40	921	6
HVGP130-988V-3S40-E	PS03	62	750	-40	1078	7
HVGP130-1126V-3S40-E	PS03	71	850	-40	1234	7.7
HVGP130-1265V-3S40-E	PS03	80	950	-40	1391	8.5
HVGP130-1403V-3S40-E	PS03	89	1050	-40	1547	9.3
HVGP130-1542V-3S40-E	PS03	98	1250	-40	1704	10.1

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS03

Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP130-295V-5S20-E	PS05	53	150	-40	277	2.8
HVGP130-434V-5S20-E	PS05	83	300	-40	434	3.6
HVGP130-572V-5S20-E	PS05	114	400	-40	591	4.3
HVGP130-711V-5S20-E	PS05	143	510	-40	747	5.1
HVGP130-849V-5S20-E	PS05	173	600	-40	904	6
HVGP130-988V-5S20-E	PS05	203	750	-40	1061	7
HVGP130-1126V-5S20-E	PS05	233	850	-40	1218	7.7
HVGP130-1265V-5S20-E	PS05	263	950	-40	1375	8.5
HVGP130-1403V-5S20-E	PS05	293	1050	-40	1531	9.3
HVGP130-1542V-5S20-E	PS05	323	1250	-40	1688	10.1

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS05



Vacuum Suction Foams HVGP (fan pump)

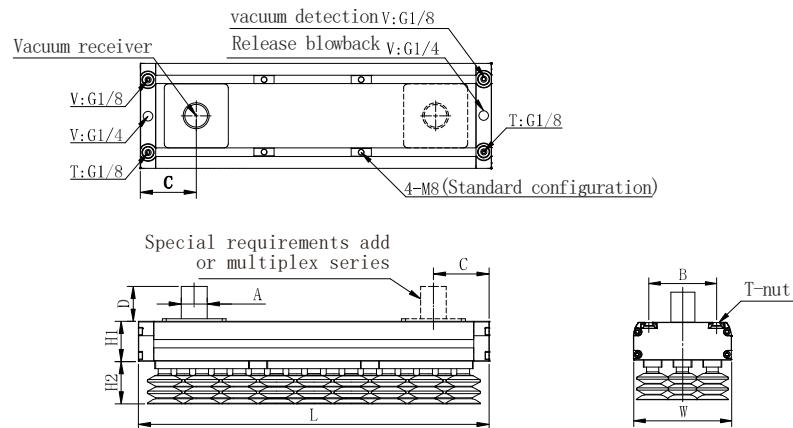
Suction size: 130mmX wide and long (customizable)

HANVAC


General



HVGP Design parameters



HVGP130

Size[mm]

Models	A	B	C	D	H1	H2	W	L
HVGP130-295V-3S40-E	60(32)	90	69	54	50	33	130	295
HVGP130-434V-3S40-E	60(32)	90	69	54	50	33	130	434
HVGP130-572V-3S40-E	60(32)	90	69	54	50	33	130	572
HVGP130-711V-3S40-E	60(32)	90	69	54	50	33	130	711
HVGP130-849V-3S40-E	60(32)	90	69	54	50	33	130	849
HVGP130-988V-3S40-E	60(32)	90	69	54	50	33	130	988
HVGP130-1126V-3S40-E	60(32)	90	69	54	50	33	130	1126
HVGP130-1265V-3S40-E	60(32)	90	69	54	50	33	130	1265
HVGP130-1403V-3S40-E	60(32)	90	69	54	50	33	130	1403
HVGP130-1542V-3S40-E	60(32)	90	69	54	50	33	130	1542

*PS03

Size[mm]

Models	A	B	C	D	H1	H2	W	L
HVGP130-295V-5S20-E	60(32)	90	69	54	50	31	130	295
HVGP130-434V-5S20-E	60(32)	90	69	54	50	31	130	434
HVGP130-572V-5S20-E	60(32)	90	69	54	50	31	130	572
HVGP130-711V-5S20-E	60(32)	90	69	54	50	31	130	711
HVGP130-849V-5S20-E	60(32)	90	69	54	50	31	130	849
HVGP130-988V-5S20-E	60(32)	90	69	54	50	31	130	988
HVGP130-1126V-5S20-E	60(32)	90	69	54	50	31	130	1126
HVGP130-1265V-5S20-E	60(32)	90	69	54	50	31	130	1265
HVGP130-1403V-5S20-E	60(32)	90	69	54	50	31	130	1403
HVGP130-1542V-5S20-E	60(32)	90	69	54	50	31	130	1542

*PS05



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Vacuum Suction Cups HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General

Product characteristics

- * Medium-sized standardized design
- * Convenient and simple maintenance
- * Lightweight and tough high strength aluminum profiles
- * Built-in multistage vacuum generator module
- * HANWHA-specific body technology
- * Different pass technology for a wide variety of workpiece applications
- * High performance imported material, longer service life



Product structure

- * (1) P: G1/4 screw thread, air inlet
- * (2) V: G1/8 screw thread, Blowback/vacuum detection
- * (3) Aluminum profile can be customized
- * (4) Strong and wear-resistant 2.5 fold suction cup, the material of the sucker is flexible, and it is easy to fit the workpiece
- * (5) fan pupm



Product advantages

- * Suitable for corrugated board, plywood, iron plate and other general workpieces



Suction Cups HVGP absorbs the carton packaging

Vacuum Suction Cups HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General



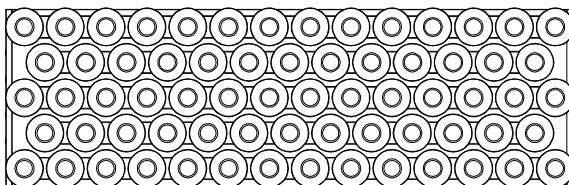
HVGP200 Order Code

HVGP 1	—	200 2	—	400 3	—	V 4	—	5 5	—	S 6	—
20 7	—	E 8									
1-Series		2-Width		3-Length							
HVGP		Cups suction		200 200mm		400		Customizable			
4-Vacuum valve specifications		5-Design type		6-Vacuum material							
V		Self-closing valve		5 PS05		S		Cup			
L		Flow valve		9 PS09							
S		High speed valve									
7-Size and type		8-Vacuum source configuration									
20		20mm		A		Generator					
40		40mm		E		Fan pump					
SI		Silicone rubber									
SI-RR		High-performance (rose red)									
* Please contact us for special requirements											

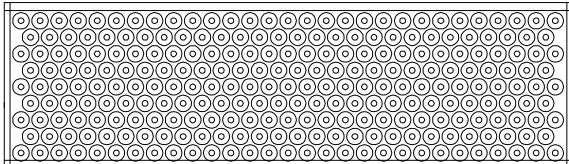
* Please contact us for special requirements



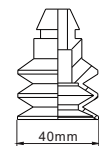
HVGP200 Cup Selection Specification



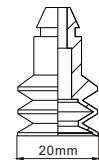
typePS05
The number of rows in use is 5
HVGP200(HSCN40)cup diameter 40MM



typePS09
The number of rows in use is 9
HVGP200(HSCN20)cup diameter 20MM



(HSCN40)



(HSCN20)



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Vacuum Suction Cups HVGP (Generator)

Suction size: 200mmX wide and long (customizable)

HANVAC


General



HVGP200 Technical parameters

Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP200-273V-5S40-E	PS05	28	140	-60	279	2.8
HVGP200-458V-5S40-E	PS05	48	240	-60	478	3.9
HVGP200-550V-5S40-E	PS05	58	290	-60	577	4.5
HVGP200-643V-5S40-E	PS05	68	340	-60	677	5.0
HVGP200-735V-5S40-E	PS05	78	390	-60	776	5.6
HVGP200-828V-5S40-E	PS05	88	440	-60	875	6.2
HVGP200-920V-5S40-E	PS05	98	490	-60	975	6.7
HVGP200-1012V-5S40-E	PS05	108	540	-60	1074	7.2
HVGP200-1243V-5S40-E	PS05	133	665	-60	1323	8.6
HVGP200-1428V-5S40-E	PS05	153	765	-60	1522	9.7

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS05

Models	Type	Number of cups	Required pumping capacity* [L/min]	Vacuum* [Kpa]	Suction N* [-40KPA]	Weight [KG]
HVGP200-273V-9S20-E	PS09	95	380	-60	317	2.8
HVGP200-458V-9S20-E	PS09	167	668	-60	557	3.9
HVGP200-550V-9S20-E	PS09	203	812	-60	677	4.5
HVGP200-643V-9S20-E	PS09	239	956	-60	797	5.0
HVGP200-735V-9S20-E	PS09	275	1100	-60	917	5.6
HVGP200-828V-9S20-E	PS09	311	1244	-60	1037	6.2
HVGP200-920V-9S20-E	PS09	347	1388	-60	1157	6.7
HVGP200-1012V-9S20-E	PS09	383	1532	-60	1127	7.2
HVGP200-1243V-9S20-E	PS09	473	1892	-60	1577	8.6
HVGP200-1428V-9S20-E	PS09	545	2180	-60	1817	9.7

*Vacuum degree for reference-Kpa vacuum suction (built-in vacuum generator)
please refer to the actual vacuum source performance values

* PS09



Vacuum Suction Cups HVGP (Generator)

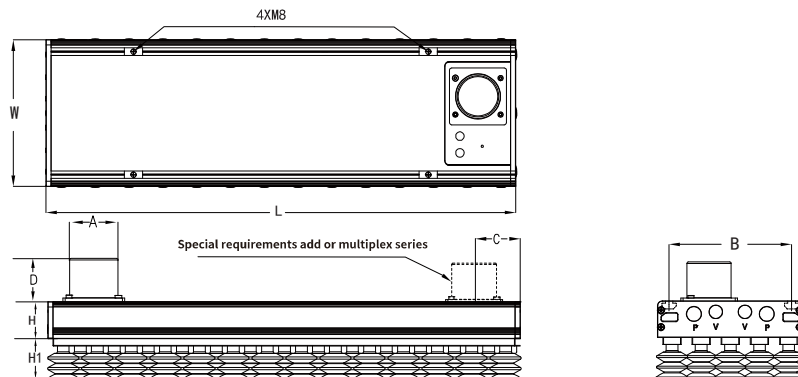
HANVAC


General

Suction size: 200mmX wide and long (customizable)



HVGP200 Design parameters



HVGP200

Size[mm]

Models	A	B	C	D	L	W	H	H1
HVGP200-273V-5S40-E	60(32)	168	69	54	273	200	105	55
HVGP200-458V-5S40-E	60(32)	168	69	54	458	200	105	55
HVGP200-550V-5S40-E	60(32)	168	69	54	550	200	105	55
HVGP200-643V-5S40-E	60(32)	168	69	54	643	200	105	55
HVGP200-735V-5S40-E	60(32)	168	69	54	735	200	105	55
HVGP200-828V-5S40-E	60(32)	168	69	54	828	200	105	55
HVGP200-920V-5S40-E	60(32)	168	69	54	920	200	105	55
HVGP200-1012V-5S40-E	60(32)	168	69	54	1012	200	105	55
HVGP200-1243V-5S40-E	60(32)	168	69	54	1243	200	105	55
HVGP200-1428V-5S40-E	60(32)	168	69	54	1428	200	105	55

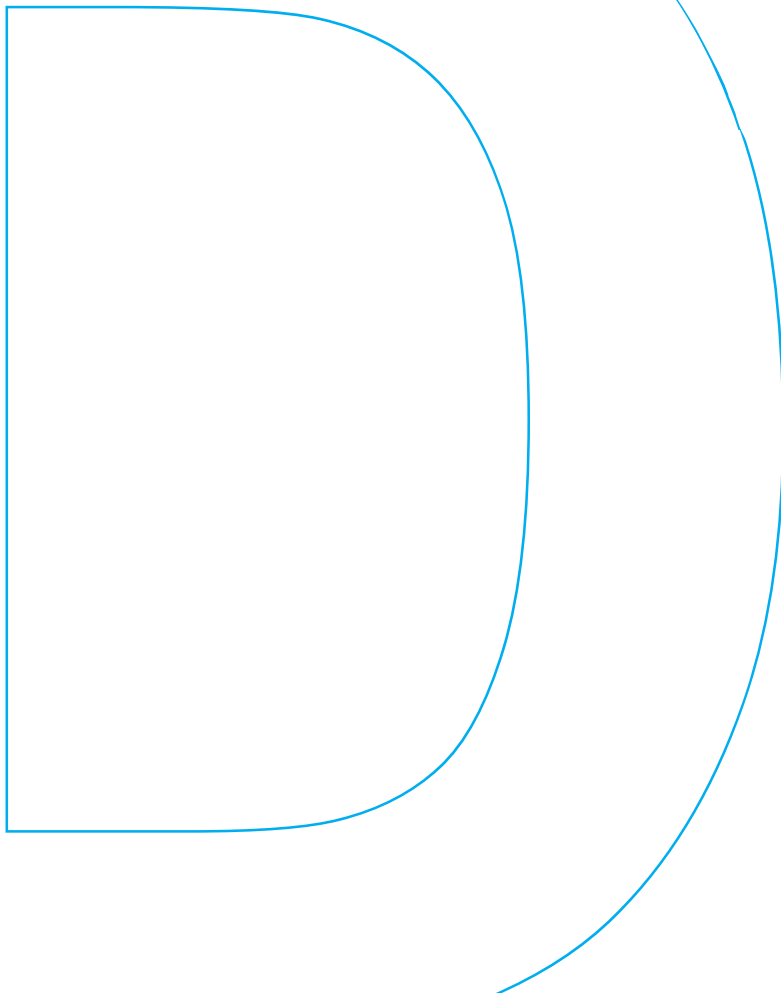
* PS05

Size[mm]

Models	A	B	C	D	L	W	H	H1
HVGP200-273V-9S20-E	60(32)	168	69	54	273	200	105	55
HVGP200-458V-9S20-E	60(32)	168	69	54	458	200	105	55
HVGP200-550V-9S20-E	60(32)	168	69	54	550	200	105	55
HVGP200-643V-9S20-E	60(32)	168	69	54	643	200	105	55
HVGP200-735V-9S20-E	60(32)	168	69	54	735	200	105	55
HVGP200-828V-9S20-E	60(32)	168	69	54	828	200	105	55
HVGP200-920V-9S20-E	60(32)	168	69	54	920	200	105	55
HVGP200-1012V-9S20-E	60(32)	168	69	54	1012	200	105	55
HVGP200-1243V-9S20-E	60(32)	168	69	54	1243	200	105	55
HVGP200-1428V-9S20-E	60(32)	168	69	54	1428	200	105	55

* PS09

*Customized **P**roducts*



HVG-104-18

Save 50% gas consumption

HVG-120-60

Reaching vacuum pressure: -85Kpa

HVGB

Maximum suction: 1020N

HVGR

Maximum vacuum flow rate: 700 L/min

HVGS

Maximum vacuum flow rate: 1050 L/min

Special suction HVG

Suction width: 18mm

HANVAC



Utility

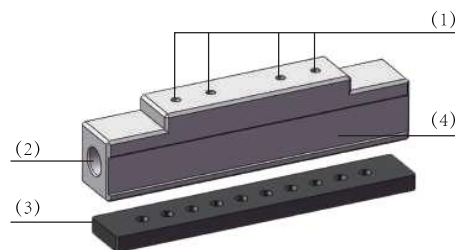
Product characteristics

- * Small and flexible design
- * High strength aluminum alloy
- * Adopts HANWHA's unique efficient valve body technology to save 50% gas consumption
- * Suitable for small pieces with smooth surfaces
- * European original imported sealed sponge pad, longer life



Product structure

- * (1) Mounting holes
- * (2) P: G1/8 screw, air inlet
- * (3) inlet sealing sponge pad
- * (4) The appliance contains a high-quality generator



Product advantages

- * Very small size is best installed in limited space, short cycle cycle, good energy saving effect.



* HVG case

Special suction HVG

Suction width: 18mm

HANVAC


Utility



HVG Ordering NO

HVG	—	104	—	18
1		2		3

1-Series		2- Suction length		3- Suction width	
HVG		104mm		18mm	



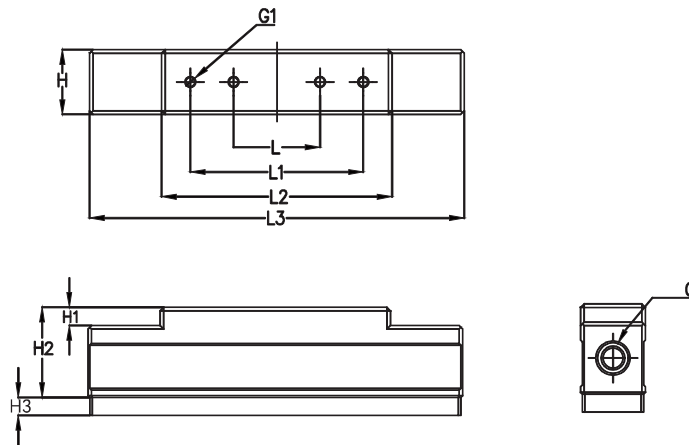
HVG Technical Data

Models	Use fluid	Suction N [-60KPA]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Sponge aperture [MM]	Sponge pore number	Weight [KG]
HVG104X18	air	7.5	0.4-0.5	28	90	4	10	0.1

*Vacuum degree is the reference value - please refer to the actual vacuum source performance value for the Kpa of the vacuum suction tool



HVG Specification



HVG104X18

model

Size[mm]	L	L1	L2	L3	H	H1	H2	H3	G	G1
HVG104X18	22	48	64	104	18	5	25	5	G1/8	4-M3

Special suction HVG

Vacuum pressure reached : -85Kpa

HANVAC


Utility

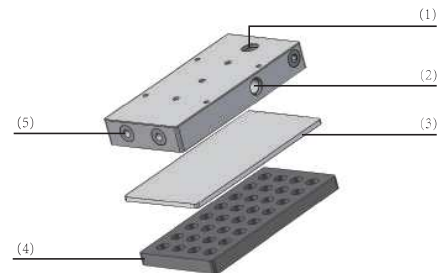
Product characteristics

- *Suitable for packaging processes, handling packaging boxes and other types of packaging products
- *Small in size and light in weight, suitable for integration into packaging machinery such as packing machines
- *Can be used with end picks to transport easily bent workpieces such as metal plates and plywood
- *The suction device is equipped with a built-in vacuum generating unit



Product structure

- *(1) Installation holes
- *(2) P: G1/8 screw thread, air inlet
- *(3) Vacuum valve
- *(4) Imported sealing sponge pad
- *(5) The instrument contains a high-quality generator inside



Product advantages

- *Suitable for various occasions that require air blowing and have a short working cycle, such as plastic sheets, automotive industry, packaging machinery, and industrial robots



*HVG case

Special suction HVG

Vacuum pressure reached : -85Kpa

HANVAC


Utility



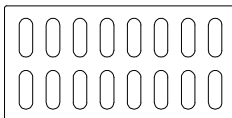
HVG Ordering NO

HVG 1	—	120 2	—	60 3	—	V 4	—	4 5	—	F 6	—
15 7											

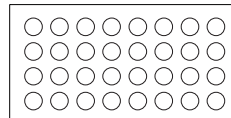
1-Series	2- Sponge length	3-Suction tool width
HVG	120	60
Sponge suction tool	120mm	60mm
4- Specifications	5-Sponge pore type	6-Type of suction pad
V Self closing valve	2 PE02	F Sponge
L Flow valve	3 PE03	
	4 PE04	
	5 PE05	
7- Sponge thickness		
15		
15mm		



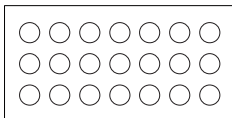
HVG120 Sponge Ordering NO



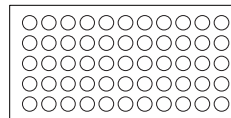
HVGP120X60 Standards
Type:PE02
Need to be customized



HVGP120X60 Standards
Type:PE04
Need to be customized



HVGP120X60 Standards
Type:PE03
Universal type



HVGP120X60 Standards
Type:PE05
Need to be customized


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Special suction HVG

Vacuum pressure reached : -85Kpa

HANVAC


Utility



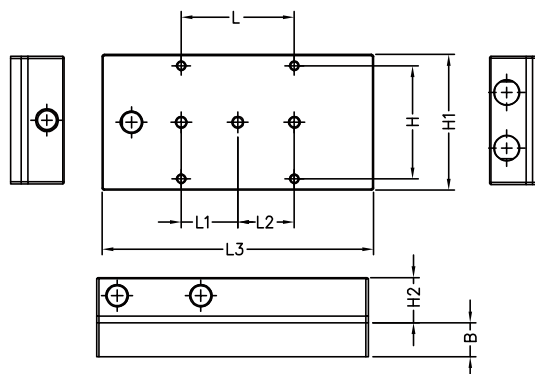
HVG Technical Data

Models	Use fluid	Suction N [-60KPa]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Sponge aperture [mm]	Sponge pore number	Weight [Kg]
HVG-120-60-V-2F**	air	124	0.5	70	85	7X20	16	0.6
HVG-120-60-L-2F**	air	124	0.5	70	85	7X20	16	0.4
HVG-120-60-V-3F**	air	100	0.5	70	85	10	21	0.6
HVG-120-60-L-3F**	air	100	0.5	70	85	10	21	0.4
HVG-120-60-V-4F**	air	96	0.5	70	85	8	32	0.6
HVG-120-60-L-4F**	air	96	0.5	70	85	8	32	0.4
HVG-120-60-V-5F**	air	41	0.5	70	85	4	55	0.6
HVG-120-60-L-5F**	air	41	0.5	70	85	4	55	0.4

*Vacuum degree is the reference value - please refer to the actual vacuum source performance value for the Kpa of the vacuum suction tool



HVG Design Data



HVG120X60

model

Size[mm]	L	L1	L2	L3	H	H1	H2	B (★)
HVG-120-60-V-2F**	50	25	25	120	50	60	28	10/15/20
HVG-120-60-L-2F**	50	25	25	120	50	60	20	10/15/20
HVG-120-60-V-3F**	50	25	25	120	50	60	28	10/15/20
HVG-120-60-L-3F**	50	25	25	120	50	60	20	10/15/20
HVG-120-60-V-4F**	50	25	25	120	50	60	28	10/15/20
HVG-120-60-L-4F**	50	25	25	120	50	60	20	10/15/20
HVG-120-60-V-5F**	50	25	25	120	50	60	28	10/15/20
HVG-120-60-L-5F**	50	25	25	120	50	60	20	10/15/20


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Special suction HVGB

Maximum suction: 1020N

HANVAC



Utility

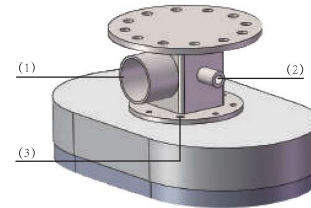
Product characteristics

- * The shell is made of high-quality stainless steel
- * Optional vacuum source with external fan or generator
- * Large area internal cavity structure
- * The shell is made of stainless steel, with flange mounting holes reserved at the top
- * Large area oval inner cavity structure design
- * Foam sponge for adsorption, good sealing, long life, sponge can be purchased and replaced by itself



Product structure

- * Body: made of aluminum alloy, small size, light weight
- * (1) Air intake: Connect the fan
- * (2) Connection port: blowback interface
- * (3) Mounting screw: tighten the screw adjustment, you can remove the side panel



Product advantages

- * High strength, mainly used in high load conditions
- * Achieve stable and fast capture of products
- * Increase the adsorption area, large adsorption force



*HVG case

Special suction HVGB

Maximum suction: 1020N

HANVAC



Utility



HVGB-E Ordering NO

HVGB	—	E	—	50	E
1		2		3	4

1-Series	2- Model	3- Specifications
HVGB	E	Ellipsoid
		50 Absorb 50~100kg woven bag
		40 Absorb 25~50kg woven bag
		30 Absorb 20~30kg woven bag
		20 Absorb a woven bag within 20kg
4- Configuration		
A	Generator model	
E	Fan payment	



HVGB-E Technical Data

Models	Vacuum fan	Power [KW]	Maximum vacuum degree [-Kpa]	Maximum inspiratory capacity [m3/h]	Suction N	Weight [Kg]
HVGB-E-50-E	HVB550	5.5	44	320	1020	9.2
HVGB-E-40-E	HVB550	5.5	44	320	780	8
HVGB-E-30-E	HVB430	4.3	36	320	480	6
HVGB-E-20-E	HVB430	4.3	36	320	270	5
HVGB-E-30-A	/	/	40	400	480	5
HVGB-E-20-A	/	/	40	400	270	4

*Fan parameters, please refer to fan data

*Vacuum degree is the reference value - please refer to the actual vacuum source performance value for the Kpa of the vacuum suction tool



Special suction HVGB

Maximum suction: 1020N

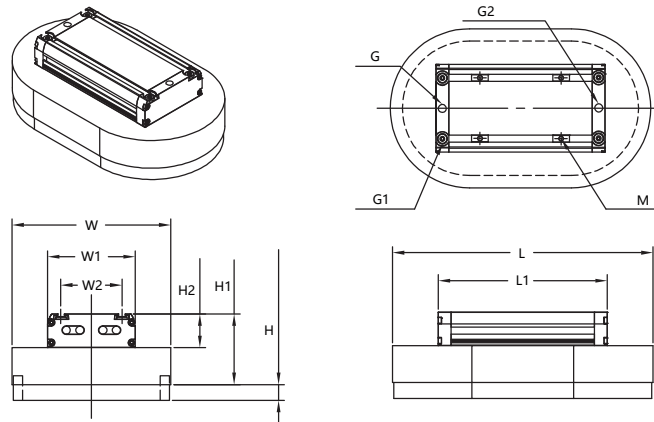
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Utility



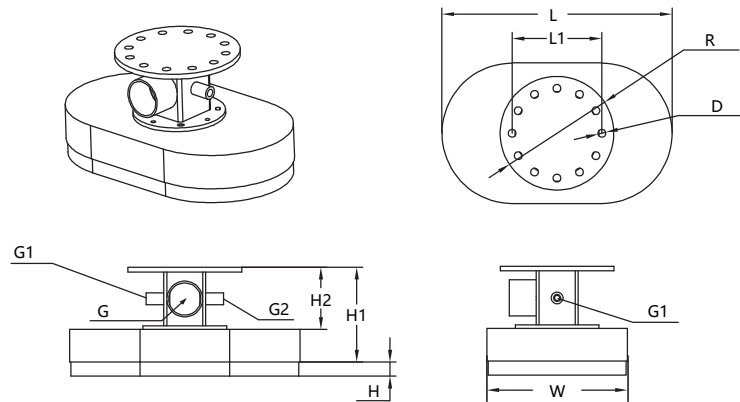
HVGB-E Design Data



HVGB-E-A

model

Size[mm]	W	W1	W2	H	H1	H2	L	L1	M	G	G1	G2
HVGB-E-30-A	200	130	90	23	105	50	300	250	M8	G1/4"	G1/8"	G1/4"
HVGB-E-20-A	150	130	90	23	105	50	250	250	M8	G1/4"	G1/8"	G1/4"



HVGB-E-E

model

Size[mm]	W	R	H	H1	H2	L	L1	D	G	G1	G2
HVGB-E-50-E	255	190	23.5	158.5	104	450	150	14-φ13	DN60	G1/8"	G1/4"
HVGB-E-40-E	230	190	23.5	158.5	104	380	150	14-φ13	DN60	G1/8"	G1/4"
HVGB-E-30-E	200	190	23.5	158.5	104	300	150	14-φ13	DN60	G1/8"	G1/4"
HVGB-E-20-E	150	190	23.5	158.5	104	250	150	14-φ13	DN60	G1/8"	G1/4"

Special suction HVG

Maximum vacuum flow rate: 700 L/min

HANVAC



Utility

Product characteristics

- *Compact and flexible design
- *Using high-strength aluminum profiles
- *Adopting HANWHA's unique high-efficiency valve body technology, saving 50% air consumption
- *Suitable for rough surfaces, leaks, deformations, and irregular workpieces
- *RB is suitable for bag and film packaging workers
- *European original imported sealing sponge pad, with a longer lifespan



Product structure

*Main body: Made of aluminum alloy, small in size and light in weight

* (1) Installing screws: Tighten the screws and adjust to remove the side panel

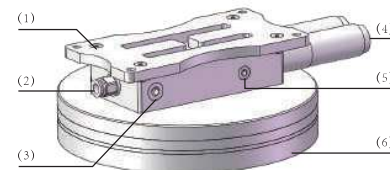
* (2) Connection port: Compressed air inlet

* (3) Connection port: 2-position intake (both sides)

* (4) Silencer: made of anodized aluminum oxide

* (5) Connection port: Vacuum detection port

* (6) Sponge pad: Imported sealed sponge pad



Product advantages

*For rigid products with irregular surfaces, the effect is better



* HVGR case

Special suction HVG

Maximum vacuum flow rate: 700 L/min

HANVAC


Utility



HVG Ordering NO

HVG 1	—	R 2	—	150 3	—	L 4	—	F 5	—	15 6	—
A 7											

1-Series	2- Type	3- Suction tool diameter
HVG	R Rotundity	100 100mm
	B Special	150 150mm
		180 180mm
		200 200mm

4- Specifications	5- Sponge specifications	6- Data size And functions
V Self closing valve	F Sponge	15 Thickness: 15mm
L Flow valve		20 Thickness: 20mm
Suitable for (HVGB)		8F8 With filtering function
		10F10 With filtering function

7-Vacuum source configuration
A Generator

*For special needs, please contact

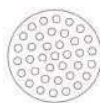


HVGR/B Ordering NO

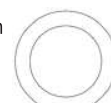
HVGR/B 1	—	100 2	—	BR 3	—	FM 4
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1-Series	2- Sponge diameter	3-Sponge pore type
HVGR/B	100 100mm	R R standard type
		B B standard type

4- Sponge type
Basic type
F Filter type
M Traceless type



HVGR standard sponge design
Hole type: R
The most versatile



HVGR standard sponge design
Hole type: B
Special scenarios, customized

Special suction HVG

Maximum vacuum flow rate: 700 L/min

HANVAC



Utility



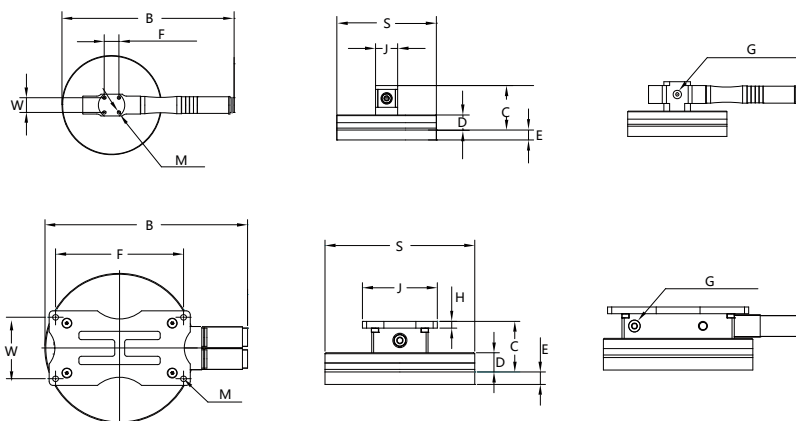
HVGR/B Technical Data

Models	Intake pressure [Bar]	Air consumption [L/Min]	Maximum vacuum degree [Kpa]	Maximum vacuum flow rate [L/Min]	Suction N(-60Kpa)	Weight [Kg]
HVGR100	4~5	100	60	350	129	0.6
HVGR150	4~5	100	60	350	251	0.9
HVGR180	4~5	200	60	700	414	1.7
HVGR200	4~5	200	60	700	414	1.9
HVGB100	4~5	100	40	350	113	0.6
HVGB150	4~5	100	40	350	314	0.9
HVGB180	4~5	200	40	700	531	1.6
HVGB200	4~5	200	40	700	707	1.8

*Vacuum degree as reference value – Kpa of vacuum suction tool (with built-in vacuum generator), please refer to the actual vacuum source performance value



HVGR/B Design Data



HVGR/B

model

Size[mm]	S	B	C	D	E			F	W	H	J	M	G
HVGR100	100	235	67.5	23	10	15	20	22	22		33	M6	1/8"
HVGR150	150	260	67.5	23	10	15	20	22	22		33	M6	1/8"
HVGR180	180	244	61	23	10	15	20	154	74	8	90	M8	1/8"
HVGR200	200	254	61	23	10	15	20	154	74	8	90	M8	1/8"
HVGB100	100	235	74.5	30	15	20	25	22	22		33	M6	1/8"
HVGB150	150	260	74.5	30	15	20	25	22	22		33	M6	1/8"
HVGB180	180	244	68	30	15	20	25	154	74	8	90	M8	1/8"
HVGB200	200	254	68	30	15	20	25	154	74	8	90	M8	1/8"



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Special suction HVG

Maximum vacuum flow rate: 1050 L/min

HANVAC



Utility

Product characteristics

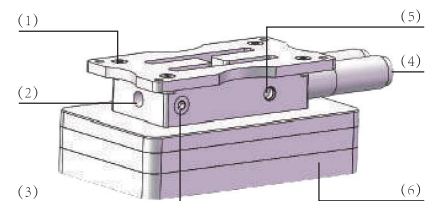
- *Compact and flexible design
- *Using high-strength aluminum profiles
- *Adopting HANWHA's unique high-efficiency valve body technology, saving 50% air consumption
- *Suitable for rough surfaces, leaks, deformations, and irregular workpieces
- *RB is suitable for bag and film packaging workers
- *European original imported sealing sponge pad, with a longer lifespan



Product structure

*Main body: Made of aluminum alloy, small in size and light in weight

- * (1) Installing screws: Tighten the screws and adjust to remove the side panel
- * (2) Connection port: Compressed air inlet
- * (3) Connection port: 2-position intake (both sides)
- * (4) Silencer: made of anodized aluminum oxide
- * (5) Connection port: Vacuum detection port
- * (6) Sponge pad: Imported sealed sponge pad



Product advantages

*Suitable for various occasions that require air blowing and have a short working cycle, such as plastic sheets, automotive industry, packaging machinery, and industrial robots



* HVGs case

Special suction HVG

Maximum vacuum flow rate: 1050 L/min

HANVAC


Utility



HVG Ordering NO

HVG 1	—	S 2	—	80 3	—	120 4	—	L 5	—	F 6	—
15 7	—	A 8									

1-Series		2- Model		3- Suction length	
HVG		S	Square basic	80	80mm
		B	Special occasions	120	120mm
				150	150mm
				180	180mm
				200	200mm
				250	250mm
				350	350mm
4- Suction tool width		5- Specifications		6-Type of suction pad	
80	80mm	V	Self closing valve	F	Sponge
120	120mm	L	Flow valve		
150	150mm		Suitable for (HVGB)		
180	180mm				
200	200mm				
250	250mm				
350	350mm				

7- Dimensions And special projects		8- Vacuum source configuration	
15	Thickness: 15mm	A	Generator
20	Thickness: 20mm		
8F8	With filtering function		
10F10	With filtering function		

*For special needs, please contact



Special suction HVG

Maximum vacuum flow rate: 1050 L/min

HANVAC


Utility

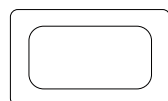


HVG Sponge Ordering NO

HVGS	80	80	SB	FM
1	2	3	4	5

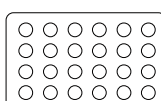
1-Series	2-Sponge length	3-Sponge width
HVGS	80	120
	80mm	120mm

4-Sponge pore type	5-Specifications
S	Basic type
B	Filter type
	Traceless type



HVGB Standards

Type: B
Special scenarios, customized



HVGR Standards

Type: S
The most versatile



HVG Technical Data

models	Sponge thickness [mm]	Intake pressure [Bar]	Air consumption [L/Min]	Maximum vacuum degree [Kpa]	Maximum vacuum flow rate [L/Min]	Suction N (-60Kpa)	Weight [Kg]
HVGS80-80	15	4-5	100	60	280	83	0.6
HVGS80-120	15	4-5	100	60	280	113	0.7
HVGS80-160	15	4-5	100	60	280	151	0.8
HVGS120-120	15	4-5	100	60	350	170	1.0
HVGS120-180	15	4-5	200	60	700	271	1.2
HVGS120-200	15	4-5	200	60	700	305	1.7
HVGS120-280	15	4-5	200	60	700	441	1.9
HVGS200-200	15	4-5	300	60	1050	550	2.3
HVGB120-70	15	4-5	100	40	350	144	0.6
HVGB150-100	15	4-5	100	40	350	264	0.8
HVGB200-120	15	4-5	100	40	350	336	1.2
HVGB250-250	20	4-5	200	40	700	1156	3.3
HVGB350-200	20	4-5	200	40	700	1296	3.6


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Special suction HVG

Maximum vacuum flow rate: 1050 L/min

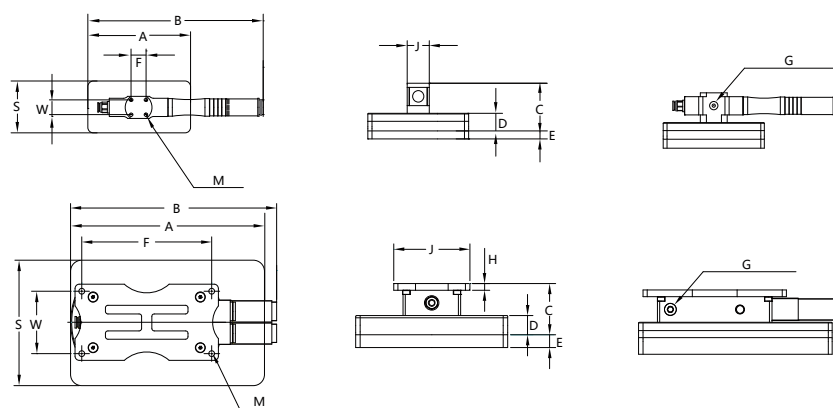
HANVAC



Utility



HVG Design Data



HVGS/B Hole type S/S product specifications

model

Size[mm]	S	A	B	C	D	E			F	W	H	J	G	M
HVGS80-80	80	80	156	59	23	10	15	20	70	50	6	60	1/8"	M6
HVGS80-120	80	120	176	59	23	10	15	20	70	50	6	60	1/8"	M6
HVGS80-160	80	160	196	59	23	10	15	20	70	50	6	60	1/8"	M6
HVGS120-120	120	120	176	59	23	10	15	20	70	50	6	60	1/8"	M6
HVGS120-180	120	180	206	59	23	10	15	20	70	50	6	60	1/8"	M6
HVGS120-200	120	200	254	61	23	10	15	20	154	74	8	90	1/8"	M8
HVGS120-280	120	280	294	61	23	10	15	20	154	74	8	90	1/8"	M8
HVGS200-200	200	200	254	61	23	10	15	20	154	74	8	90	1/8"	M8
HVGB120-70	70	120	245	69.5	25	10	15	20	22	22		33	1/8"	M6
HVGB150-100	100	150	260	69.5	25	10	15	20	22	22		33	1/8"	M6
HVGB200-120	200	120	245	69.5	25	10	15	20	22	22		33	1/8"	M6
HVGB250-250	250	250	279	73	35	10	15	20	154	74	8	90	1/8"	M8
HVGB350-200	200	350	329	73	35	10	15	20	154	74	8	90	1/8"	M8



Vacuum *Generators*

ECG-10H
Integrated vacuum generator

EVG-10M
Integrated vacuum function

ECG-10S
Integrated vacuum function

ECO-200M
Multi-stage vacuum generator

ECO-350M
Multi-stage vacuum generator

ECO-H40
Multi-stage vacuum generator

ECO-H2010
Multi-stage vacuum generator

ECO-H3010
Multi-stage vacuum generator

ECO-H3020
Multi-stage vacuum generator

ECO-H4005
Lightweight vacuum generator

ECO-H4010
Lightweight vacuum generator

ECO-H5010
Multi-stage vacuum generator

ECO-H6010
High flow vacuum generator

ECO-H7010
Multi-stage vacuum generator

ECV-180M
Integrated vacuum generator

ECV-200M
Integrated vacuum generator

ECV-350M
Integrated vacuum generator

HCV
Transport type vacuum generator

EZL3/6
Multi-stage vacuum generator

SECV-10
Blowback vacuum generator

Vacuum Generator ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Electronic New energy

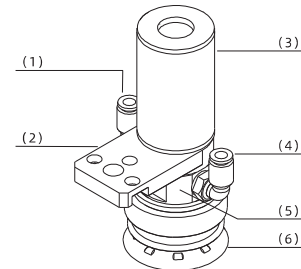
Product characteristics

- * Higher vacuum flow
- * Integrated generator + suction cup + silencer/pagoda connector
- * Vertical and horizontal installation
- * Rubber suction cup, flexible contact, strong adsorption, protects the surface of the workpiece



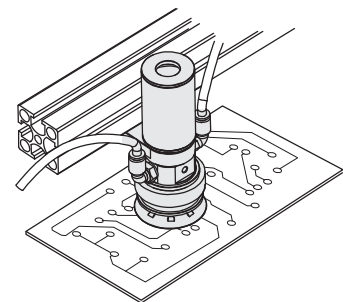
Product structure

- * (1) Release/vacuum detection port
- * (2) Install the flange
- * (3) Silencer
- * (4) Air supply port
- * (5) Vacuum generator
- * (6) Supporting suction cup



Product advantages

- * Flexible contact prevents scratching and other damage to the workpiece during grasping and handling.
- Simple structure, integrated design, direct connection to compressed air, no need for additional generator*



*Vacuum generator ECG-10H combination

Vacuum Generator ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Electronic New energy



ECG-10H Ordering NO

ECG	10H	50	SI
1	2	3	4

1-Series	2-Model	3-Diameter of sucker
ECG	10H	50
Vacuum Generator		50mm

4-Material
SI
Silicone rubber



ECG-10H Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECG-10H	air	0~60	0.1~0.7	165	16	270~650	0.14



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Vacuum Generator

ECG

Maximum vacuum flow: 270~650L/Min

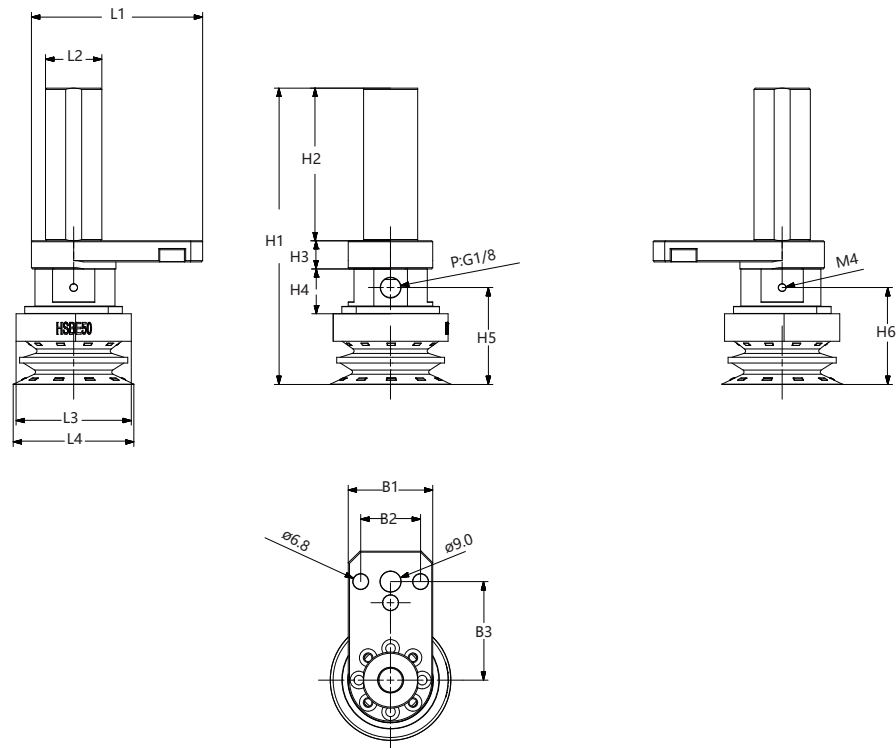
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Electronic New energy



ECG-10H Design Data



ECG-10H

Size[mm]

Models	L1	L2	L3	L4	H1	H2	H3	H4	H5	H6	B1	B2	B3
ECG-10H	73	24	49	51.4	126.3	65	12	19.2	41.3	41.3	36	25.5	42



Vacuum Generator ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Currency

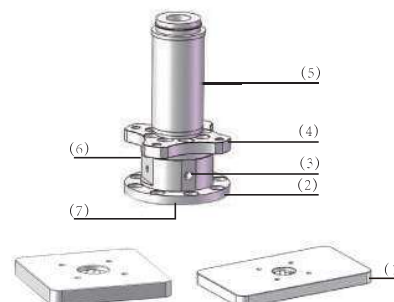
Product characteristics

- * Transportation of perforated circuit boards
- * Handling thin and fragile foil
- * Handling sensitive plastic parts
- * Handling textile or composite fiber materials
- * The adsorption surface is close to the suction port, integrated with vacuum generation function, with large suction volume, low air consumption, and controlled exhaust



Product structure

- * (1) Quickly replace contact surfaces of different shapes
- * (2) Anodized aluminum body with built-in vacuum generator
- * (3) Connector: for the compressed air inlet connector for blowing
- * (4) Axial installation of basic model
- * (5) Exhaust control
- * (6) Vacuum detection port or back purge
- * (7) Real Connection Port



Product advantages

- * Prevent workpieces from being sucked in or damaged, with compact sucker units that can be directly connected, and porous materials that can be safely sucked, with low operating costs and no contamination of the process area



*Vacuum generator ECG assembly

Vacuum Generator

ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Currency



ECG-10M Ordering NO

ECG	—	10M
1		2

1-Series		2-Model	
ECG	Vacuum Generator	10M	

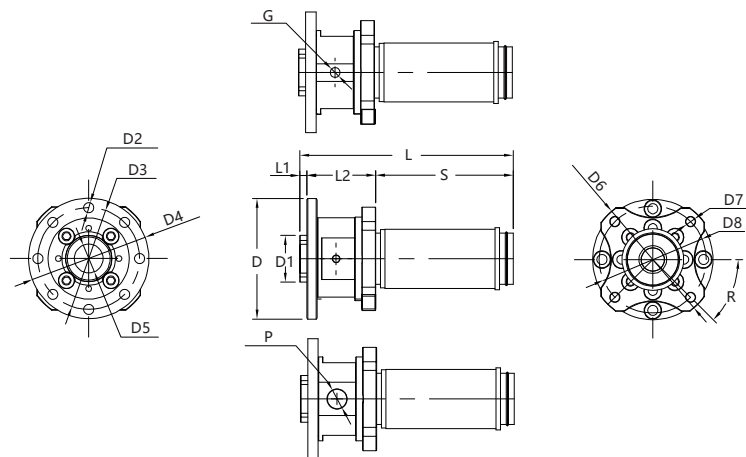


ECG-10M Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECG-10M	air	0~60	0.1~0.5	60~200	14	270~650	0.14



ECG-10M Design Data



ECG-10M

Size[mm]

Models	L	L1	L2	D	D1	D2	D3	D4	D5	D6	D7	D8	G	R	P	S
ECG-10M	92	3	29.6	φ52	φ20	8-φ4.4	φ43.7	φ51.8	φ12.5	φ54.8	4-φ4.1	φ46	M5	45°C	G1/8"	Silencing



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Vacuum Generator ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Currency

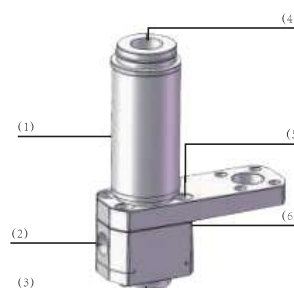
Product characteristics

- * The adsorption surface is adjacent to the suction port
- * Integrated vacuum generation function
- * Extremely high suction capacity
- * Large suction capacity and low gas consumption
- * Controlled exhaust



Product structure

- *(1) Silencer pipe
- *(2) Compressed air intake
- *(3) M20 threaded hole
- *(4) With a diameter of 26.6
- *(5) Install G1/4 screws
- *(6) Vacuum detection or backflushing



Product advantages

- * Composite special suction cups are used for handling sensitive plastic parts, printed circuit boards, textiles, or composite fiber materials



Vacuum Generator

ECG

Maximum vacuum flow: 270~650L/Min

HANVAC



Currency



ECG-10S Ordering NO

ECG	10S
1	2

1-Series	2-Model
ECG	Vacuum Generator
	10S

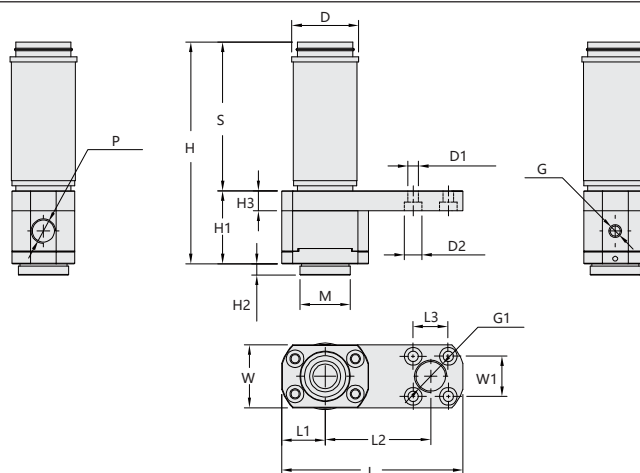


ECG-10M Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECG-10S	air	0~60	0.1~0.5	60~200	14	270~650	0.1



ECG-10S Design Data



ECG-10S

Size[mm]

Models	H	H1	H2	H3	W	W1	L	L1	L2	L3	D	D1	D2	G	G1	M	P	S
ECG-10S	88.2	29	4.5	8	25	16	72	17.3	42	13.9	φ26.6	4-φ4.2	4-φ7	M5	G1/4"	M20X1	G1/8"	Silencing



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Vacuum Generator ECO

Maximum vacuum pressure: -94Kpa

HANVAC



Utility

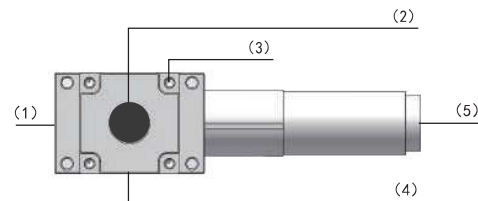
Product characteristics

- * Robust aluminum alloy body, multiple installation designs
- * Integrated modular vacuum generator, supporting customer free configuration, to meet the control requirements of specific systems.



Product structure

- *Main body: Made of plastic, small in size and light in weight
- * (1) Connector: Compressed air connector for blowing air
- * (2) Vacuum connection port
- * (3) 4 mounting holes for installation and fixation
- * (4) V: G1/8 vacuum detection
- * (5) The air outlet is made of aluminum oxide



Product advantages

- * Reduce energy consumption by more than 50%, and release quickly and accurately without compressed air consumption
- * No maintenance required and reduces maintenance and spare parts costs



*ECO case



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Vacuum Generator ECO

HANVAC


Utility

Maximum vacuum pressure: -94Kpa



ECO-200M Ordering NO

ECO	200M	H	S
1	2	3	4

1-Series	2-Model	3- Specifications
ECO	Vacuum Generator	200M
		H High vacuum
		L Low vacuum
		M Lower in
4-Silencer		
	No silencer	
S	With silencer	



ECO-200M Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECO-200M-H	air	0~60	0.5	120	94	372	0.2
ECO-200M-L	air	0~60	0.5	90	70	342	0.2
ECO-200M-M	air	0~60	0.31	123	90	336	0.2

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80
ECO-200M-H	168	144	108	72	43.2	32.4	24	18	8.4
ECO-200M-L	192	174	132	84	51	37.2	21	10.8	0
ECO-200M-M	168	150	108	66	39	30	21	15	6

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80
ECO-200M-H	0.04	0.009	0.17	0.28	0.44	0.63	0.9	1.3
ECO-200M-L	0.03	0.07	0.11	0.21	0.35	0.6	1	0
ECO-200M-M	0.038	0.084	0.153	0.267	0.441	0.677	1.01	1.581


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Vacuum Generator

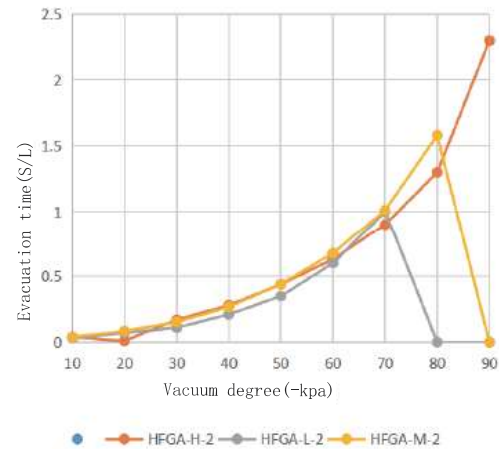
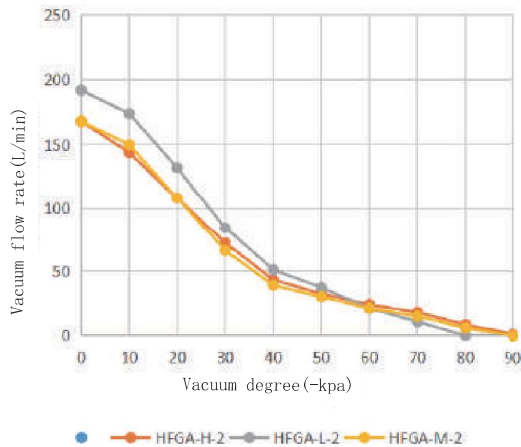
ECO

HANVAC

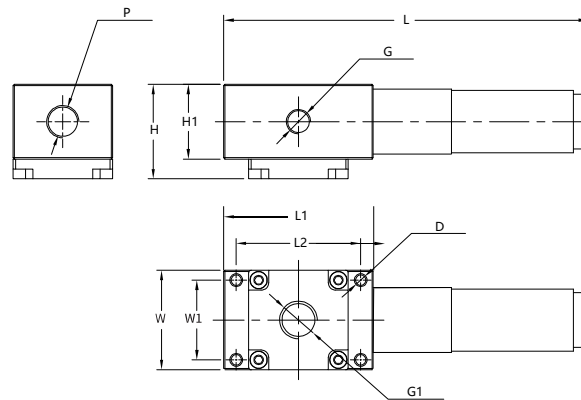

Utility

Maximum vacuum pressure: -94Kpa

Performance parameter



ECO-200M Design Data



ECO-200M

model

Size[mm]	L	L1	L2	W	W1	H	H1	G	G1	P	D
ECO-200M-HS	146.5	60	50	40	32	38	30	G1/8"	G3/8"	G1/4"	4-φ4.2
ECO-200M-LS	146.5	60	50	40	32	38	30	G1/8"	G3/8"	G1/4"	4-φ4.2
ECO-200M-MS	146.5	60	50	40	32	38	30	G1/8"	G3/8"	G1/4"	4-φ4.2


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Vacuum Generator ECO

Maximum vacuum pressure: -94Kpa

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Utility

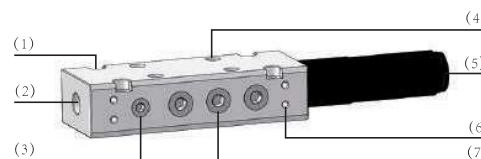
Product characteristics

- *Durable aluminum alloy body with multiple installation designs
- *Integrated modular vacuum generator, supporting customer free configuration to meet specific system control requirements.



Product structure

- *Main body: Made of aluminum alloy, small in size and light in weight
- * (1) 4- Φ 4.5 Installation Interface
- * (2) Connector: Compressed air intake connector for blowing air
- * (3) 2 vacuum detection ports
- * (4) 4- Φ 4.2 Installation Interface
- * (5) The air outlet is made of aluminum oxide
- * (6) 4 mounting holes for installation and fixation
- * (7) 6-position vacuum connection port



Product advantages

- *Reduce energy consumption by more than 50%, and release quickly and accurately without compressed air consumption
- *No maintenance required and reduces maintenance and spare parts costs



*ECO case



Vacuum Generator

ECO

HANVAC


Utility

Maximum vacuum pressure: -94Kpa



ECO-350M Ordering NO

ECO	—	350M	—	H	—	S
1		2		3		4

1-Series	2- Model	3- Specifications
ECO	Vacuum Generator	350M
		H High vacuum
		L Low vacuum
		M Low intake
4-Silencer		
	No silencer	
S	With silencer	



ECO-350M Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECO-350M-H	air	0~60	0.5	120	94	372	0.35
ECO-350M-L	air	0~60	0.5	90	70	342	0.35
ECO-350M-M	air	0~60	0.31	120	90	336	0.35

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80	90
ECO-350M-H	372	222	132	108	78	48.6	24	18	8.4	1.2
ECO-350M-L	342	198	132	84	51	37.2	21	10.8	0	0
ECO-350M-M	336	150	108	66	39	30	21	15	6	0

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
ECO-350M-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECO-350M-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECO-350M-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4


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Vacuum Generator ECO

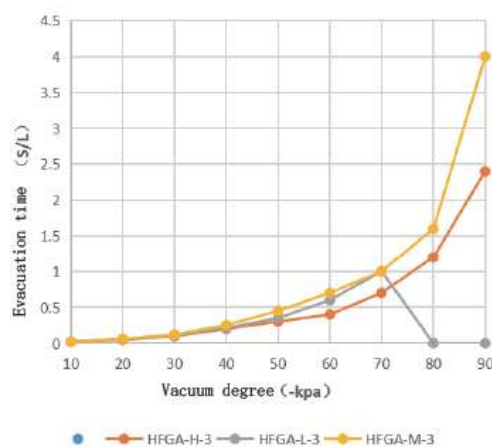
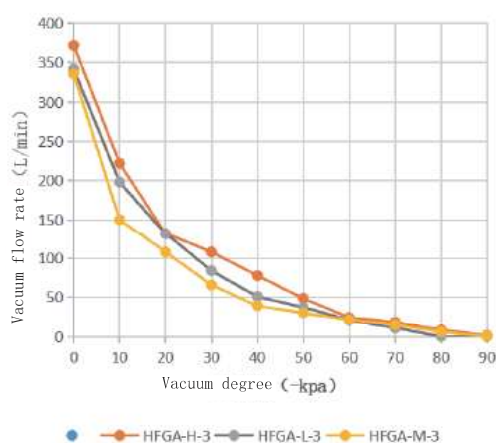
Maximum vacuum pressure: -94Kpa

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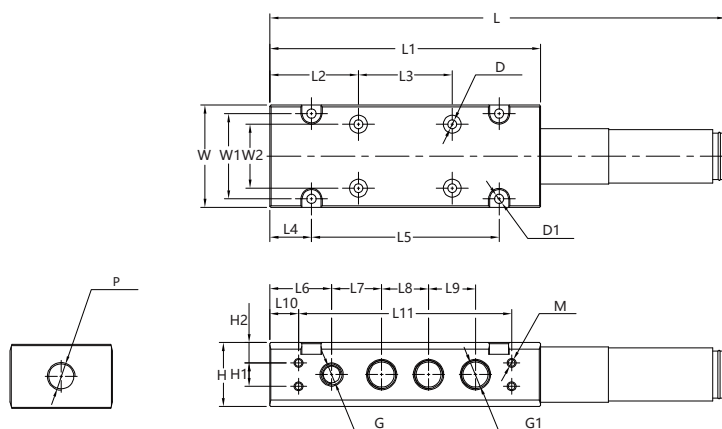


Utility

Performance parameter



ECO-350M Design Data



ECO-350M

model

Size[mm]	L	L1	L2	L3	L4	L5	L6	L7	L8	L9
ECO-350M-HS	213.8	127	41.5	44	19.5	88	29	23.5	22	22
ECO-350M-LS	213.8	127	41.5	44	19.5	88	29	23.5	22	22
ECO-350M-MS	213.8	127	41.5	44	19.5	88	29	23.5	22	22

L10	L11	H	H1	H2	W	W1	W2	G	G1	D	D1	P	M
13.5	100	30	11	9.5	48	40	30	G1/8"	G1/4"	4-Φ4.2	4-Φ4.5	G1/4"	4-M4
13.5	100	30	11	9.5	48	40	30	G1/8"	G1/4"	4-Φ4.2	4-Φ4.5	G1/4"	4-M4
13.5	100	30	11	9.5	48	40	30	G1/8"	G1/4"	4-Φ4.2	4-Φ4.5	G1/4"	4-M4



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Vacuum Generator ECO

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General

Supply pressure range: 0~0.7Mpa

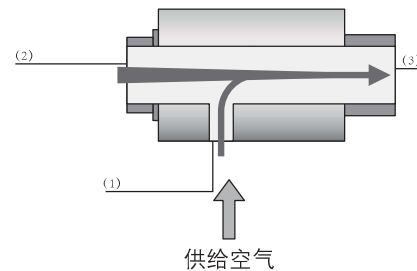
Product characteristics

- * According to the supply of compressed air, high flow blowing or vacuum generation can be carried out
- * Able to blow air at 4 times the supplied air volume
- * Can generate a vacuum flow rate that is three times the supply air volume
- * By having a large diameter, cutting chips, impurities, etc. can be sucked in
- * No maintenance required
- * Can come with mounting bracket



Product structure

- * Main body: Made of aluminum alloy, small in size and light in weight
- * (1) Joint: G-tooth internal thread for compressed air intake joint
- * (2) Connection port: intake
- * (3) Exhaust port: blow air



Product advantages

- * Handling highly breathable workpieces, conveying materials such as particles, powders, gases, liquids, etc



Vacuum Generator

ECO

HANVAC


General

Supply pressure range: 0~0.7Mpa



ECO-H40 Ordering NO

ECO	H40	12	A
1	2	3	4

1-Series	2-Models	3-Diameter	
ECO	H40	12	Through a diameter of 8mm
		16	Through a diameter of 11mm
		19	Through a diameter of 14mm
		25	Through a diameter of 19mm
		32	Through a diameter of 27mm
		38	Through a diameter of 32mm
		50	Through a diameter of 40mm
		63	Through a diameter of 54mm

4-model selection	
	No bracket
A	With bracket

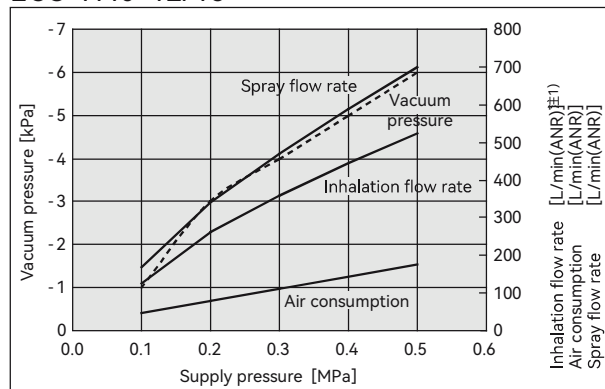


ECO-H40 Technical Data

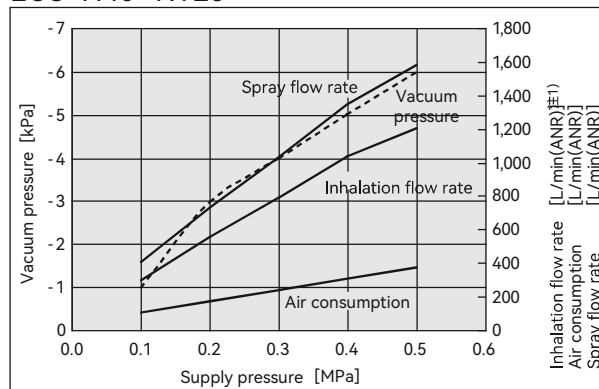
Models	Using fluids	Pressure of intake air [Mpa]	By diameter [mm]	Maximum vacuum degree [kpa]	Weight [g]
ECO-H40-12	Clean air	0~0.7	8	-60	63
ECO-H40-16	Clean air	0~0.7	11	-60	76
ECO-H40-19	Clean air	0~0.7	14	-60	109
ECO-H40-25	Clean air	0~0.7	19	-60	181
ECO-H40-32	Clean air	0~0.7	27	-60	223
ECO-H40-38	Clean air	0~0.7	32	-60	247
ECO-H40-50	Clean air	0~0.7	40	-60	421
ECO-H40-63	Clean air	0~0.7	54	-60	609

performance parameter

ECO-H40-12/16



ECO-H40-19/25


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Vacuum Generator

ECO

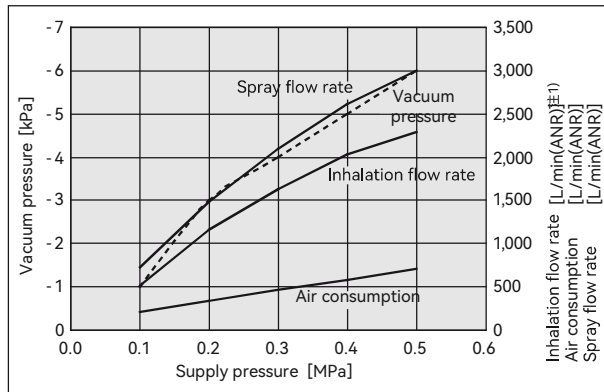
Supply pressure range: 0~0.7Mpa

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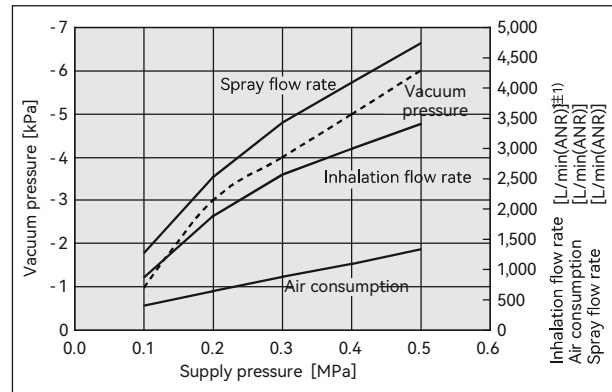


General

ECO-H40-32/38



ECO-H40-50/63



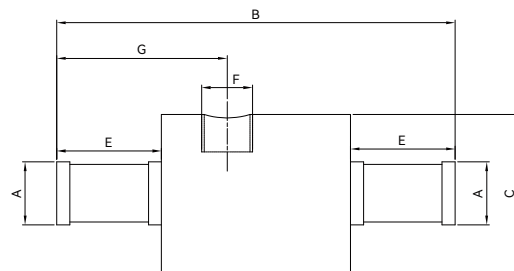
notes 1) The suction flow rate is the theoretical value.

notes 2) The characteristics mentioned above indicate the value of the pressure at the nozzle when it is at atmospheric pressure.

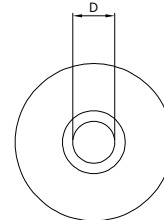
notes 3) When installing filter materials to capture dust at the piping on the spray side, please be careful not to cause back pressure.



ECO-H40 Design Data



No bracket occasion



ECO-H40

Models

Size[mm]	øA	B	øC	øD	E	F	G
ECO-H40-12	12	76	30	8	20	G1/8	32.5
ECO-H40-16	16	72	34	11	18	G1/4	30.5
ECO-H40-19	19	83	39	14	22	G1/4	36
ECO-H40-25	25	92	49	19	24	G1/4	40
ECO-H40-32	32	96	54	27	25	G3/8	43
ECO-H40-38	38	104	59	32	28	G3/8	48
ECO-H40-50	50	113	73	40	32	G3/8	53.5
ECO-H40-63	63	122	94	54	34	G3/8	57



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Vacuum Generator ECO

Maximum vacuum flow rate: 13.8L/Min 16.8L/Min 14.5L/Min 19.2L/Min

HANVAC



Utility

Product characteristics

*Integrate various types of suction cups and modular design together. The vacuum gripping system greatly simplifies the selection and installation of vacuum systems. A more energy-efficient and reliable distributed vacuum system.



Product structure

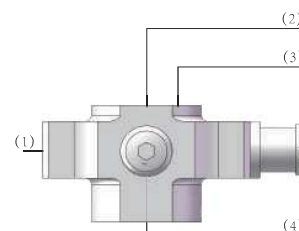
*Main body: Made of plastic, small in size and light in weight

*(1) Connector: used for compressed air intake connector

*(2) Connection port: Vacuum connection port

*(3) Installation screw: M3x4

*(4) Connection port: Vacuum detection port



Product advantages

*Modular, fast and convenient installation design, vacuum system with advantages such as economic efficiency and reliable operation, can greatly simplify the selection and work of vacuum systems. Provide more convenience for customers.



*ECO-H2010 case



Vacuum Generator ECO

HANVAC


Utility

Maximum vacuum flow rate: 13.8L/Min 16.8L/Min 14.5L/Min 19.2L/Min



ECO-H2010 Ordering NO

ECO	H2010	H	M03
1	2	3	4

1-Series	2-Model	3- Specifications
ECO	Vacuum Generator	H High vacuum
		L Low vacuum
		M Lower in
4-Nozzle code		
03		
02		
25		
05		



ECO-H2010 Technical Data

Models	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECO-H2010-M	air	0~60	0.18	8.5	83	13.8	0.1
ECO-H2010-L	air	0~60	0.6	7.2	75	16.8	0.1
ECO-H2010-H	air	0~60	0.5	7.8	92	14.5	0.1

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80
ECO-H2010-H	13.98	9	4.74	2.64	2.16	1.8	1.38	0.78	0.42
ECO-H2010-L	21	18.6	15	10.8	6.6	4.8	3.6	1.8	0.42
ECO-H2010-M	13.8	9	3.6	2.4	2.1	1.38	0.78	0.36	0

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80
ECO-H2010-H	0.52	1.39	3.01	5.51	8.56	12.32	17.77	27.48
ECO-H2010-L	0.3	0.66	1.12	1.8	2.85	4.35	6.55	11.5
ECO-H2010-M	0.05	1.4	3.9	6.4	10	16	28	51


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Vacuum Generator ECO

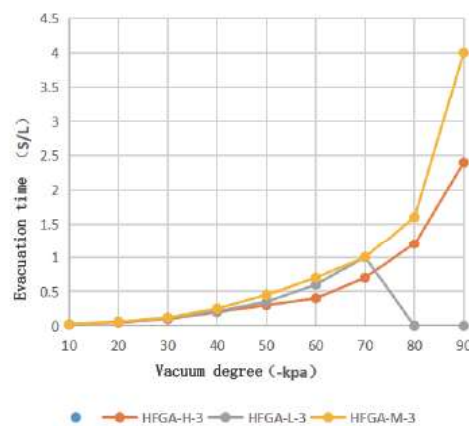
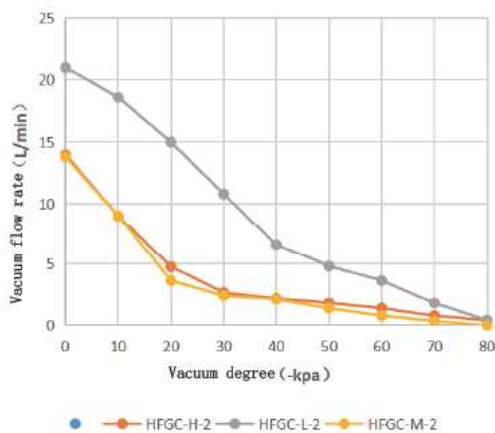
Maximum vacuum flow rate: 13.8L/Min 16.8L/Min 14.5L/Min 19.2L/Min

HANVAC

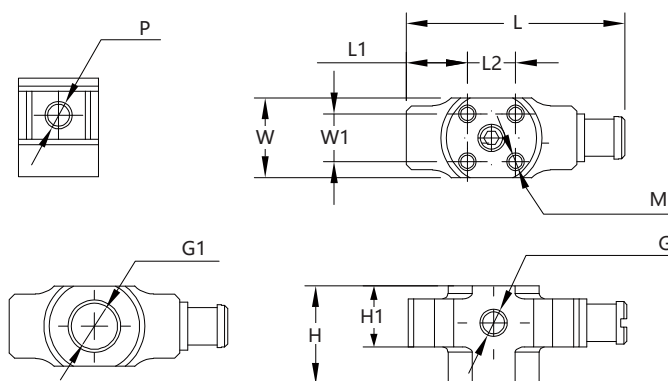


Utility

Performance parameter



ECO-H2010 Design Data



ECO-H2010

model

Size[mm]	L	L1	L2	W	W1	H	H1	P	G	G1	M
ECO-H2010-M03	41	11.5	9	15	9	18.5	11.5	M5	M5	G1/8"	4-M3 DEEP 6
ECO-H2010-L02	41	11.5	9	15	9	18.5	11.5	M5	M5	G1/8"	4-M3 DEEP 6
ECO-H2010-H25	41	11.5	9	15	9	18.5	11.5	M5	M5	G1/8"	4-M3 DEEP 6
ECO-H2010-T05	41	11.5	9	15	9	18.5	11.5	M5	M5	G1/8"	4-M3 DEEP 6



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Vacuum Generator ECO

Vacuum flow rate: 80L/Min ~ 85L/Min

HANVAC



Utility

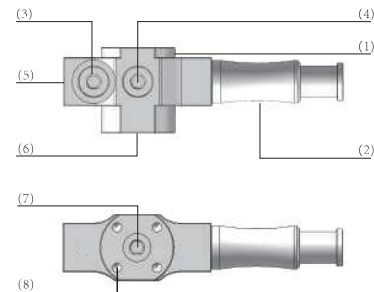
Product characteristics

- *Can integrate various types of suction cups and modular design together.
- *Reduce installation costs by half, such as solenoid valves, hoses, etc
- *Suitable for general end effectors, there is no need to adjust the bracket when replacing the vacuum generator



Product structure

- *(1) The main body is made of aluminum profiles, with small volume and light weight
- *(2) The air outlet is made of aluminum oxide
- *(3) P: G1/8 2-position air intake (both sides)
- *(4) V: G1/8 2-position vacuum detection (both sides)
- *(5) Compressed air inlet
- *(6) Vacuum connection port
- *(7) V: G1/8 vacuum detection



Product advantages

- *Reduce energy consumption by more than 50%, and release quickly and accurately without compressed air consumption
- *No maintenance required and reduces maintenance and spare parts costs



* ECO-H3010 case

Vacuum Generator

ECO

Vacuum flow rate: 80L/Min ~ 85L/Min

HANVAC


Utility



ECO-H3010 Ordering NO

ECO	–	H3010	–	FG02	–	M	–	S
1		2		3		4		5

1-Series		2-Model		3-Threaded	
ECO	Vacuum Generator	H3010		F internal thread	G02-G1/4 G03-G3/8

4- Specifications		5-Silencer	
M	Low intake	S	With silencer
H	High vacuum		Without silencer



ECO-H3010 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECO-H3010-FG02-M	air	0-60	0.32	26.4	90	84	0.1
ECO-H3010-FG03-M	air	0-60	0.32	26.4	90	84	0.1
ECO-H3010-FG02-H	air	0-60	0.5	26.4	92	80	0.1
ECO-H3010-FG03-H	air	0-60	0.5	26.4	92	80	0.1

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80	90
ECO-H3010-**-M-S	84	36	26.4	16.2	11.4	8.4	6	3.6	1.8	0
ECO-H3010-**-H-S	85.8	42	30	19.8	11.4	9	6.6	4.2	2.7	0.011

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
ECO-H3010-**-M-S	0.08	0.23	0.49	1	1.7	2.6	3.9	6.3	0
ECO-H3010-**-H-S	0.09	0.26	0.5	0.9	1.5	2.2	3.4	5.2	8.8



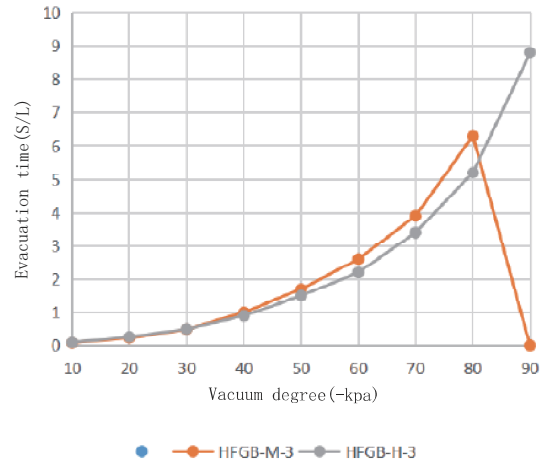
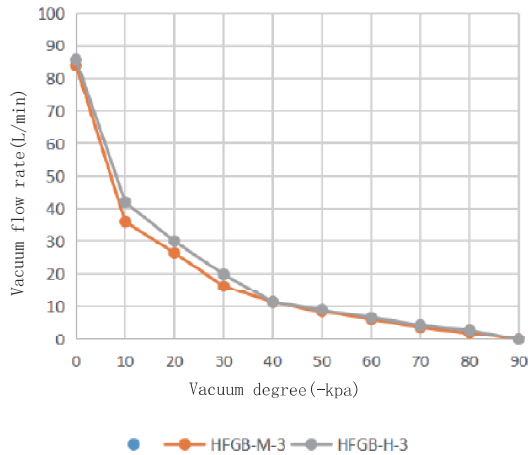
Vacuum Generator ECO

Vacuum flow rate: 80L/Min ~ 85L/Min

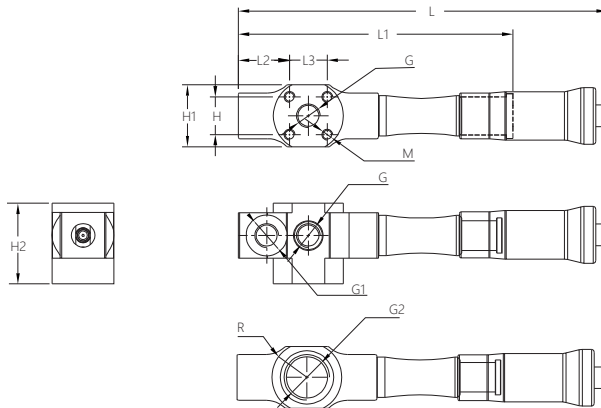
HANVAC


Utility

Performance parameter



ECO-H3010 Design Data



ECO-H3010

model	L	L1	L2	L3	H	H1	H2	G[V]	G1[P]	G2[V]	R	M
Size[mm]												
ECO-H3010	136.6	98	19	14	14	23	30	G1/8	G1/8	G1/4	13	4-M4 DEEP 8
-FG02-M-S	136.6	98	19	14	14	23	30	G1/8	G1/8	G3/8	13	4-M4 DEEP 8
ECO-H3010	136.6	98	19	14	14	23	30	G1/8	G1/8	G1/4	13	4-M4 DEEP 8
-FG02-H-S	136.6	98	19	14	14	23	30	G1/8	G1/8	G3/8	13	4-M4 DEEP 8
ECO-H3010	136.6	98	19	14	14	23	30	G1/8	G1/8	G3/8	13	4-M4 DEEP 8
-FG03-H-S	136.6	98	19	14	14	23	30	G1/8	G1/8	G3/8	13	4-M4 DEEP 8

Vacuum Generator ECO

Maximum vacuum flow rate: 40~45L/Min

HANVAC



Utility

Product characteristics

*ECO pumps have excellent vacuum characteristics even at low power fluctuation pressures. Optimize the overall size of pipeline design. The aluminum body provides high-strength threads in the vacuum port, allowing for direct repair of the connection cup, avoiding the need for additional pipes or fittings.

*Linear installation method

*Slender shell, compact and compact in size

*Optimal lateral direct exhaust design



Product structure

* (1) P: Compressed air inlet

* (2) V: Vacuum port

* (3) Exhaust port

* Provide multiple sizes of upper (1) lower (2) connection internal threads



Product advantages

*Inline design, optimizing overall dimensions

*Suitable for installation in small spaces

*Easy to connect, no need to add installation accessories

*Maximum reduction of product noise



*ECO-H3020 case



Vacuum Generator

ECO

HANVAC


Utility

Maximum vacuum flow rate: 40~45L/Min



ECO-H3020 Ordering NO

ECO	-	H3020	-	M
1		2		3

1-Series		2-Model		4- Specifications	
ECO	Vacuum Generator	H3020	small-scale	M	Low intake
				H	High vacuum



ECO-H3020 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECO-H3020-M	air	0-60	0.32	26.4	90	40	0.1
ECO-H3020-H	air	0-60	0.5	27.6	94	45	0.1

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80	90
ECO-H3020-M	40.8	36	26.4	16.2	11.4	8.4	6	3.6	1.8	0
ECO-H3020-H	45	37.8	29.4	19.8	11.4	9	6.6	4.2	2.7	0.011

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
ECO-H3020-M	0.17	0.32	0.58	1.1	1.8	2.7	4	6.4	0
ECO-H3020-H	0.14	0.3	0.6	1	1.6	2.3	3.5	5.3	8.9


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Vacuum Generator ECO

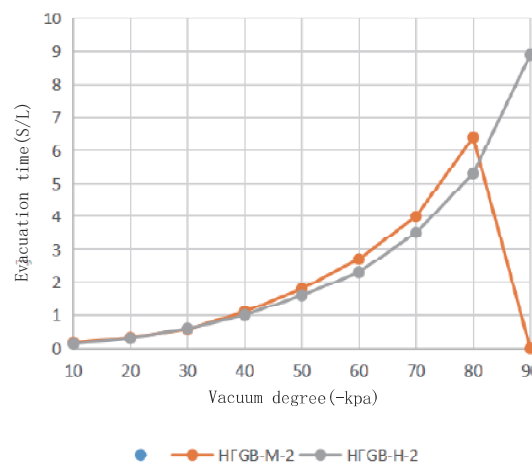
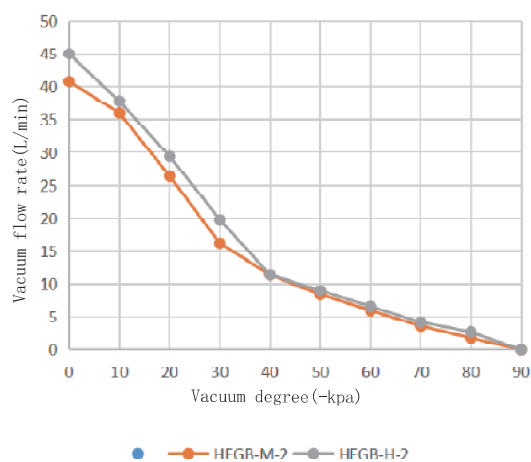
Maximum vacuum flow rate: 40~45L/Min

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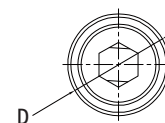
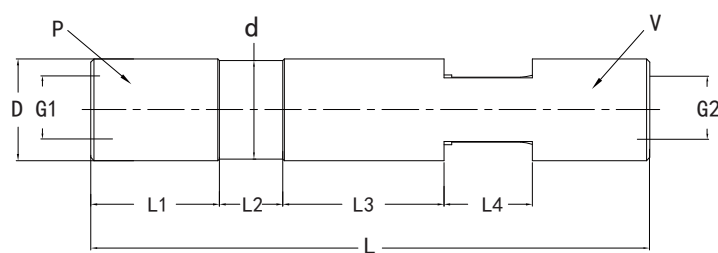


Utility

Performance parameter



ECO-H3020 Design Data



ECO-H3020

model

Size[mm]	D	G1	G2	d	L1	L2	L3	L4	L
ECO-H3020-M	16	G1/4" - F	G1/4" - M	15.5	20.3	10.0	25.4	13.9	88
ECO-H3020-H	16	G1/4" - F	G1/4" - M	15.5	20.3	10.0	25.4	13.9	88



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Vacuum Generator

ECG

Maximum vacuum flow: 73L/Min

HANVAC



Utility

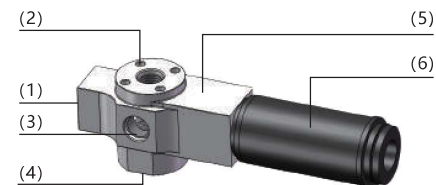
Product characteristics

- * Lightweight vacuum generator with plastic housing
- * ECO-H4005 series generators are suitable for very harsh environments and meet high dust and humidity requirements
- * Suitable for applications requiring less vacuum, such as packaging/bag handling
- * Integrated silencer reduces noise levels
- * The ECO-H4005 series generator is compatible with any HANWHA G3/8" suction cup
- * Similar generators, the same parameters, the shortest size



Product structure

- * Body: made of aluminum alloy, small size, light weight
- * (1) Connector: For compressed air inlet connector G1/8
- * (2) Mounting screw: 4XM4
- * (3) Connection port: vacuum detection port G1/8
- * (4) Connector: Vacuum connector G3/8
- * (5) Silencer: made of anodized aluminum
- * (6) Silencer cylinder



Product advantages

- * Efficient and energy-saving vacuum generator, can quickly reach the maximum vacuum degree
- * The corresponding generator can be selected according to different working conditions



*ECO-H4005 case

Vacuum Generator

ECG

Maximum vacuum flow: 73L/Min

HANVAC


Utility



ECO-H4005 Ordering NO

ECO	—	H4005	—	H
1		2		3

1-Series	2-Model	3-Specifications
ECO	Vacuum Generator	H
		L
		High vacuum (green diaphragm)
		Low vacuum (without diaphragm)



ECO-H4005 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]
ECO-H4005-H	air	-8~80	0.5	54	90	73
ECO-H4005-L	air	-8~80	0.5	54	53	73

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80
ECO-H4005-H	207.6	181.2	144.6	102	61.2	36.6	28.2	16.8	6
ECO-H4005-L	207.6	181.2	144.6	102	61.2	14.4	0	0	0

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80
ECO-H4005-H	0.038	0.074	0.123	0.204	0.356	0.577	0.879	1.718
ECO-H4005-L	0.031	0.068	0.116	0.19	0.349	0	0	0

Vacuum Generator

ECG

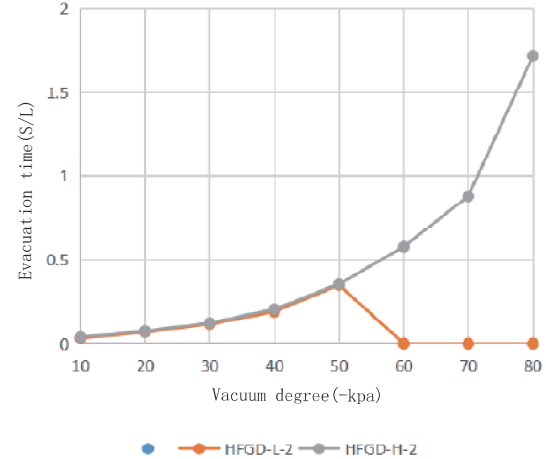
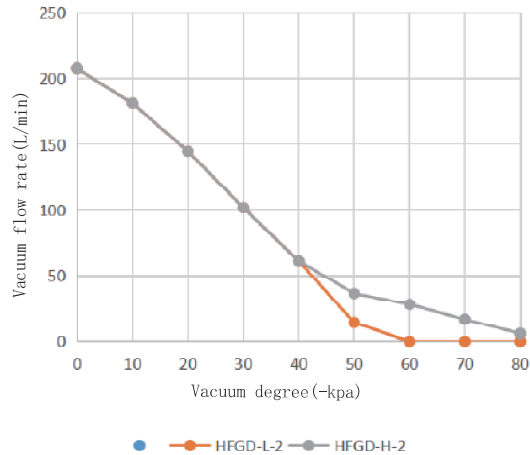
Maximum vacuum flow: 73L/Min

HANVAC

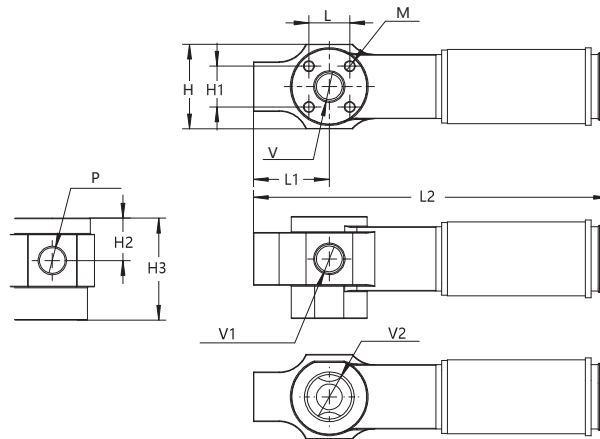


Utility

Performance parameter



ECO-H4005 Design Data



ECO-H4005

model

Size[mm]	L	L1	L2	H	H1	H2	H3	M	V	V1	V2	P
ECO-H4005	14	26	122	29	14	14.50	35	4XM4	G1/8	2xG1/8	G3/8	G1/8

Vacuum Generator ECO

Maximum vacuum flow: 207L/Min

HANVAC



Utility

Product characteristics

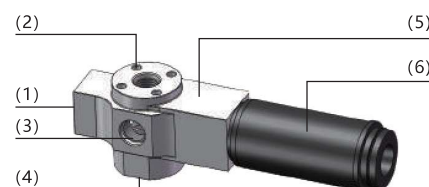
- *With plastic casing, lightweight vacuum generator
- *ECO-H4010 series generators are suitable for extremely harsh environments and meet high dust and humidity requirements
- *Suitable for applications that require less vacuum, such as packaging/bag handling, etc
- *Integrated silencer reduces noise levels
- *ECO-H4010 series generators are compatible with any HANWHA G3/8 "suction cup
- *Among generators of the same type, with the same parameters, the



Product structure

*Main body: Made of aluminum alloy, small in size and light in weight

- * (1) Connector: Used for compressed air intake connector G1/8
- * (2) Installation screw: 4XM4
- * (3) Connection port: Vacuum detection port G1/8
- * (4) Connection port: Vacuum connection port G3/8
- * (5) Silencer: made of anodized aluminum oxide
- * (6) Silencer tube



Product advantages

- *Efficient and energy-saving vacuum generator that can quickly reach maximum vacuum degree
- *Corresponding generators can be selected according to different operating conditions
- *The installation structure is simple and can be quickly installed
- *Reduce product noise



*ECO-H4010 case

Vacuum Generator

ECO

HANVAC


Utility

Maximum vacuum flow: 207L/Min



ECO-H4010 Ordering NO

ECO	H4010	H	N
1	2	3	4

1-Series	2-Model	3-Specifications
ECO	H4010	H High vacuum (red diaphragm) L Low vacuum (without diaphragm)
4-Silencing		
N		
S	Extended noise reduction	



ECO-H4010 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]
ECO-H4010-H	air	-8~80	0.44	118	90	207
ECO-H4010-L	air	-8~80	0.44	118	50	207

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80
ECO-H4010-H	73.2	61.8	46.8	31.2	16.2	12.6	9	5.4	1.8
ECO-H4010-L	73.2	61.8	46.8	31.2	16.2	0	0	0	0

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80
ECO-H4010-H	0.082	0.201	0.374	0.674	1.216	1.914	2.978	6.187
ECO-H4010-L	0.089	0.199	0.353	0.606	0	0	0	0


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Vacuum Generator

ECO

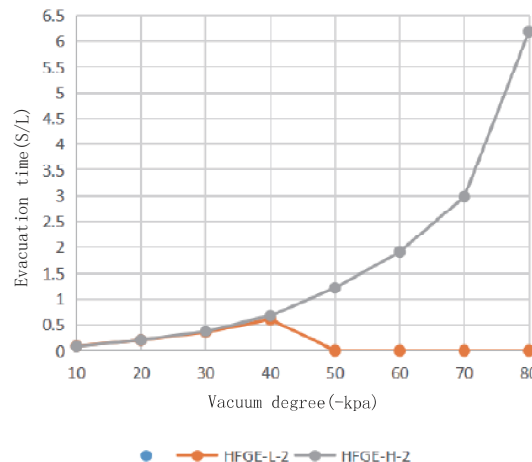
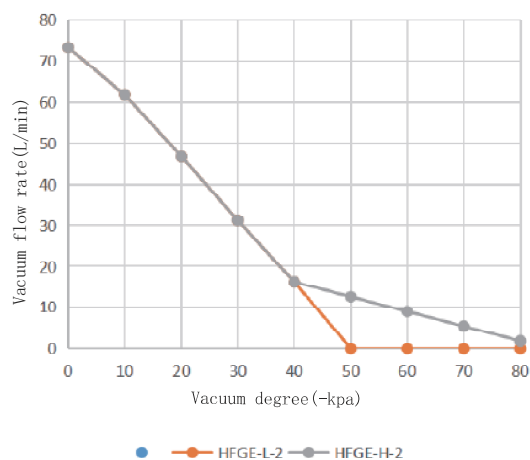
Maximum vacuum flow: 207L/Min

HANVAC

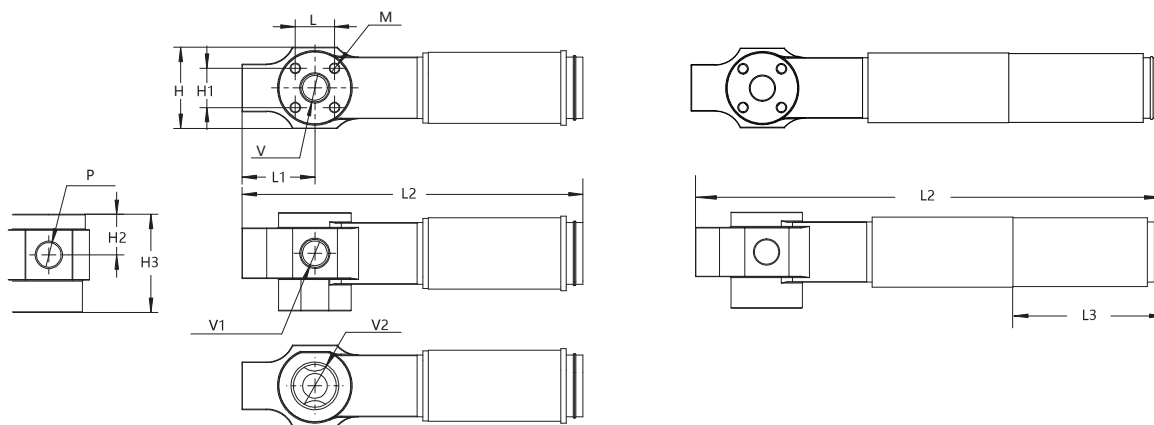


Utility

Performance parameter



ECO-H4010 Design Data



ECO-H4010/ECO-H4010-S

model

Size[mm]	L	L1	L2	L3	H	H1	H2	H3	M	V	V1	V2	P
ECO-H4010	14	26	122	/	29	14	14.50	35	4XM4	G1/8	2xG1/8	G3/8	G1/8
ECO-H4010-S	14	26	177	55	29	14	14.50	35	4XM4	G1/8	2xG1/8	G3/8	G1/8



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Vacuum Generator ECO

Maximum vacuum flow: -94Kpa

HANVAC



Utility

Product characteristics

*Can integrate various types of suction cups and modular design together. This vacuum gripping system greatly simplifies the selection and installation of vacuum systems. Take you on a tour of the wonders of a more energy-efficient, efficient, and reliable distributed vacuum system.

*Modular, fast and convenient installation design, vacuum system with advantages such as economic efficiency and reliable operation, can greatly simplify the selection and work of vacuum systems, and provide more convenience for customers.



Product structure

*Main body: Made of aluminum alloy, small in size and light in weight

*(1) Connector: used for compressed air intake connector

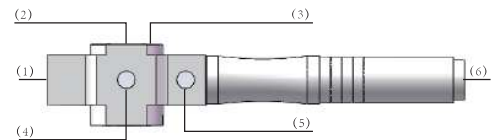
*(2) Connection port: 2-position vacuum detection port

*(3) Installation screw: M6x4

*(4) Connection port: 2-position intake (both sides)

*(5) Connection port: 2-position vacuum detection port

*(6) Silencer: made of anodized aluminum oxide



Product advantages

*Energy saving, high efficiency, and low noise. High vacuum, high flow rate, easy to maintain.



Vacuum Generator ECO

Maximum vacuum flow: -94Kpa

HANVAC



Utility



ECO-H5010 Ordering NO

ECO	-	H5010	-	H		S
1		2		3		4

1-Series		2-Model		3- Specifications	
ECO		H5010		H	High vacuum (red diaphragm)
				M	Low intake
				L	Low vacuum (green diaphragm)
4-Silencer					
	No silencer				
S	With silencer				



ECO-H5010 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]
ECO-H5010-L	air	0~60	0.5	90	70	342
ECO-H5010-H	air	0~60	0.5	120	94	372
ECO-H5010-M	air	0~60	0.31	123	90	336

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80	90
ECO-H5010-H	372	222	132	108	78	48.6	24	18	8.4	1.2
ECO-H5010-L	342	198	132	84	51	37.2	21	10.8	0	0
ECO-H5010-M	336	150	108	66	39	30	21	15	6	0

Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
ECO-H5010-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECO-H5010-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECO-H5010-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4



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Vacuum Generator

ECO

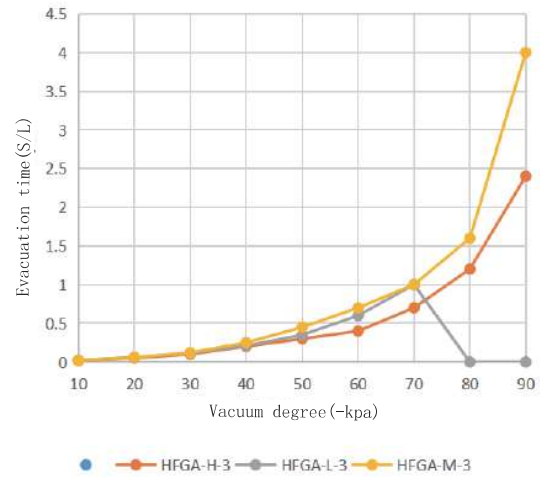
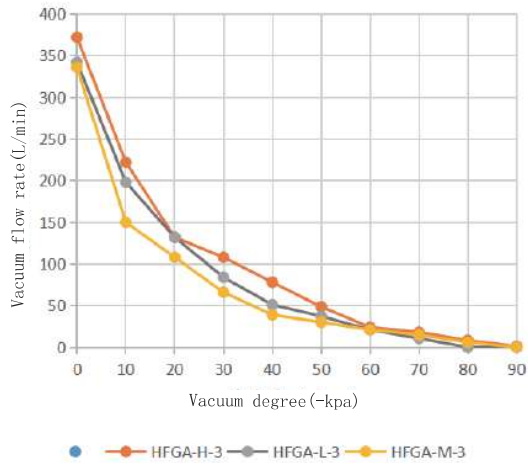
Maximum vacuum flow: -94Kpa

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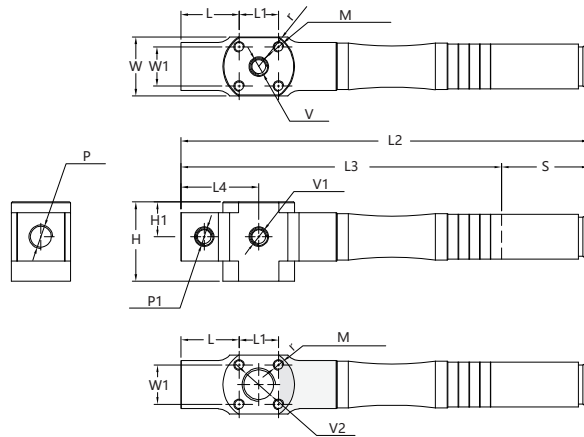


Utility

Performance parameter



ECO-H5010 Design Data



ECO-H5010

model

Size[mm]	L	L1	L2	L3	L4	W	W1	H	H1
ECO-H5010-HS	32.5	22	228.1	179.1	43.5	33	22	44.4	19.5
ECO-H5010-LS	32.5	22	228.1	179.1	43.5	33	22	44.4	19.5
ECO-H5010-MS	32.5	22	228.1	179.1	43.5	33	22	44.4	19.5

V	V1	V2	P	P1	r	S	M
G1/4"	G1/4"	G1/2"	G1/4"	G1/4"	R20	Silencer pipe	4-M6 DEEP 10
G1/4"	G1/4"	G1/2"	G1/4"	G1/4"	R20	Silencer pipe	4-M6 DEEP 10
G1/4"	G1/4"	G1/2"	G1/4"	G1/4"	R20	Silencer pipe	4-M6 DEEP 10



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Vacuum Generator ECO

Maximum vacuum flow: -94Kpa

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Utility

Product characteristics

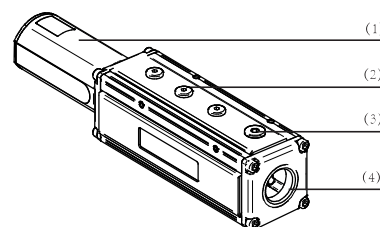
- *The vacuum generator body is made of aluminum oxide
 - *Multi stage vacuum tubes can meet the vacuum flow rate in different situations, thereby improving the vacuum degree.
- The vacuum interface is threaded G3/4



Product structure

*Main body: Made of aluminum, small in size and light in weight

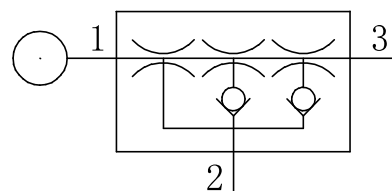
- * (1) Silencer: made of anodized aluminum oxide
- * (2) V: G1/8 vacuum detection port
- * (3) P: G1/4 compressed air inlet
- * (4) V: G1 vacuum connection port



Product advantages

*Modular, fast and convenient installation design, vacuum system with advantages such as economic efficiency and reliable operation, can greatly simplify the selection and work of vacuum systems. Provide customers with more convenience.

Pneumatic schematic diagram



Vacuum Generator

ECO

HANVAC


Utility

Maximum vacuum flow: -94Kpa



ECO-H6010 Ordering NO

ECO	H6010	M	01	S
1	2	3	4	5

1-Series	2-Model	3-Specifications
ECO Vacuum generator	H6010	H High vacuum M Low intake L Low vacuum
4- Number of vacuum tubes	5-Silencer	
01~04 1-4 occurrence canals	No silencer S With silencer	



ECO-H6010 Technical Data

Models	Use fluid	Temperature [°C]	Intake pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]
ECO-H6010-H01-S	air	0~60	0.5	120	94	372
ECO-H6010-H02-S	air	0~60	0.5	240	94	744
ECO-H6010-H03-S	air	0~60	0.5	360	94	1116
ECO-H6010-H04-S	air	0~60	0.5	480	94	1488
ECO-H6010-L01-S	air	0~60	0.5	90	70	342
ECO-H6010-L02-S	air	0~60	0.5	180	70	684
ECO-H6010-L03-S	air	0~60	0.5	270	70	1026
ECO-H6010-L04-S	air	0~60	0.5	360	70	1368
ECO-H6010-M01-S	air	0~60	0.31	120	90	336
ECO-H6010-M02-S	air	0~60	0.31	240	90	672
ECO-H6010-M03-S	air	0~60	0.31	360	90	1008
ECO-H6010-M04-S	air	0~60	0.31	480	90	1344


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Vacuum Generator ECO

Maximum vacuum flow: -94Kpa

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Utility

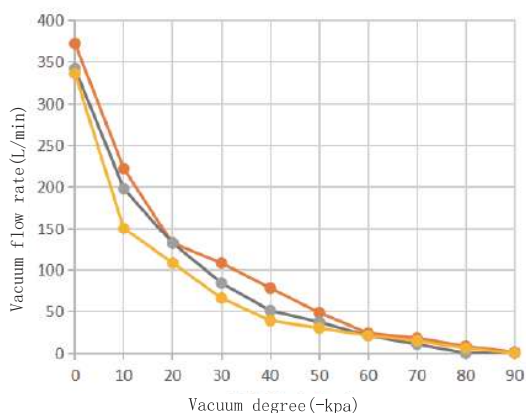
Vacuum flow rate (L/min) for different vacuum degrees (- kpa)

Models	0	10	20	30	40	50	60	70	80	90
ECO-H6010-H	372	222	132	108	78	48.6	24	18	8.4	1.2
ECO-H6010-L	342	198	132	84	51	37.2	21	10.8	0	0
ECO-H6010-M	336	150	108	66	39	30	21	15	6	0

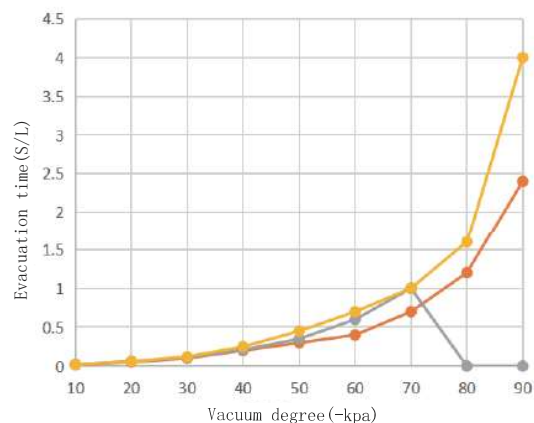
Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
ECO-H6010-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECO-H6010-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECO-H6010-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4

Performance parameter



● HFGA-H-3 ● HFGA-L-3 ● HFGA-M-3



● HFGA-H-3 ● HFGA-L-3 ● HFGA-M-3

Vacuum Generator

ECO

Maximum vacuum flow: -94Kpa

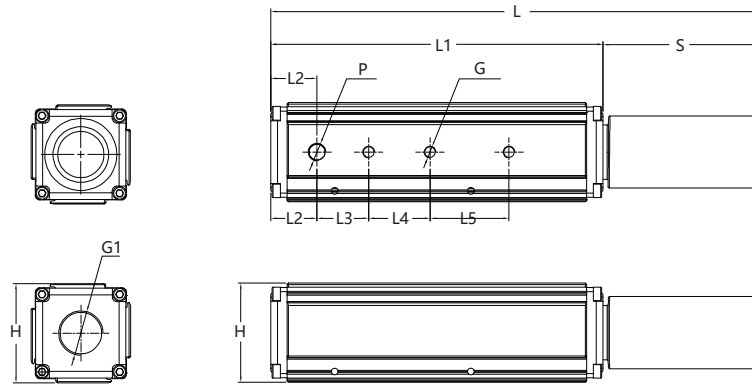
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Utility



ECO-H6010 Design Data



ECO-H6010

model

Size[mm]	L	L1	L2	L3	L4	L5	H	P	G	G1	S
ECO-H6010-H01-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-H02-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-H03-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-H04-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-L01-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-L02-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-L03-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-L04-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-M01-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-M02-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-M03-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer
ECO-H6010-M04-S	331	214	34	38	45	58	73	G1/4"	3-G1/8"	G1	Silencer



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Vacuum Generator ECO

Maximum vacuum flow: -94kpa

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General

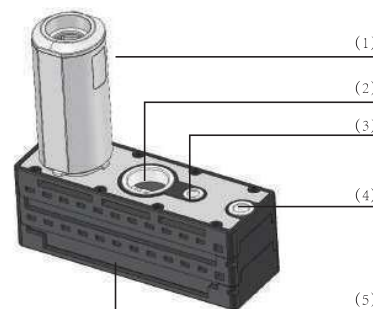
Product characteristics

- * Unique patented design, the industry's latest technology.
- * High quality plastic shell precision, high vacuum.
- * Suitable for a variety of environments, all walks of life use (workpiece absorption).
- * The overall structure adopts the sliding combination, no connection rod is required, and the installation is convenient.



Product structure

- * 1. Install silencer cylinder at G3/4 exhaust port
- * 2. G3/4 Vacuum port
- * 3. 1/8 vacuum gauge
- * 4. G1/4 air supply port
- * 5. High quality plastic shell



Product advantages

- * Gas supply pressure range 0.3~0.5Mpa
- * Exhaust noise: 50~60dB(A)
- * Maximum vacuum: -94kPa



Vacuum Generator

ECO

HANVAC


General

Maximum vacuum flow: -94Kpa



ECO-H7010 Ordering NO

ECO 1	—	H7010 2	—	H 3	—	1 4	—	G06 5	—	P 6						
47 7	—	S 8														
1-Series			2-Models			3-Specification										
ECO		Vacuum generator	H7010		<table><tr><td>H</td><td>High vacuum</td></tr><tr><td>M</td><td>Low vacuum</td></tr><tr><td>L</td><td>Low admission</td></tr></table>						H	High vacuum	M	Low vacuum	L	Low admission
H	High vacuum															
M	Low vacuum															
L	Low admission															
4-Number of vacuum tubes			5-Vacuum port			6-Control device										
1~6		1-6 Optional	G06		G3/4	<table><tr><td>Valveless (standard)</td></tr></table>				Valveless (standard)						
Valveless (standard)																
7-Pressure gage			G08		G1											
47			8-Silencer		*Please contact us for special customization (P: air supply valve E: energy saving valve X: air supply damage valve)											
		Mechanical watch	S1		With silencer (1 section)											
		47C-01Pressure sensor	S2		With silencer (2section)											

Vacuum Generator

ECO

Maximum vacuum flow: -94Kpa

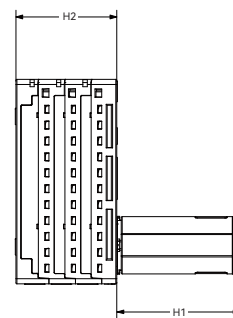
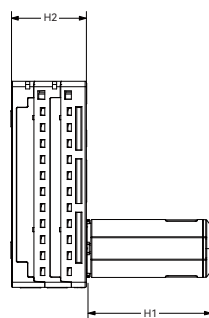
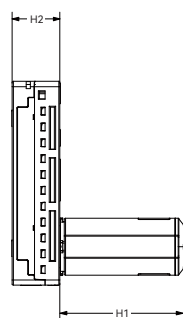
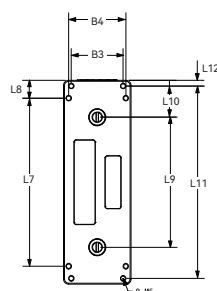
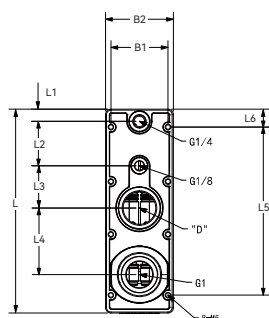
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General



ECO-H7010 Design Data



ECO-H7010-1/ECO-H7010-2

ECO-H7010-3/ECO-H7010-4

ECO-H7010-5/ECO-H7010-6

Models

Size[mm]	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	B1	B2	B3	B4	H1	H2
ECO-H7010-1*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	45
ECO-H7010-2*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	45
ECO-H7010-3*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	70
ECO-H7010-4*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	70
ECO-H7010-5*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	95
ECO-H7010-6*	159	11.5	42	40	63	159	17	159	17	123	35	182	5.5	54	64	49	54	117.3	95

Models

Models	Volume[mm ³]
ECO-H7010-1*	763920
ECO-H7010-2*	763920
ECO-H7010-3*	1018320
ECO-H7010-4*	1018320
ECO-H7010-5*	1272720
ECO-H7010-6*	1272720

$$*ECO-H7010volume=(L*B2*H2+306000)mm^3$$



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Vacuum Generator ECV

Maximum vacuum flow: -92Kpa

HANVAC



General

Product characteristics

- * Energy efficient nozzle technology enables high suction rates while minimizing compressed air loss consumption
- * Compact, lightweight, can be installed directly on the grasping system
- * Single L-bracket, integrated DIN rail mounting, centralized gas supply
- * ECV-180M-S effectively reduces noise, with A minimum noise value of 60[dB(A)]

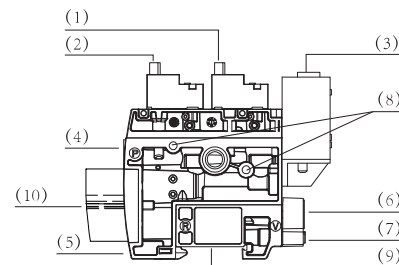


ECV-180M-S

ECV-180M

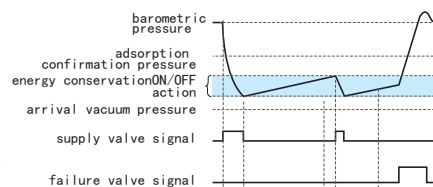
Product structure

- * "Build vacuum" valve (1)
- * "Quick Release" valve (2)
- * LED display vacuum pressure switch (3)
- * Air intake P: G1/8 (4)
- * Air Intake & Muffler Cover (5)
- * Vacuum port V: G1/8 (6)
- * Exhaust adjustment screws (7)
- * Mounting holes (8)
- * Optional rail mounting (9)
- * Enhanced muffler cover (10)

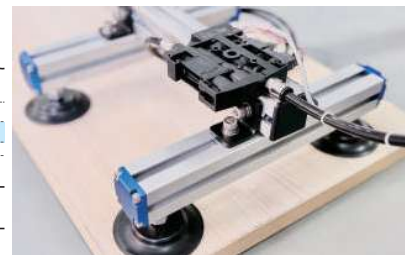


Product advantages

- * Pressure switch with energy-saving function minimizes compressed air consumption by 90% (according to our measurement conditions)
- * The ON/OFF action of the supply valve can be switched automatically within the set value range
- * The exhaust noise of the vacuum generator is also reduced in the energy-saving state



output action mode



* Vacuum generator ECV-180 application example

Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

HANVAC



General



ECV-180M Ordering NO

ECV	180M	10	N
1	2	3	4

1-Series	2-Models	3-Specification
ECV	180M	10 1.0nozzle
	180M-S	15 1.5nozzle
		GH High vacuum
		GM Low supply voltage
4-Vacuum Pressure switch		
N	NPN No energy saving function	
P	PNP No energy saving function	
NE	NPN With energy-saving function	
PE	PNP With energy-saving function	
	With energy-saving function without vacuum switch	



ECV-180M Technical Data

Models	inlet pressure [Bar]	Inspiratory air consumption [L/Min]	Air consumption by blowing [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	* Noise at maximum vacuum [dB (A)]
ECV-180M-10	4.3	45	60	85	36.1	64
ECV-180M-15	4.3	100	60	85	65.5	68
ECV-180M-GH	5	26.4	60	92	45	64
ECV-180M-GM	3.2	27.6	60	90	41	64
ECV-180M-10-S	4.3	45	60	85	36.1	60
ECV-180M-15-S	4.3	100	60	85	65.5	65
ECV-180M-GH-S	5	26.4	60	92	45	60
ECV-180M-GM-S	3.2	27.6	60	90	41	60

* For details see < Noise Decibel Diagram >



Vacuum Generator ECV

Maximum vacuum flow: -92Kpa

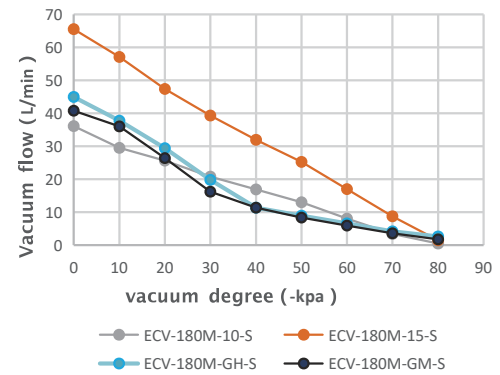
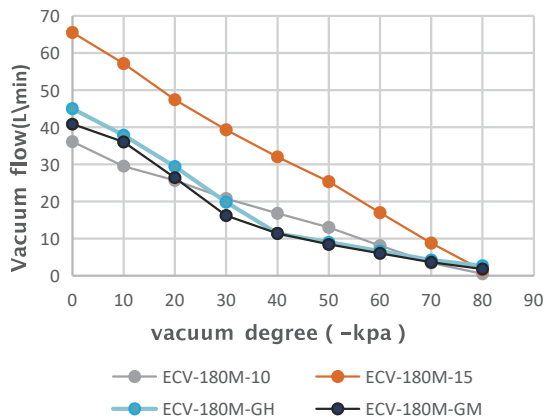
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General

Vacuum flow (L/min) with different vacuum degree (-KPa)

Models	0	10	20	30	40	50	60	70	80
ECV-180M-10	36.1	29.5	25.7	20.8	16.9	13	8.1	3.4	0.5
ECV-180M-15	65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5
ECV-180M-GH	45	37.8	29.4	19.8	11.4	9	6.6	4.2	2.7
ECV-180M-GM	40.8	36	26.4	16.2	11.4	8.4	6	3.6	1.8
ECV-180M-10-S	36.1	29.5	25.7	20.8	16.9	13	8.1	3.4	0.5
ECV-180M-15-S	65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5
ECV-180M-GH-S	45	37.8	29.4	19.8	11.4	9	6.6	4.2	2.7
ECV-180M-GM-S	40.8	36	26.4	16.2	11.4	8.4	6	3.6	1.8



Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

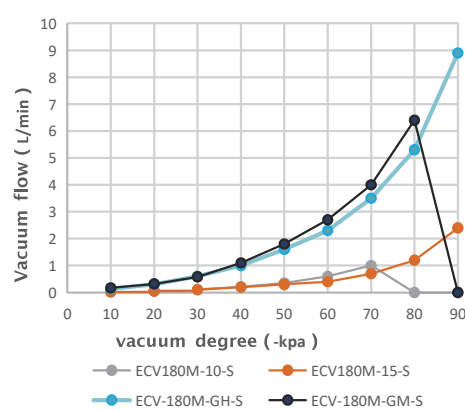
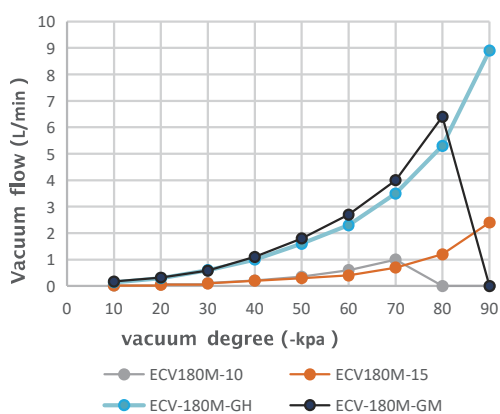
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General

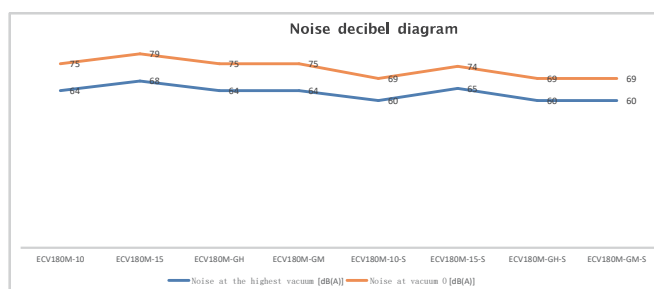
Pumping time with different vacuum (-KPa) (S/L)

Models	10	20	30	40	50	60	70	80	90
ECV-180M-10	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECV-180M-15	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECV-180M-GH	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
ECV-180M-GM	36	36	36	36	36	36	36	36	36
ECV-180M-10-S	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECV-180M-15-S	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECV-180M-GH-S	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
ECV-180M-GM-S	36	36	36	36	36	36	36	36	36



ECV-180M/ECV-180M-S Noise decibels of vacuum generators [dB (A)]

Models	Noise at the highest vacuum [dB(A)]	Noise at vacuum 0 [dB(A)]
ECV-180M-10	64	75
ECV-180M-15	68	79
ECV180M-GH	64	75
ECV180M-GM	64	75
ECV-180M-10-S	60	69
ECV-180M-15-S	65	74
ECV180M-GH-S	60	69
ECV180M-GM-S	60	69



Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

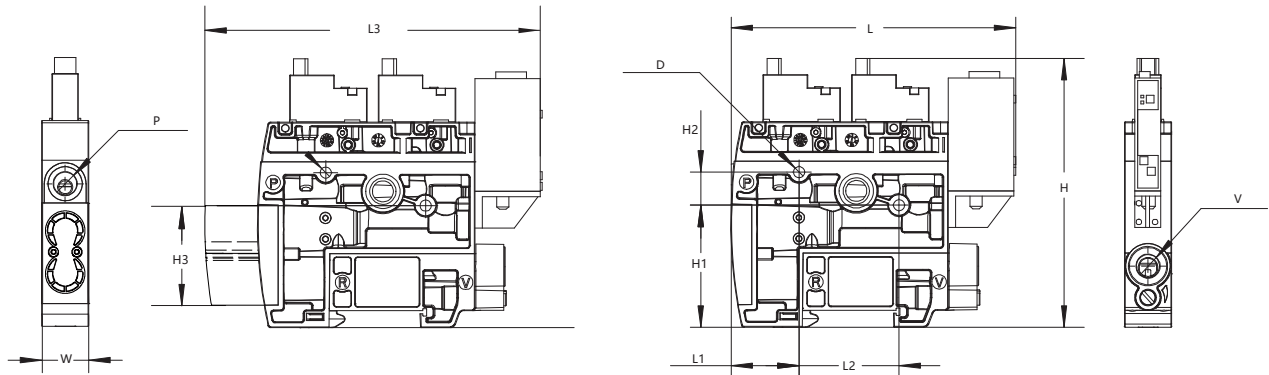
HANVAC



General



ECV-180M Design Data



ECV-180M/ECV-180M-S

Size[mm]

Models	L	L1	L2	L3	H	H1	H2	H3	W	D	P	V
ECV-180M-**	108.5	25.9	38.1	/	102.5	46.55	12.6	/	18	2-φ4.2	G1/8"	G1/8"
ECV-180M-**-S	108.5	25.9	38.1	128	102.5	46.55	12.6	38	18	2-φ4.2	G1/8"	G1/8"



Solenoid Valve Technical Data

Item	Technical parameter number	Project	Technical parameter number
Type	Two-position tee	Port type	T102-BL-B
Working medium	Compressed air, inert gas	Electrical interface mode	Right Angle (L-shaped)
Ambient temperature	-10°C~+80°C	Standard voltage	DC 24V
Working pressure	0~7bar	Allowable voltage fluctuation	Plus or minus 10%
On-current duration	ED 100%	Maximum operating frequency	10 Hz
Insulation class	H	Service life	More than 50 million times
Class of protection	IP50		

* Supply air containing foreign matter, moisture, oil, condensate, etc., may lead to poor operation of supply valve and damage valve. Therefore, please set up air purification components in the upstream of the product, and carry out regular maintenance, and fully manage the supply air.

* Please set the air filter and oil mist separator upstream of the product (especially the oil mist separator must be installed in high-frequency occasions)

Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

HANVAC



General



Pressure Switch Technical Data

Model number		P93
Rated pressure range		-100.0-100.0kpa
Set pressure range		-105.0-105.0kpa
Pressure resistance		500kpa
Applicable gas		Air, non-corrosive, non-flammable
The pressure unit is set to a minimum scale	Kpa	0.1
	Kgf/cm2	0.001
	Bar	0.001
	Psi	0.01
	Inhg	0.1
	Mmhg	1
Supply voltage		24V DC±10%, wave crest value below 10%
Current consumption		≤40mA (off load)
Switching output	Action display light	NPN or PNPcollector output
	output mode	125mA
	Maximum load current	24V DC
	Maximum supply voltage	≤1.5V
control input	Internal pressure drop	NPN type
		Low level input (SPST or electronic contact)
		Level voltage: below 0.4V DC, input time above 10ms
		PNP type
		High level input (SPST or electronic contact)
		Level voltage: below 20-24V DC, input time above 10ms
Solenoid valve drives maximum current		200mA@24V DC max
repeatability		±0.2% F.S. ±1 digit
Switching reaction time		≤2.5ms
		(Error prevention function: 2.5ms, 20ms, 100ms, 500ms, 1000ms and 1999ms optional)
Short-circuit protection		OUT switch: Yes, vacuum solenoid valve (V-Sol)/Broken vacuum solenoid valve (D-Sol) : No
reveal		31/2-bit LED 7-segment display (red) (sampling rate 5 times/SEC)
Display accuracy		±2% F.S. ±1 digit
Motion display light		OUT Green/V-Sol control input: red (vacuum mark)



Vacuum Generator ECV

Maximum vacuum flow: -92Kpa

HANVAC



General

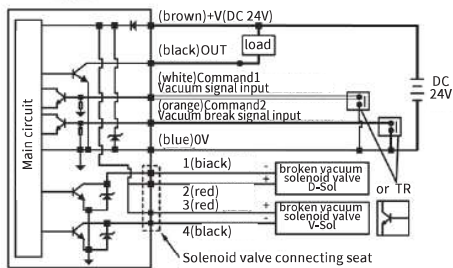


Pressure Switch Technical Data

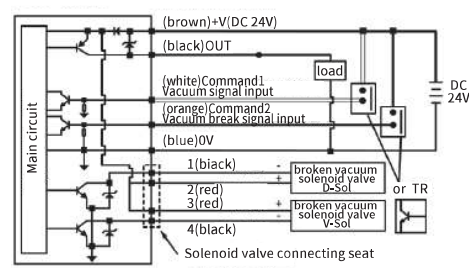
Model number	P93	
Environmental requirement	Class of protection	IP40
	Ambient temperature	Action: 0-50°C storage -10-60°C (no water dew, no freezing)
	Ambient humidity	Operation and storage: 35-80% RH (no water)
	Withstand voltage	1000VAC 1 min (between lead and housing)
	Insulation impedance	Above 500MΩ (500V DC) (between the lead and the housing)
	Vibration resistance	Complex amplitude 1.5mm or 10G, 10HZ-150HZ-10HZ every minute, 2 hours in each direction X,Y,Z
	Impact resistance	900m/s ² (100G), 3 times in each direction X,Y,Z
Temperature characteristic		±2% F.F. Comparison reference temperature 25°C (0-50°C temperature range)
Intake form		90 ° inlet Port & None
Wire specification		Oil resistant PVC wire (0.15mm ²)
weight		Approx. 58g (includes 2 meters of wire)



Pressure Switch Circuit Wiring diagram



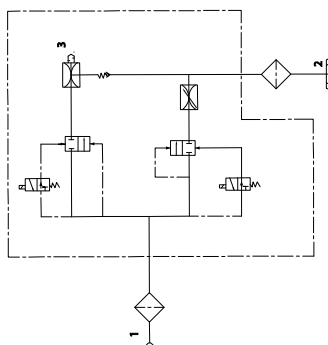
NPN output



PNP output



Schematic Diagram Of Gas Path



Vacuum Generator ECV

Max. 16 sets

HANVAC



General

Product characteristics

- * Energy efficient nozzle technology enables high suction rates while minimizing compressed air consumption
- * Compact, lightweight, can be installed directly on the grasping system
- * Single L-bracket, integrated DIN rail mounting, centralized gas supply
- * ECV-180M-S effectively reduces noise, with A minimum noise value of 60[dB(A)]



ECV-180M Ordering NO

ECV	180M	10	S	N	F2
1	2	3	4	5	6

1-Series		2-Models		3-Specification	
ECV		180M		10	1.0 Nozzle
				15	1.5 Nozzle
				GH	High vacuum
				GM	Low supply
4-Silencer		5-Vacuum pressure switch			
		N	NPN no energy saving function		
S	With enhanced silencing	P	PNP no energy saving function		
		NE	NPN with energy-saving function		
		PE	PNP with energy-saving function		
			No vacuum switch		
6-Quantity					
F2	2 sets				
F3	3sets				
F4	4sets				
F5	5sets				
....	...sets				
F16	16sets				

*1.5 Nozzle specifications Up to 10 sets, 1.0 nozzle/ high vacuum GH/ low gas supply GM up to 16 sets *

*1.5 Nozzle specifications Up to 10 sets, 1.0 nozzle/ high vacuum GH/ low gas supply GM up to 16 sets *

Vacuum Generator

ECV

Max. 16 sets

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General



ECV-180M Technical Data

Models	Used fluid	Temperature [°C]	inlet pressure [Mpa]	Inspiratory air consumption [L/Min]	Air consumption by blowing [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]
ECV-180M-10-F2	air	0~60 (non-freezing)	4.3	90	120	85	72.5
ECV-180M-10-F3	air	0~60 (non-freezing)	4.3	135	180	85	108.3
ECV-180M-10-F4	air	0~60 (non-freezing)	4.3	180	240	85	144.4
ECV-180M-10-F16	air	0~60 (non-freezing)	4.3	720	960	85	577.6
ECV-180M-15-F2	air	0~60 (non-freezing)	4.3	200	120	85	131
ECV-180M-15-F3	air	0~60 (non-freezing)	4.3	300	180	85	196.5
ECV-180M-15-F4	air	0~60 (non-freezing)	4.3	400	240	85	262
ECV-180M-15-F10	air	0~60 (non-freezing)	4.3	1000	600	85	655
ECV180M-GH-F2	air	0~60 (non-freezing)	5	52.8	120	92	90
ECV180M-GH-F3	air	0~60 (non-freezing)	5	79.2	180	92	135
ECV180M-GH-F4	air	0~60 (non-freezing)	5	105.6	240	92	180
ECV180M-GH-F16	air	0~60 (non-freezing)	5	422.4	960	92	720
ECV180M-GM-F2	air	0~60 (non-freezing)	3.2	55.2	120	90	82
ECV180M-GM-F3	air	0~60 (non-freezing)	3.2	82.8	180	90	123
ECV180M-GM-F4	air	0~60 (non-freezing)	3.2	110.4	240	90	164
ECV180M-GM-F16	air	0~60 (non-freezing)	3.2	441.6	960	90	656

ECV-180M vacuum generator blowing air consumption [L/Min]/ suction air consumption [L/Min]/ Maximum vacuum flow [L/Min] calculation formula

Models	Inspiratory air consumption [L/Min]	Air consumption by blowing [L/Min]	Maximum vacuum flow [L/Min]
ECV180M-10-F* (Up to 16 groups)	40xN	60xN	36.1xN
ECV180M-15-F* (Up to 10 groups)	100xN	60xN	65.5xN
ECV180M-GH-F* (Up to 16 groups)	26.4xN	60xN	45xN
ECV180M-GM-F* (Up to 16 groups)	27.6xN	60xN	41xN



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Vacuum Generator

ECV

Max. 16 sets

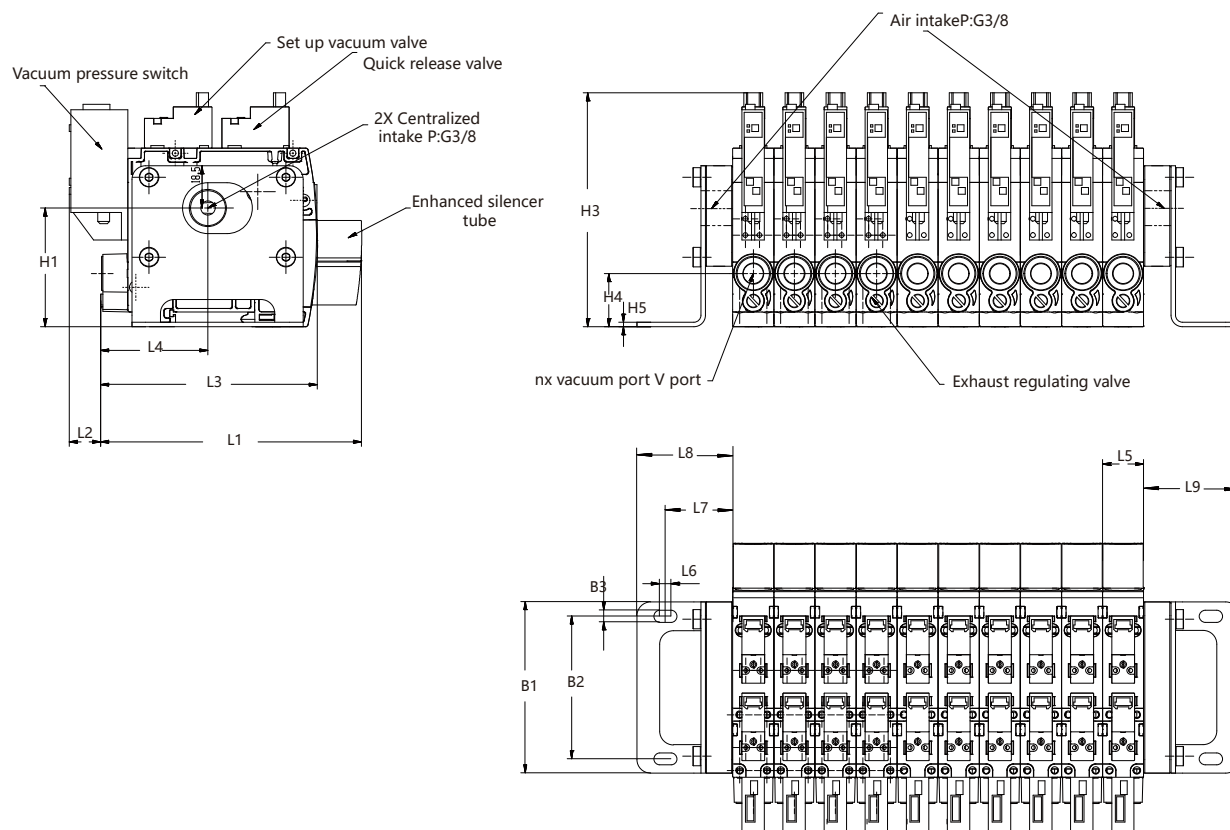
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General



ECV-180M Design Data



Size[mm]

Models	L1	L2	L3	L4	L5	L6	L7	L8	L9	H1	H2	H3	H4	H5	B1	B2	B3
ECV-180M-**-F2	/	13.7	94.9	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2
ECV-180M-**-F**	/	13.7	94.9	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2
ECV-180M-**-F16	/	13.7	94.9	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2
ECV-180M-**-S-F2	114.3	13.7	/	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2
ECV-180M-**-S-F**	114.3	13.7	/	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2
ECV-180M-**-S-F16	114.3	13.7	/	47.1	18	5	29.5	42	42	52	108.5	18.5	23.3	2	75	62.5	5.2

Total length of ECV180 vacuum generator = L8 + L5 * N + L9

*1.5 nozzle specifications up to 10 sets, 1.0 nozzle/high vacuum GH/ low gas supply GM up to 16 sets *



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Vacuum Generator

ECV

Max. 16 sets

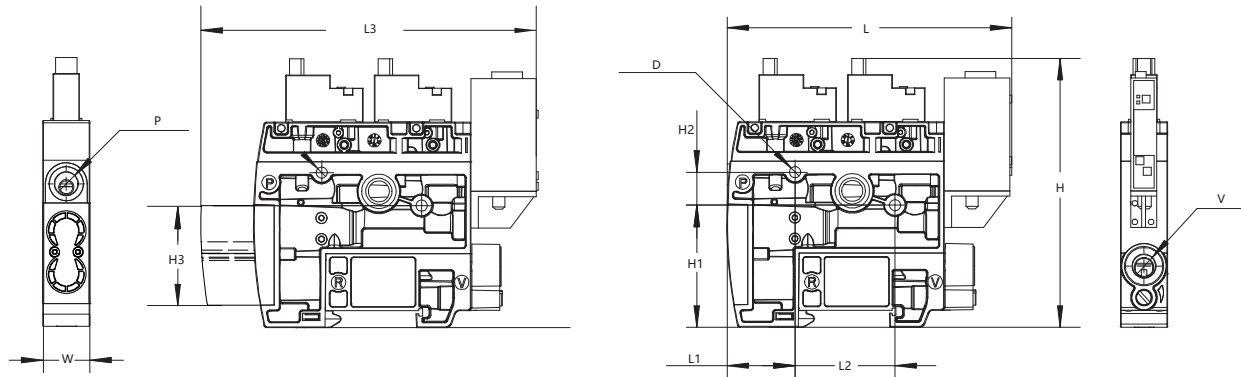
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General



ECV-180M Design Data



ECV-180M/ECV-180M-S

Size[mm]

Models	L	L1	L2	L3	H	H1	H2	H3	W	D	P	V
ECV-180M-10	108.5	25.9	38.1	/	102.5	46.55	12.6	/	18	2-φ4.2	G1/8"	G1/8"
ECV-180M-15	108.5	25.9	38.1	/	102.5	46.55	12.6	/	18	2-φ4.2	G1/8"	G1/8"
ECV-180M-10-S	108.5	25.9	38.1	128	102.5	46.55	12.6	38	18	2-φ4.2	G1/8"	G1/8"
ECV-180M-15-S	108.5	25.9	38.1	128	102.5	46.55	12.6	38	18	2-φ4.2	G1/8"	G1/8"



Solenoid Valve Technical Data

Item	Technical parameter number	Project	Technical parameter number
Type	Two-position tee	Port type	T102-BL-B
Working medium	Compressed air, inert gas	Electrical interface mode	Right Angle (L-shaped)
Ambient temperature	-10°C~+80°C	Standard voltage	DC 24V
Working pressure	0~7bar	Allowable voltage fluctuation	Plus or minus 10%
On-current duration	ED 100%	Maximum operating frequency	10 Hz
Insulation class	H	Service life	More than 50 million times
Class of protection	IP50		

* Supply air containing foreign matter, moisture, oil, condensate, etc., may lead to poor operation of supply valve and damage valve. Therefore, please set up air purification components in the upstream of the product, and carry out regular maintenance, and fully manage the supply air.

* Please set the air filter and oil mist separator upstream of the product (especially the oil mist separator must be installed in high-frequency occasions)



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Vacuum Generator ECV

Max. 16 sets

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General



压力开关技术参数/Technical Data

Model number		P93
Rated pressure range		-100.0-100.0kpa
Set pressure range		-105.0-105.0kpa
Pressure resistance		500kpa
Applicable gas		Air, non-corrosive, non-flammable
The pressure unit is set to a minimum scale	Kpa	0.1
	Kgf/cm2	0.001
	Bar	0.001
	Psi	0.01
	Inhg	0.1
	Mmhg	1
Supply voltage		24V DC±10%, wave crest value below 10%
Current consumption		≤40mA (off load)
Switching output	Action display light	NPN or PNPcollector output
	output mode	125mA
	Maximum load current	24V DC
	Maximum supply voltage	≤1.5V
control input	Internal pressure drop	NPN type
		Low level input (SPST or electronic contact)
		Level voltage: below 0.4V DC, input time above 10ms
		PNP type
		High level input (SPST or electronic contact)
		Level voltage: below 20-24V DC, input time above 10ms
Solenoid valve drives maximum current		200mA@24V DC max
repeatability		±0.2% F.S. ±1 digit
Switching reaction time		≤2.5ms
		(Error prevention function: 2.5ms, 20ms, 100ms, 500ms, 1000ms and 1999ms optional)
Short-circuit protection		OUT switch: Yes, vacuum solenoid valve (V-Sol)/Broken vacuum solenoid valve (D-Sol) : No
reveal		31/2-bit LED 7-segment display (red) (sampling rate 5 times/SEC)
Display accuracy		±2% F.S. ±1 digit
Motion display light		OUT Green/V-Sol control input: red (vacuum mark)



Vacuum Generator ECV

Max. 16 sets

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General

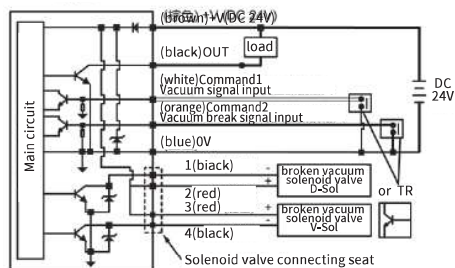


Pressure Switch Technical Data

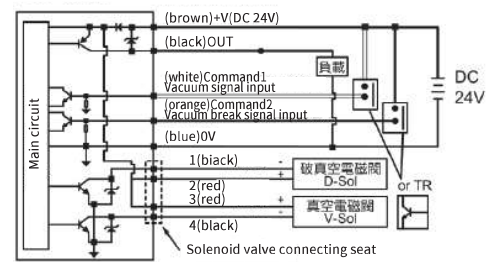
Model number	P93	
Environmental requirement	Class of protection	IP40
	Ambient temperature	Action: 0-50°C storage -10-60°C (no water dew, no freezing)
	Ambient humidity	Operation and storage: 35-80% RH (no water)
	Withstand voltage	1000VAC 1 min (between lead and housing)
	Insulation impedance	Above 500MΩ (500V DC) (between the lead and the housing)
	Vibration resistance	Complex amplitude 1.5mm or 10G, 10HZ-150HZ-10HZ every minute, 2 hours in each direction X,Y,Z
	Impact resistance	900m/s ² (100G), 3 times in each direction X,Y,Z
Temperature characteristic	±2% F.F. Comparison reference temperature 25°C (0-50°C temperature range)	
Intake form	90 ° inlet Port & None	
Wire specification	Oil resistant PVC wire (0.15mm ²)	
weight	Approx. 58g (includes 2 meters of wire)	



Pressure Switch Circuit Wiring diagram



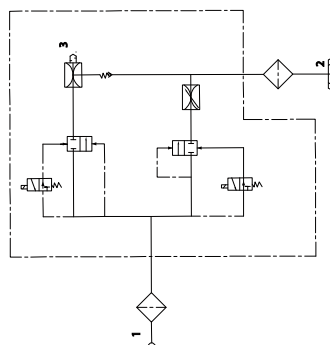
NPN output



PNP output



Schematic Diagram Of Gas Path



Vacuum Generator ECV

Maximum vacuum flow: -92Kpa

HANVAC



General

Product characteristics

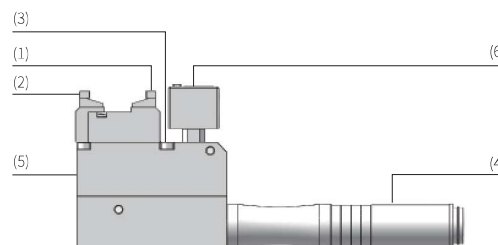
Integrated vacuum generators for handling airtight or slightly breathable workpieces in the electronics, packaging, robotics and automotive industries

- * High flow, dirt resistance, long life, high performance vacuum generator for handling airtight workpieces under extreme conditions, such as for handling sheet metal in the stamping production line
- * Pick and place application for short beat time
- * For vacuum system preparation and accurate monitoring in automated systems



Product structure

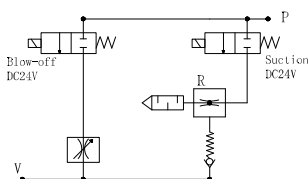
- * Supply valve (1)
- * Damage valve (2)
- * Reverse blow adjustment button (3)
- * Silencer tube (4)
- * Compressed air intake (5)
- * Pressure switch (6)



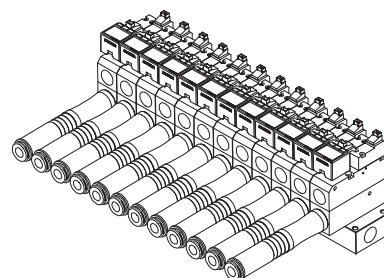
Product advantages

* Prevent workpiece from being sucked or damaged, compact suction unit, can be directly connected, porous material can also

Safe suction, low operating cost, no pollution process area



Schematic diagram of gas path



* Vacuum generator ECV multiple side-by-side installation examples



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Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

HANVAC



General



ECV-200M Ordering NO

ECV	200M	H	S	01
1	2	3	4	5

1-Series	2-Models	3-Specification
ECV	200M	H High vacuum
		L Low vacuum
		M Low admission
4-Silencer	5-Pressure switch	
S	No-pressure switch	
	01 NPN	
	03 PNP	



ECV-200M Technical Data

Models	Used fluid	Temperature [°C]	inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECV-200M-H	air	0~60 (non-freezing)	0.5	113	92	168	0.58
ECV-200M-L	air	0~60 (non-freezing)	0.5	115	70	192	0.58
ECV-200M-M	air	0~60 (non-freezing)	0.31	115	90	168	0.58

Vacuum flow rate with different vacuum degree (-kpa)(L/min)

Models	0	10	20	30	40	50	60	70	80	90
ECV-200M-H	168	144	108	72	43.2	32.4	24	18	8.4	1.2
ECV-200M-L	192	174	132	84	51	37.2	21	10.8	0	0
ECV-200M-M	168	150	108	66	39	30	21	15	6	0

Pumping time with different vacuum (-kpa) (S/L)

Models	10	20	30	40	50	60	70	80	90
ECV-200M-H	0.04	0.009	0.17	0.28	0.44	0.63	0.9	1.3	2.3
ECV-200M-L	0.03	0.07	0.11	0.21	0.35	0.6	1	0	0
ECV-200M-M	0.038	0.084	0.153	0.267	0.441	0.677	1.01	1.581	0



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Vacuum Generator

ECV

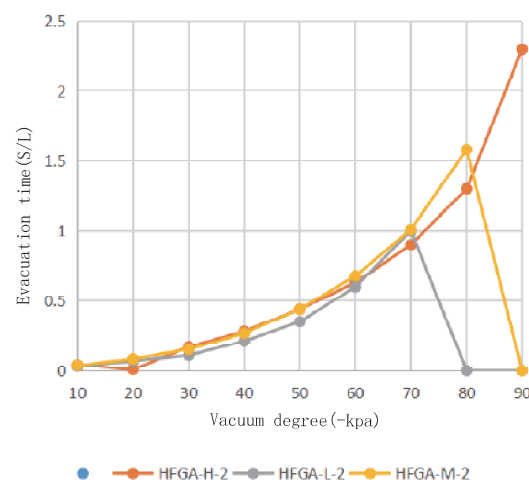
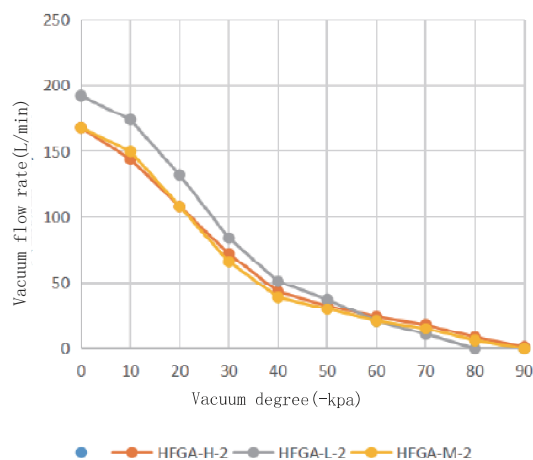
Maximum vacuum flow: -92Kpa

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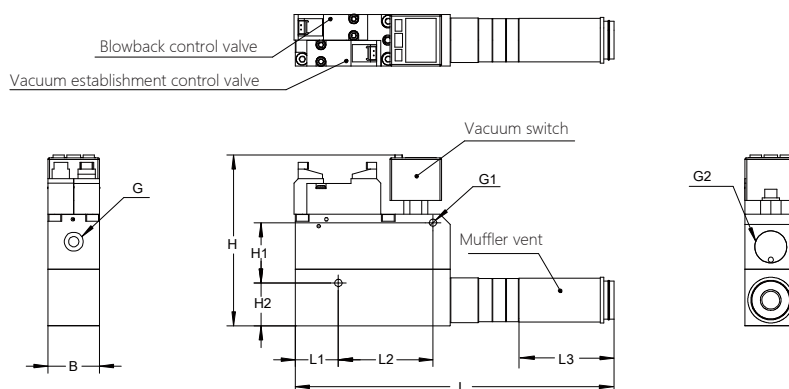


General

performance parameter



ECV-200M Design Data



ECV-200M

Size[mm]

Models	G	G1	G2	H	H1	H2	L	L1	L2	L3	B
ECV-200M	P:G1/4	M5▽10(4.2through-hole)	V:G1/2	100	35	25	185	25	55	49.3	30



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Vacuum Generator

ECV

Maximum vacuum flow: -92Kpa

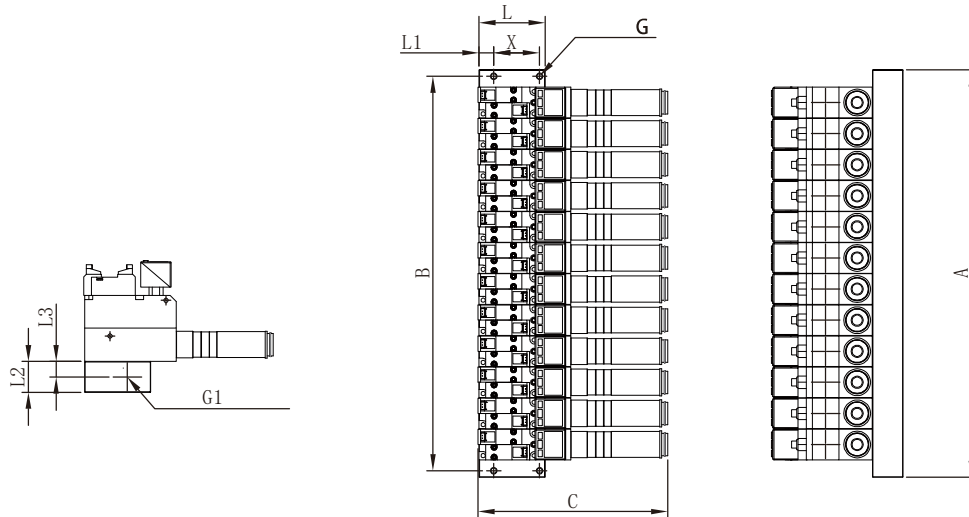
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General



ECV-200M Design Data



ECV-200M packaging

Size[mm]

Models	Modular unit	A	B	C	L	L1	L2	L3	X	G	G1
ECV-200M-**-F12	12	400	387	186.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-200M-**-F10	10	339	326	186.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-200M-**-F8	8	278	265	186.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-200M-**-F6	6	217	204	186.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-200M-**-F4	4	156	143	186.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2

Vacuum Generator ECV

Maximum vacuum flow: -92Kpa

HANVAC



General



Pressure Switch Technical Data

Models		47C-□ (continuous pressure)
Rated pressure range		-100.0~100.0 kPa
Set pressure range		-103.0~103.0 kPa
Compression resistance		500 kPa
Applicable gas		air, non-corrosive, non-flammable
Pressure unit Minimum scale value	kPa	0.1
	MPa	—
	kgf/cm²	0.001
	bar	0.001
	psi	0.01
	inHg	0.1
	mmHg	1
Mains input		12 to 24V DC ±10%, ripple peakless than 10%
Consumption current		≤ 40mA (off load)
Switched out put	Output type	open collector output (NPN or PNP)
	load current	Max.125mA
	Internal pressure drop	≤ 1.0V
	Response time	≤ 2.5ms (false action prevention function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms optional)
Linear analogy exportation	Output voltage	1 ~ 5V ±2.5% F.S. (under the rated pressure range)
	Output impedance	About 1kΩ
	Linearity	± 1% F.S.
Display	Display	3 colors (red/green/orange) display (sampling rate: 5 times/SEC, 2 times/SEC, 1 time/SEC optional)
	Display accuracy	± 1% F.S. ± 1 digit (at ambient temperature: 25 ± 3°C)
	Repeated accuracy	± 0.3% F.S. ± 1 digit
	Action light	orange (1 indicator) OUT1
Environmental proof	Protective structure class	IP 40
	Ambient temperature	0 ~ 50 °C
	Temperature characteristic	± 3% F.S. comparison parameter Temperature 25°C (0~50°C temperature range)
	Storage temperature	storage: -10 ~ 60 °C (no dew and no icing)
	Ambient humidity	operation and storage: 35~85% RH (dew free)
	Withstand voltage	1000V AC 1 min (between leads and plastic housing)
	Insulation resistance	50MΩ 以上 (500V DC) (between leads and plastic housing)
	Vibration resistance	complex amplitude 1.5mm or 10G, 10Hz ~150Hz~10Hz every minute, 2 hours in each direction X, Y and Z
Impact resistance	100m/s² (10G), X、Y、Z three times in each direction	
Nozzle diameter		R1/8", M5
Wire specification		Φ4 oil resistant PVC (0.15mm2)-4 cores
Weight		approx. 67g (including 2 meters of wire)



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Vacuum Generator ECV

Maximum vacuum flow: -94Kpa

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General

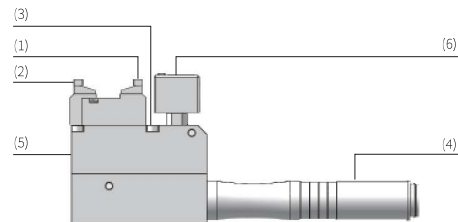
Product characteristics

- Integrated vacuum generators for handling airtight or slightly breathable workpieces in the electronics, packaging, robotics and automotive industries
- * High flow, dirt resistance, long life, high performance vacuum generator for handling airtight workpieces under extreme conditions, such as for handling sheet metal in the stamping production line
- * Pick and place application for short beat time
- * For vacuum system preparation and accurate monitoring in automated systems



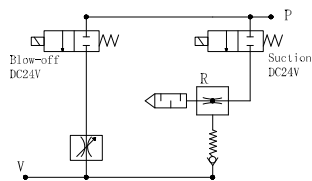
Product structure

- * Supply valve (1)
- * Damage valve (2)
- * Reverse blow adjustment button (3)
- * Silencer tube (4)
- * Compressed air intake (5)
- * Pressure switch (6)

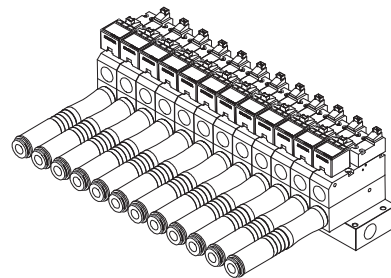


Product advantages

- * Prevent workpiece from being sucked or damaged, compact suction unit, can be directly connected, porous material can also
- Safe suction, low operating cost, no pollution process area



Schematic diagram of gas path



- * Vacuum generator ECV multiple side-by-side installation examples



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Vacuum Generator

ECV

Maximum vacuum flow: -94Kpa

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General



ECV-350M Ordering NO

ECV	350M	H	S	01
1	2	3	4	5

1-Series	2-Models	3-Specification
ECV	350M	H High vacuum
		L Low vacuum
		M Low admission

4-Silencer	5-Pressure switch
S Silenceless	No-pressure switch
	01 NPN
	03 PNP



ECV-350M Technical Data

Models	Used fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]	Weight [Kg]
ECV-350M-H	air	0~60	0.5	115	94	372	0.58
ECV-350M-L	air	0~60	0.5	115	70	342	0.58
ECV-350M-M	air	0~60	0.31	113	90	336	0.58

Vacuum flow rate with different vacuum degree (-kpa)(L/min)

Models	0	10	20	30	40	50	60	70	80	90
ECV-350M-H	372	222	132	108	78	48.6	24	18	8.4	1.2
ECV-350M-L	342	198	132	84	51	37.2	21	10.8	0	0
ECV-350M-M	336	150	108	66	39	30	21	15	6	0

Pumping time with different vacuum (-kpa) (S/L)

Models	10	20	30	40	50	60	70	80	90
ECV-350M-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
ECV-350M-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
ECV-350M-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4



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Vacuum Generator ECV

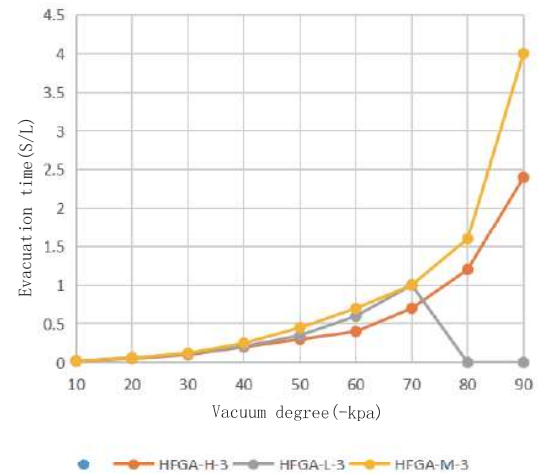
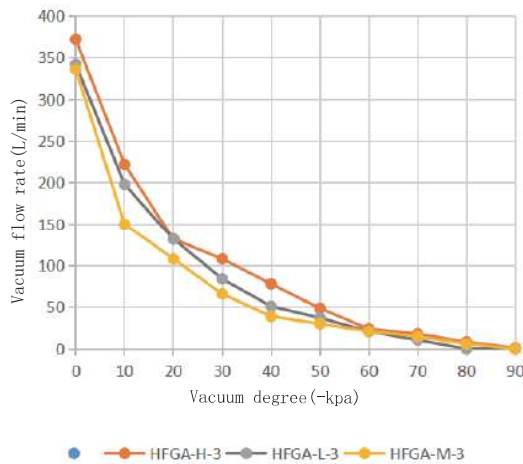
Maximum vacuum flow: -94kpa

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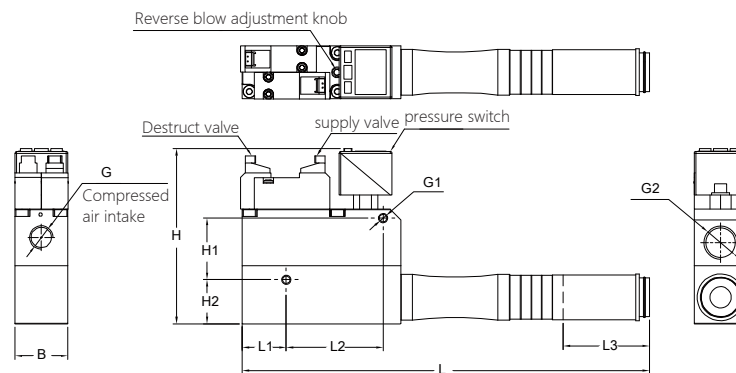


General

performance parameter



ECV-350M Design Data



ECV-350M

Size[mm]

Models	G	G1	G2	H	H1	H2	L	L1	L2	L3	B
ECV-350M	P:G1/4	M5▽10(4.2through-hole)	V:G1/2	100	35	25	231.3	25	55	49.3	30

Vacuum Generator

ECV

Maximum vacuum flow: -94kPa

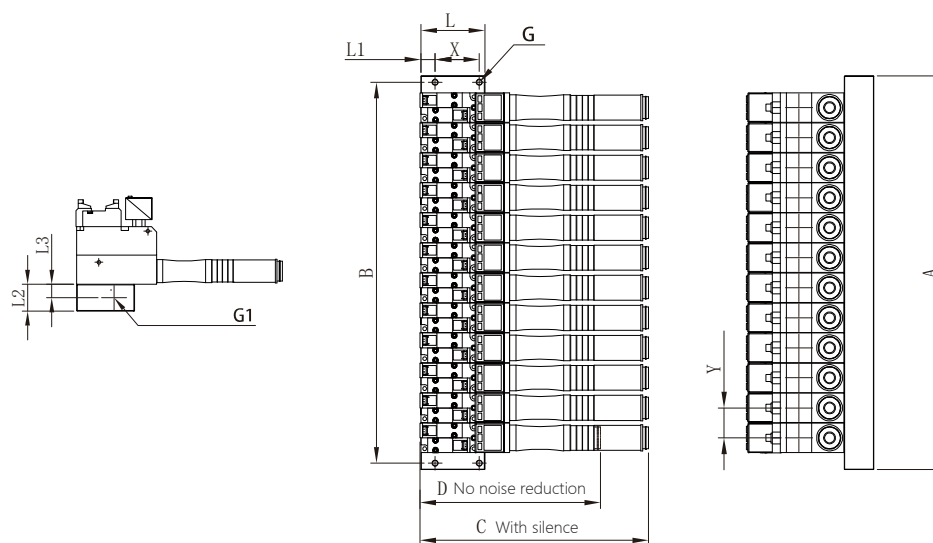
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General



ECV-350M Design Data



ECV-350M packaging

Size[mm]

Models	Modular unit	A	B	C	D	L	L1	L2	L3	X	G	G1
ECV-350M-**-F12	12	400	387	232.5	183.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-350M-**-F10	10	339	326	232.5	183.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-350M-**-F8	8	278	265	232.5	183.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-350M-**-F6	6	217	204	232.5	183.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2
ECV-350M-**-F4	4	156	143	232.5	183.5	65	14.5	30	15	45	4- ϕ 5.5	2-G1/2



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Vacuum Generator

ECV

Maximum vacuum flow: -94kPa

HANVAC



General



Pressure Switch Technical Data

Models		47C-□ (continuous pressure)
Rated pressure range		-100.0~100.0 kPa
Set pressure range		-103.0~103.0 kPa
Compression resistance		500 kPa
Applicable gas		air, non-corrosive, non-flammable
Pressure unit Minimum scale value	kPa	0.1
	MPa	—
	kgf/cm ²	0.001
	bar	0.001
	psi	0.01
	inHg	0.1
	mmHg	1
Mains input		12 to 24V DC $\pm 10\%$, ripple peakless than 10%
Consumption current		$\leq 40\text{mA}$ (off load)
Switched out put	Output type	open collector output (NPN or PNP)
	load current	Max.125mA
	Internal pressure drop	$\leq 1.0\text{V}$
	Response time	$\leq 2.5\text{ms}$ (false action prevention function: 25ms, 100ms, 250ms, 500ms, 1000ms and 1500ms optional)
Linear analogy exportation	Output voltage	1 ~ 5V $\pm 2.5\%$ F.S. (under the rated pressure range)
	Output impedance	About 1k Ω
	Linearity	$\pm 1\%$ F.S.
Display	Display	3 colors (red/green/orange) display (sampling rate: 5 times/SEC, 2 times/SEC, 1 time/SEC optional)
	Display accuracy	$\pm 1\%$ F.S. ± 1 digit (at ambient temperature: 25 $\pm 3^\circ\text{C}$)
	Repeated accuracy	$\pm 0.3\%$ F.S. ± 1 digit
	Action light	orange (1 indicator) OUT1
Environmental proof	Protective structure class	IP 40
	Ambient temperature	0 ~ 50 $^\circ\text{C}$
	Temperature characteristic	$\pm 3\%$ F.S. comparison parameter Temperature 25 $^\circ\text{C}$ (0~50 $^\circ\text{C}$ temperature range)
	Storage temperature	storage: -10 ~ 60 $^\circ\text{C}$ (no dew and no icing)
	Ambient humidity	operation and storage: 35~85% RH (dew free)
	Withstand voltage	1000V AC 1 min (between leads and plastic housing)
	Insulation resistance	50M Ω 以上 (500V DC) (between leads and plastic housing)
	Vibration resistance	complex amplitude 1.5mm or 10G, 10Hz~150Hz~10Hz every minute, 2 hours in each direction X, Y and Z
Impact resistance		100m/s ² (10G), X, Y, Z three times in each direction
Nozzle diameter		R1/8", M5
Wire specification		$\Phi 4$ oil resistant PVC (0.15mm ²)-4 cores
Weight		approx. 67g (including 2 meters of wire)



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Vacuum Generator HCV

Maximum vacuum flow: -35Kpa

HANVAC



Currency

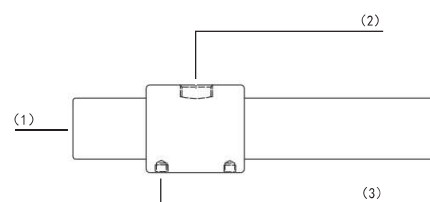
Product characteristics

- *Direct through structure, which can provide high vacuum flow rate
- *Multiple diameter specifications to meet different needs, with a maximum vacuum degree of 35-kPa



Product structure

- *Main body: straight through structure, capable of continuously absorbing and transporting materials
- *(1) Connector: Compressed air connector for blowing air
- *(2) Vacuum connection port
- *(3) Equipped with installation threaded port



Product advantages

- *Stable efficiency, energy-saving and efficient, simplified installation and easy maintenance
- *Can transport highly breathable workpieces, conveying fluid materials such as particles, powders, gases, liquids, etc



*Example of vacuum generator HCV suction for food packaging bags

Vacuum Generator

HCV

Maximum vacuum flow: -35Kpa

HANVAC



Currency



HCV Ordering NO

HCV	2	S
1	2	3

1-Series		2-Specifications	
HCV	Vacuum generator	2	Nozzle diameter 6.5mm
		3	Nozzle diameter 9.5mm
		5	Nozzle diameter 12.5mm
		7	Nozzle diameter 19mm
3-Material		15-1	Nozzle diameter 25mm
	Aluminium alloy	15-2	Nozzle diameter 38mm
S	Stainless steel		



HCV Technical Data

Model	Nozzle diameter mm	Temperature [°C]	Rated gas supply pressure [bar]	Gas consumption [L/Min]	Reaching vacuum pressure [-KPa]	Maximum vacuum flow rate [L/Min]	Weight [Kg]	Weight S [Kg]
HCV-2	6.5	-20~80 (No freeze)	6.0	85	26.0	295	0.09	0.3
HCV-3	9.5	-20~80 (No freeze)	6.0	95	16.0	425	0.07	0.2
HCV-5	12.5	-20~80 (No freeze)	6.0	395	35.0	870	0.17	0.5
HCV-7	19.0	-20~80 (No freeze)	6.0	790	28.0	1825	0.39	1.2
HCV-15-1	25.0	-20~80 (No freeze)	6.0	405	4.4	4400	0.52	1.5
HCV-15-2	38.0	-20~80 (No freeze)	6.0	790	9.0	5610	0.66	2.0



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Vacuum Generator

HCV

Maximum vacuum flow: -35Kpa

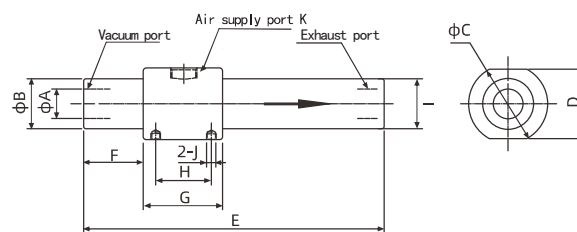
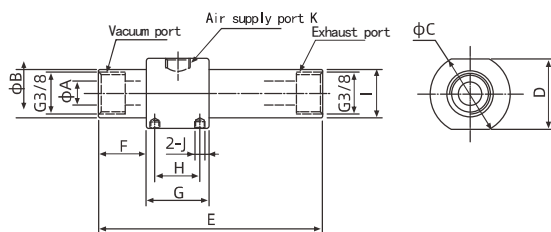
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Currency



HCV Design Data



HCV

Size[mm]

Models	A	B	C	D	E	F	G	H	I	J	K
HCV-2	6.5	18.5	32	28	89	19	25	18	19.5	M4	G1/8
HCV-3	9.5	18.5	32	58	89	19	25	18	19.5	M4	G1/8
HCV-5	12.5	24.0	38	34	140	25	32	23	25.0	M4	G1/4
HCV-7	19.0	31.0	50	45	190	38	50	35	33.0	M4	G3/8
HCV-15-1	25.0	38.0	59	55	198	40	56	40	38.0	M4	G3/8
HCV-15-2	38.0	49.6	69	65	205	40	60	42	49.6	M4	G3/8



Vacuum Generator

EZL

HANVAC


General

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)

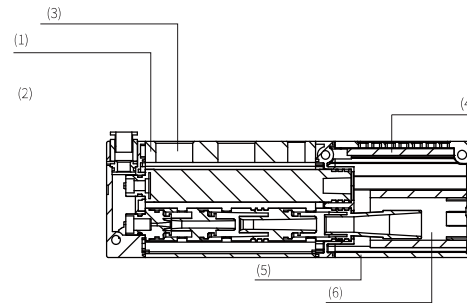
Product characteristics

- * In the field of industrial automation, machinery, electronics, packaging, printing, plastics and robots are widely used.
- * A variety of vacuum flow options, improve the vacuum reaction time.
- * Suitable for adsorption of fragile, soft, thin non-iron, non-metallic materials or spherical objects.
- * Three kinds of vacuum pressure detection unit.



Product structure

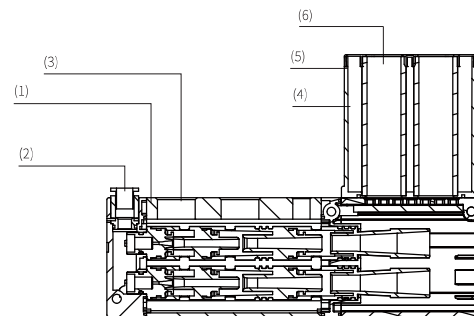
- * (1) Aluminum alloy (anodized) body
- * (2) Ø8 Quick Plug
- * (3) Vacuum port
- * (4) Resin silencer material
- * (5) Muffler housing
- * (6) Non-woven silencer material



EZL2/EZL4

Product structure

- * (1) Aluminum alloy (anodized) body
- * (2) Ø8 Quick Plug
- * (3) Vacuum port
- * (4) Silencer housing
- * (5) Muffler cover
- * (6) Non-woven silencer material



EZL3/EZL6


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Vacuum Generator

EZL

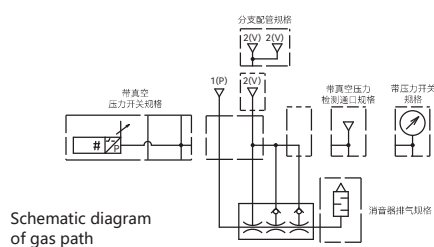
Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)

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General

Product advantages

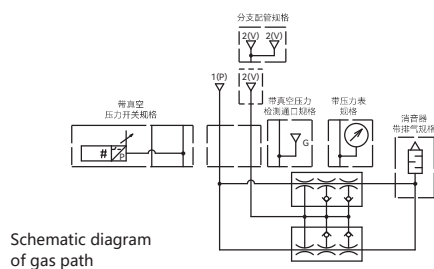
* Special multi-stage Venturi tube structure design, nozzle and aerodynamic technology make the multi-stage vacuum pump has good performance.



* Examples of vacuum generator HZL2/HZL3

EZL2/EZL3

* Easier piping in branch piping, quick change joints can be connected without the use of bushings.



* Example of vacuum generator HZL4/HZL6

EZL4/EZL6

Vacuum Generator EZL

HANVAC


General

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)



EZL Ordering NO

EZL	6	H	F02	S	GN
1	2	3	4	5	6

1-Series	2-Models	Maximum vacuum flow	3-specification
EZL	2	192L/min	L coarse vacuum
	3	372L/min	H high vacuum
	4	384L/min	M Low admission
	6	744L/min	

4-Vacuum port	5-Exhaust specification
F02 1XG1/2	S Built-in silence
F04 2XG1/2	S01 Muffled exhaust port
F06 G3/4	

6-Vacuum pressure measurement
GN G1/8
G mechanical pressure gauge
E digital pressure gauge



EZL Technical Data

Models	Used fluid	Temperature [°C]	inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-KPa]	Maximum vacuum flow [L/Min]	Weight [Kg]
EZL-2-L	air	0~60 (non-freezing)	0.5	115	70	192	0.42
EZL-2-H	air	0~60 (non-freezing)	0.5	115	92	168	0.42
EZL-2-M	air	0~60 (non-freezing)	0.31	113	90	168	0.42
EZL-3-L	air	0~60 (non-freezing)	0.5	115	70	342	0.44
EZL-3-H	air	0~60 (non-freezing)	0.5	115	92	372	0.44
EZL-3-M	air	0~60 (non-freezing)	0.31	113	90	336	0.44
EZL-4-L	air	0~60 (non-freezing)	0.5	115	70	384	0.45
EZL-4-H	air	0~60 (non-freezing)	0.5	115	92	336	0.45
EZL-4-M	air	0~60 (non-freezing)	0.31	113	90	336	0.45
EZL-6-L	air	0~60 (non-freezing)	0.5	230	70	684	0.46
EZL-6-H	air	0~60 (non-freezing)	0.5	230	92	744	0.46
EZL-6-M	air	0~60 (non-freezing)	0.31	226	90	672	0.46


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Vacuum Generator

EZL

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)

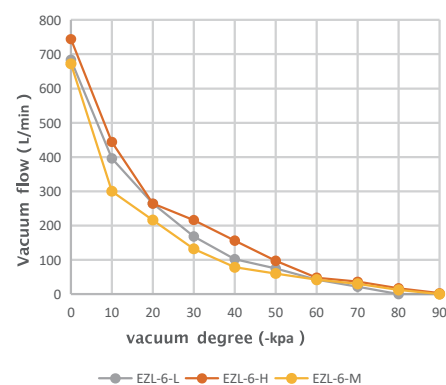
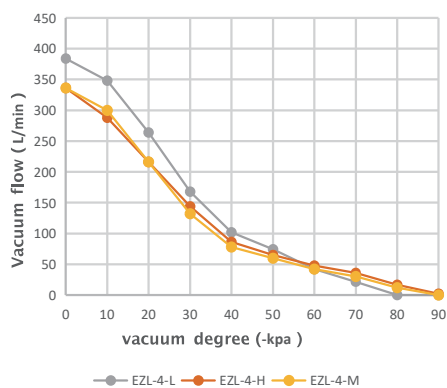
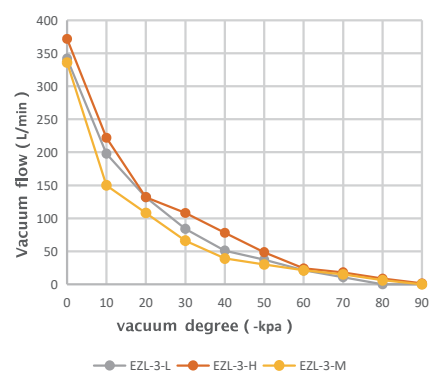
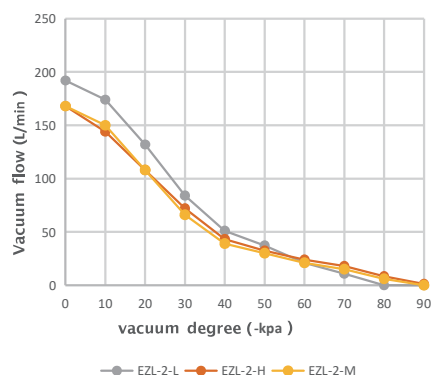
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General

Vacuum flow (L/min) with different vacuum degree (-kpa)

Models	0	10	20	30	40	50	60	70	80	90
EZL-2-L	192	174	132	84	51	37.2	21	10.8	0	0
EZL-2-H	168	144	108	72	43.2	32.4	24	18	8.4	1.2
EZL-2-M	168	150	108	66	39	30	21	15	6	0
EZL-3-L	342	198	132	84	51	37.2	21	10.8	0	0
EZL-3-H	372	222	132	108	78	48.6	24	18	8.4	1.2
EZL-3-M	336	150	108	66	39	30	21	15	6	0
EZL-4-L	384	348	264	168	102	74.4	42	21.6	0	0
EZL-4-H	336	288	216	144	86.4	64.8	48	36	16.8	2.4
EZL-4-M	336	300	216	132	78	60	42	30	12	0
EZL-6-L	684	396	264	168	102	74.4	42	21.6	0	0
EZL-6-H	744	444	264	216	156	97.2	48	36	16.8	2.4
EZL-6-M	672	300	216	132	78	60	42	30	12	0



Vacuum Generator

EZL

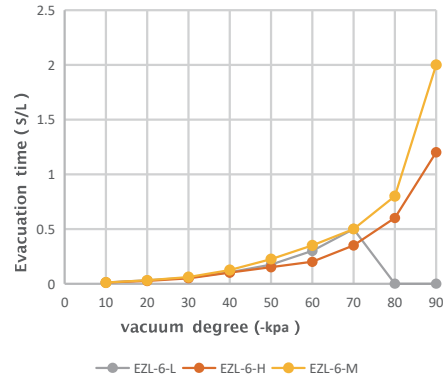
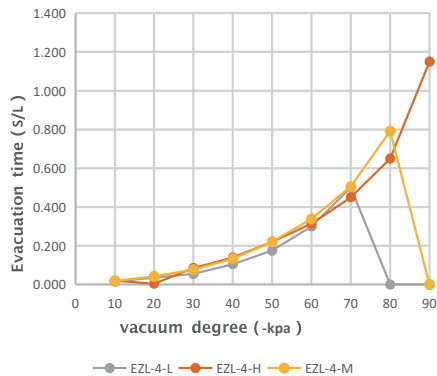
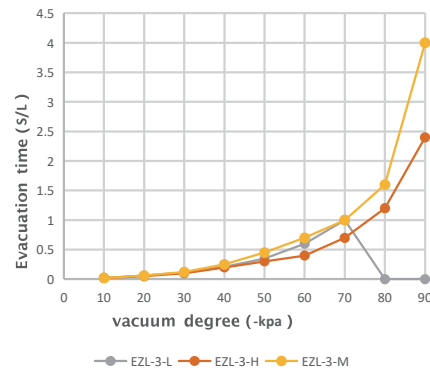
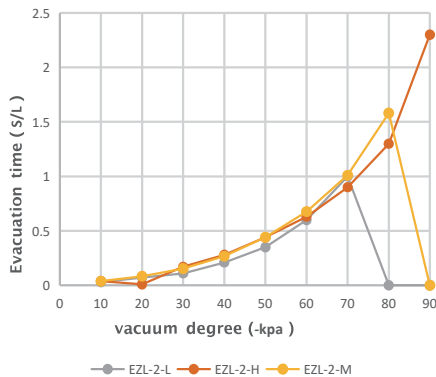
HANVAC


General

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)

Pumping time with different vacuum (-kpa) (S/L)

Models	10	20	30	40	50	60	70	80	90
EZL-2-L	0.03	0.07	0.11	0.21	0.35	0.6	1	0	0
EZL-2-H	0.04	0.009	0.17	0.28	0.44	0.63	0.9	1.3	2.3
EZL-2-M	0.038	0.0084	0.153	0.267	0.441	0.677	1.01	1.581	0
EZL-3-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
EZL-3-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
EZL-3-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4
EZL-4-L	0.015	0.035	0.055	0.105	0.175	0.300	0.500	0	0
EZL-4-H	0.020	0.005	0.085	0.140	0.220	0.315	0.450	0.650	1.150
EZL-4-M	0.019	0.042	0.077	0.134	0.221	0.339	0.505	0.	0
EZL-6-L	0.01	0.03	0.055	0.105	0.175	0.3	0.5	0	0
EZL-6-H	0.01	0.025	0.05	0.1	0.15	0.2	0.35	0.6	1.2
EZL-6-M	0.01	0.03	0.06	0.125	0.225	0.35	0.5	0.8	2



Vacuum Generator

EZL

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)

HANVAC



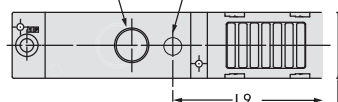
General



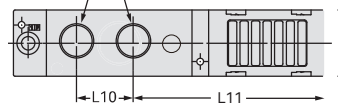
EZL Design Data

F02: Vacuum (V) port G1/2
(Recommended tightening moment: 3-5N·m)

Vacuum detection port G1/8
(Recommended tightening moment: 3-5N·m)

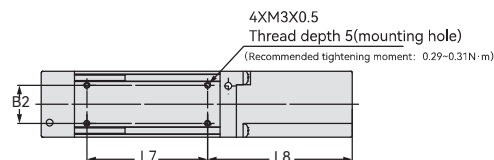
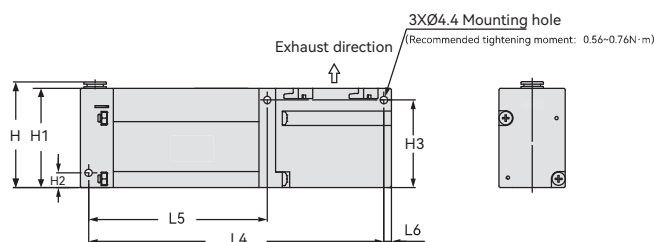
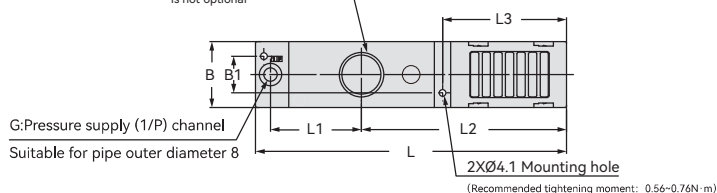


F04: Vacuum (2/V) port 2XG1/2
(Recommended tightening moment: 28-30N·m)
Note: The HZL2/HZL4 series is not optional



F06: Vacuum (V) port G3/4
(Recommended tightening moment: 28-30N·m)
Note: The HZL2/HZL4 series is not optional

G: Pressure supply (1/P) channel
Suitable for pipe outer diameter 8



Size[mm]

Models	G	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
EZL-2-L	1/P	157.8	26	114.8	75	148.3	77.8	4.5	42.8	87.5	90	/	/
EZL-2-H	1/P	157.8	26	114.8	75	148.3	77.8	4.5	42.8	87.5	90	/	/
EZL-2-M	1/P	157.8	26	114.8	75	148.3	77.8	4.5	42.8	87.5	90	/	/
EZL-3-L	1/P	188	55	124	75	178.5	108	4.5	73	87.5	90	32	121
EZL-3-H	1/P	188	55	124	75	178.5	108	4.5	73	87.5	90	32	121
EZL-3-M	1/P	188	55	124	75	178.5	108	4.5	73	87.5	90	32	121

Size[mm]

Models	B	B1	B2	H	H1	H2	H3
EZL-2-L	40	22.2	23	65	60	9	53
EZL-2-H	40	22.2	23	65	60	9	53
EZL-2-M	40	22.2	23	65	60	9	53
EZL-3-L	40	22.2	23	65	60	9	53
EZL-3-H	40	22.2	23	65	60	9	53
EZL-3-M	40	22.2	23	65	60	9	53



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Vacuum Generator

EZL

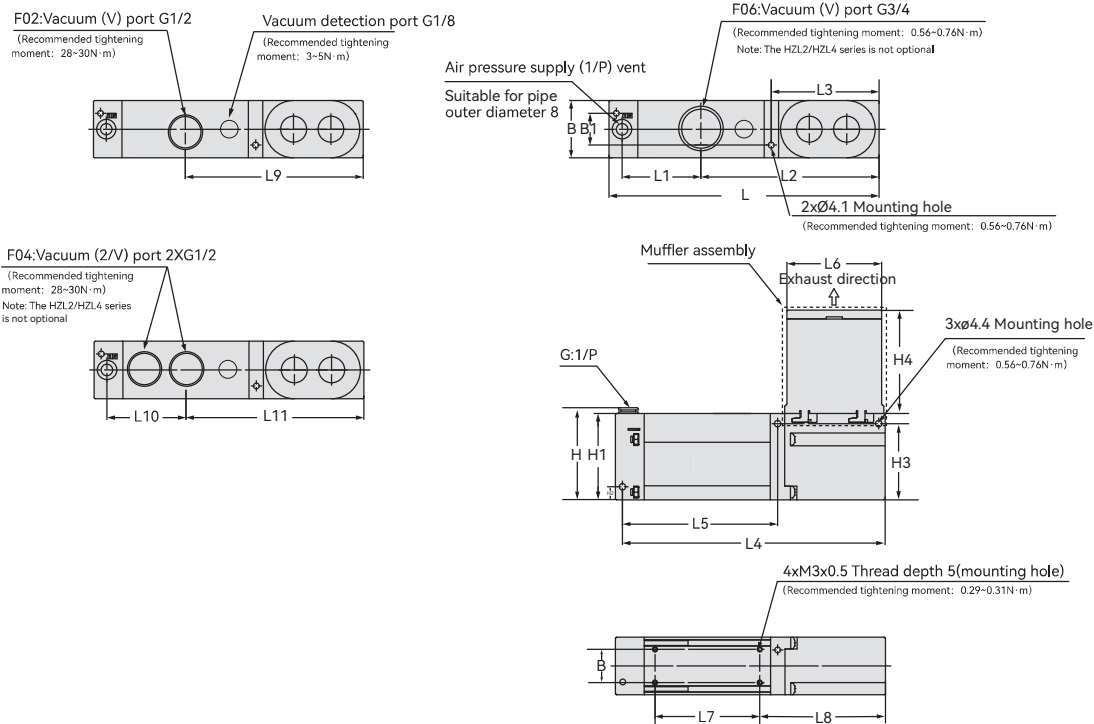
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General

Maximum vacuum flow: Four types 192/372/384/744L/Min (ARN)



EZL Design Data



Size[mm]													
Models	G	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
EZL-4-L	1/P	157.8	26	114.8	75	148.3	108	66	42.8	87.5	90	/	/
EZL-4-H	1/P	157.8	26	114.8	75	148.3	108	66	42.8	87.5	90	/	/
EZL-4-M	1/P	157.8	26	114.8	75	148.3	108	66	42.8	87.5	90	/	/
EZL-6-L	1/P	188	55	124	75	178.5	108	66	73	87.5	90	32	121
EZL-6-H	1/P	188	55	124	75	178.5	108	66	73	87.5	90	32	121
EZL-6-M	1/P	188	55	124	75	178.5	108	66	73	87.5	90	32	121

Size[mm]													
Models	B	B1	B2	H	H1	H2	H3	H4	H5				
EZL-4-L	40	22.2	23	65	60	9	53	72	132				
EZL-4-H	40	22.2	23	65	60	9	53	72	132				
EZL-4-M	40	22.2	23	65	60	9	53	72	132				
EZL-6-L	40	22.2	23	65	60	9	53	72	132				
EZL-6-H	40	22.2	23	65	60	9	53	72	132				
EZL-6-M	40	22.2	23	65	60	9	53	72	132				


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Vacuum Generator

EZL

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

HANVAC


General

Product characteristics

*In the field of industrial automation, it is widely used in fields such as machinery, electronics, packaging, printing, plastics, and robotics.

*Multiple vacuum flow rate options to increase vacuum reaction time.

*Suitable for adsorbing fragile, soft, thin non-iron, non-metallic materials or spherical objects.

*Three types of vacuum pressure detection units.



Product structure

*Aluminum alloy (anodized) main body (1)

*G1/8 thread (2)

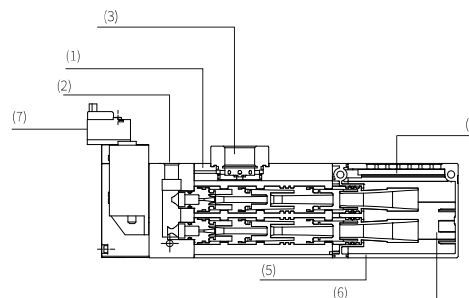
*Vacuum port (energy-saving version) (3)

*Resin soundproofing material (4)

*Silencer housing (5)

*Non woven sound-absorbing material (6)

*Electric control valve (7)



EZLK

*Aluminum alloy (anodized) main body (1)

*G1/8 thread (2)

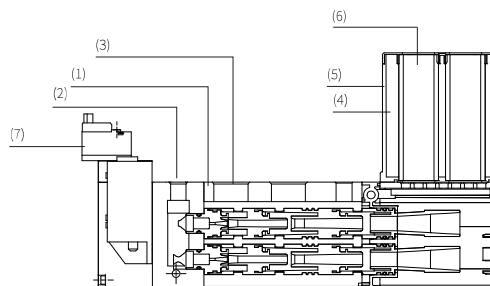
*Vacuum port (electronic control version) (3)

*Silencer housing (4)

*Silencer cover (5)

*Non woven sound-absorbing material (6)

*Electric control valve (7)



EZLE/R

Vacuum Generator

EZL

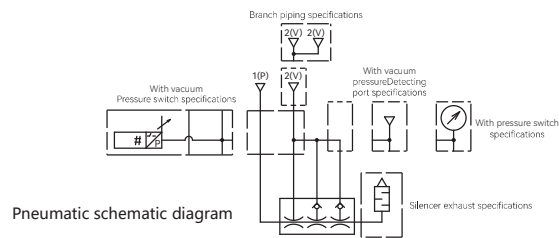
HANVAC


General

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

Product advantages

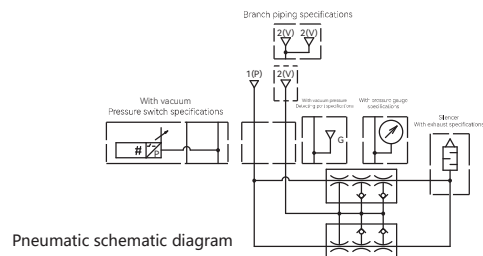
*Adopting a special multi-stage Venturi tube structure design, the nozzle and aerodynamic technology make the multi-stage vacuum pump have good efficiency.



*Example of vacuum generator EZL2/EZL3

EZL2/EZL3

*The piping during branch piping is easier, and quick change joints can be connected without using shaft sleeves.



*Example of vacuum generator EZL4/EZL6

EZL4/EZL6

Vacuum Generator

EZL

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

HANVAC


General



HZL Electric control series Ordering NO

EZL-E 1	6 2	H 3	F02 4	S 5	GN 6
------------	--------	--------	----------	--------	---------

1-Series		2- Model	Maximum vacuum flow	3-specification	
EZL-E	Supply/Destruction	2	192L/min	L	Low vacuum
EZL-K	energy conservation	3	372L/min	H	high vacuum
EZL-R	Self-sustaining	4	384L/min	M	Low intake
		6	744L/min		

4-Vacuum port		5- Exhaust specifications		6- Vacuum pressure Testing Department	
F02	1XG1/4	S	Built in noise reduction	N	NPN without energy saving
F04	2XG1/2	S01	Low noise reduction	P	PNP without energy saving
F06	G3/4			NE	NPN Energy Conservation
F07	G1/2			PE	PNP Energy Conservation
F08	G3/4			空白	Without vacuum switch



EZL Selection specifications

Models	Applicable vacuum port	Models	Applicable exhaust specifications
EZL-E/R-2/4	F02/F06	EZL-*2/3	S
EZL-E/R-3/6	F02/F04/F06	EZL-*4-6	S01
EZL-K-2/4/3/6	F07/F08		

*Other selection specifications need to be customized, please negotiate with our company



EZL Technical Data

Models	Using fluids	Temperature [°C]	Inlet pressure [Mpa]	Gas consumption [L/Min]	Vacuum pressure [-KPa]	Maximum vacuum flow rate [L/Min]	Weight [Kg]
EZL-E/K/R-2-L	air	0~60	0.5	115	70	192	0.42
EZL-E/K/R-2-H	air	0~60	0.5	115	92	168	0.42
EZL-E/K/R-2-M	air	0~60	0.31	113	90	168	0.42
EZL-E/K/R-3-L	air	0~60	0.5	115	70	342	0.44
EZL-E/K/R-3-H	air	0~60	0.5	115	92	372	0.44
EZL-E/K/R-3-M	air	0~60	0.31	113	90	336	0.44
EZL-E/K/R-4-L	air	0~60	0.52	115	70	384	0.45
EZL-E/K/R-4-H	air	0~60	0.54	115	92	336	0.45
EZL-E/K/R-4-M	air	0~60	0.47	125	90	336	0.45
EZL-E/K/R-6-L	air	0~60	0.52	230	70	684	0.46
EZL-E/K/R-6-H	air	0~60	0.54	230	92	744	0.46
EZL-E/K/R-6-M	air	0~60	0.47	250	90	672	0.46


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Vacuum Generator

EZL

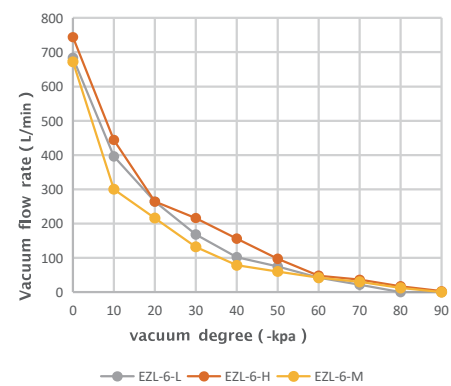
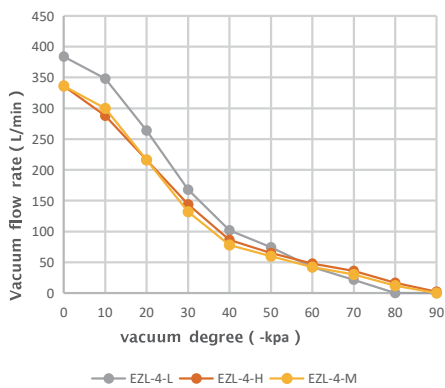
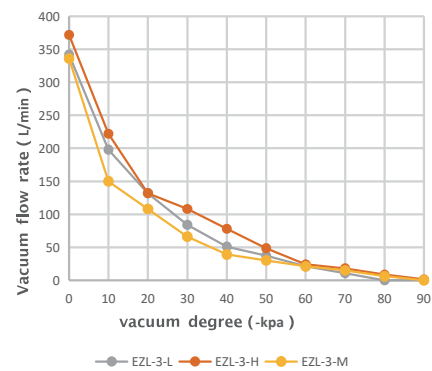
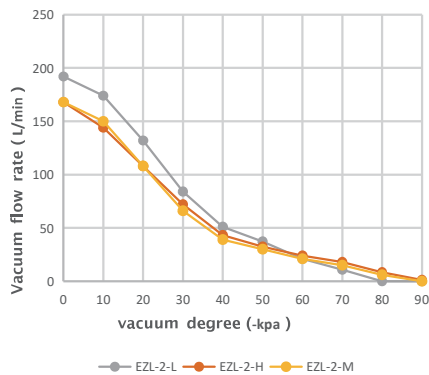
HANVAC


General

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

Vacuum flow rate at different vacuum degrees (-kpa) (L/min)

Models	0	10	20	30	40	50	60	70	80	90
EZL-2-L	192	174	132	84	51	37.2	21	10.8	0	0
EZL-2-H	168	144	108	72	43.2	32.4	24	18	8.4	1.2
EZL-2-M	168	150	108	66	39	30	21	15	6	0
EZL-3-L	342	198	132	84	51	37.2	21	10.8	0	0
EZL-3-H	372	222	132	108	78	48.6	24	18	8.4	1.2
EZL-3-M	336	150	108	66	39	30	21	15	6	0
EZL-4-L	384	348	264	168	102	74.4	42	21.6	0	0
EZL-4-H	336	288	216	144	86.4	64.8	48	36	16.8	2.4
EZL-4-M	336	300	216	132	78	60	42	30	12	0
EZL-6-L	684	396	264	168	102	74.4	42	21.6	0	0
EZL-6-H	744	444	264	216	156	97.2	48	36	16.8	2.4
EZL-6-M	672	300	216	132	78	60	42	30	12	0



Vacuum Generator

EZL

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

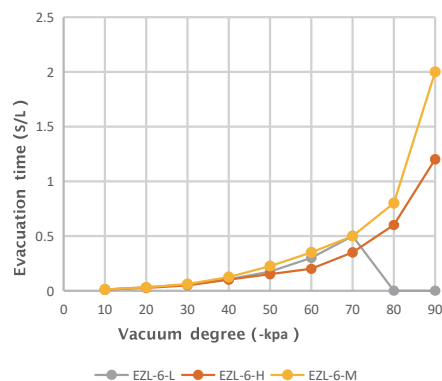
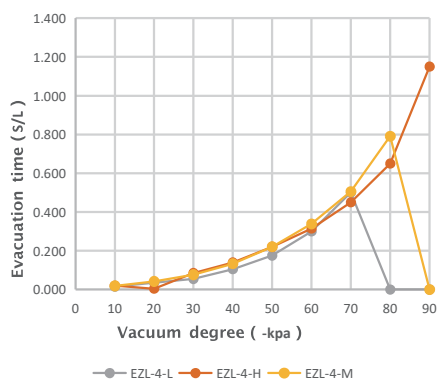
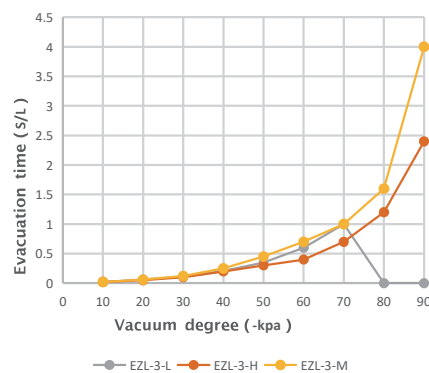
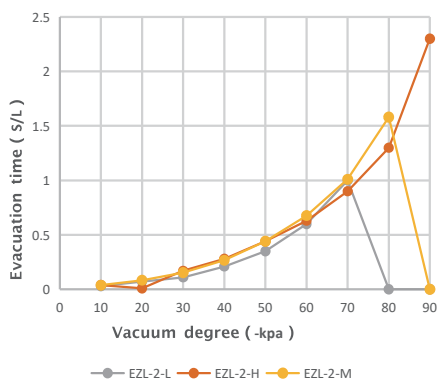
HANVAC



General

Extraction time (S/L) for different vacuum degrees (- kpa)

Models	10	20	30	40	50	60	70	80	90
EZL-2-L	0.03	0.07	0.11	0.21	0.35	0.6	1	0	0
EZL-2-H	0.04	0.009	0.17	0.28	0.44	0.63	0.9	1.3	2.3
EZL-2-M	0.038	0.0084	0.153	0.267	0.441	0.677	1.01	1.581	0
EZL-3-L	0.02	0.06	0.11	0.21	0.35	0.6	1	0	0
EZL-3-H	0.02	0.05	0.1	0.2	0.3	0.4	0.7	1.2	2.4
EZL-3-M	0.02	0.06	0.12	0.25	0.45	0.7	1	1.6	4
EZL-4-L	0.015	0.035	0.055	0.105	0.175	0.300	0.500	0	0
EZL-4-H	0.020	0.005	0.085	0.140	0.220	0.315	0.450	0.650	1.150
EZL-4-M	0.019	0.042	0.077	0.134	0.221	0.339	0.505	0.	0
EZL-6-L	0.01	0.03	0.055	0.105	0.175	0.3	0.5	0	0
EZL-6-H	0.01	0.025	0.05	0.1	0.15	0.2	0.35	0.6	1.2
EZL-6-M	0.01	0.03	0.06	0.125	0.225	0.35	0.5	0.8	2



Vacuum Generator

EZL

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

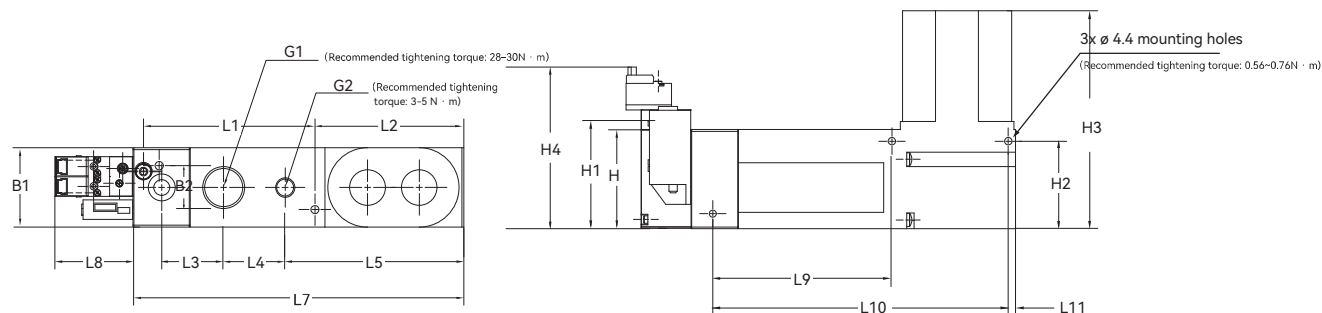
HANVAC


General

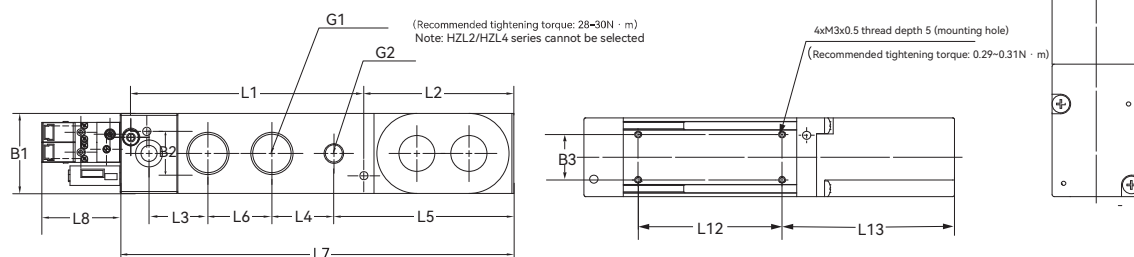


EZL Design parameters for electronic control models

EZL*-4-*-F02/EZL*-6-*-F06



EZL*-6-*-F04



Model

Size [mm]	G1	G2	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
EZL*-4-*-F02	G1/2	G1/8	77.8	75	27.8	31.2	90	/	157.8	39.3	77.8	148.3	4.5
EZL*-6-*-F04	2-G1/2	G1/8	108	75	32	24	90	29.4	188	39.3	108	178.5	4.5
EZL*-6-*-F06	G3/4	G1/8	108	75	58.4	31.2	90	/	188	39.3	108	178.5	4.5

Model

Size [mm]	L12	L13	B1	B2	B3	H	H1	H2	H3	H4
EZL*-4-*-F02	42.8	87.5	40	22.2	23	60	64	53	132	97.9
EZL*-6-*-F04	73	87.5	40	22.2	23	60	64	53	132	97.9
EZL*-6-*-F06	73	87.5	40	22.2	23	60	64	53	132	97.8

Vacuum Generator

EZL

HANVAC

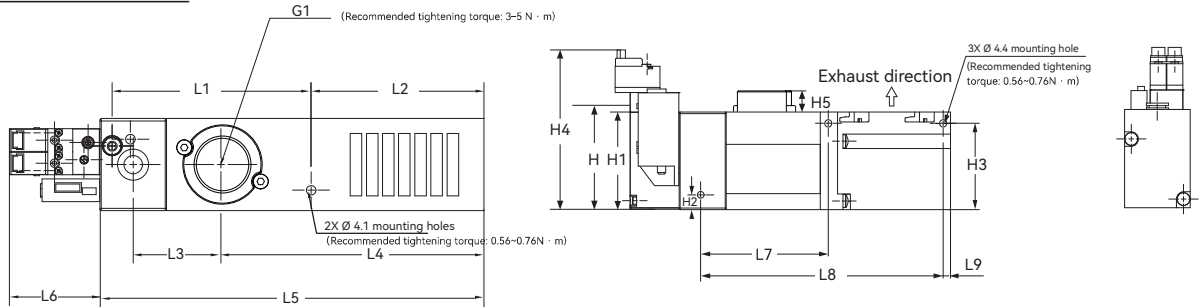

General

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

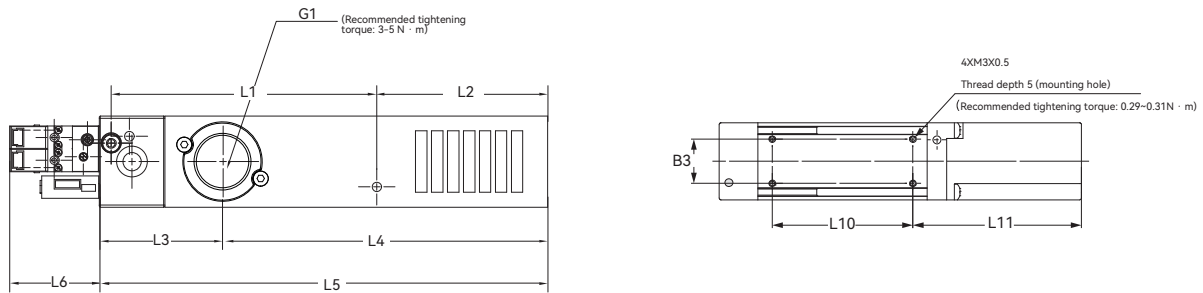


EZL Design parameters for electronic control models

EZLK-3-*-F04/EZLK-3-*-F06



EZLK-6-*-F04/EZLK-6-*-F06



Model

Size [mm]	G1	L1	L2	L3	L4	L5	L6	L7	L8	L9
EZLK-3-*-F04	G1/2	108	75	43.4	139	188	39.3	108	178.5	4.5
EZLK-3-*-F06	G3/4	108	75	43.4	139	188	39.3	108	178.5	4.5
EZLK-6-*-F04	G1/2	108	75	43.4	139	188	39.3	108	178.5	4.5
EZLK-6-*-F06	G3/4	108	75	43.4	139	188	39.3	108	178.5	4.5

Model

Size [mm]	L10	L11	B1	B2	B3	H	H1	H2	H3	H4	H5
EZLK-3-*-F04	73	87.5	40	22.2	23	65	60	9	53	97.9	11
EZLK-3-*-F06	73	87.5	40	22.2	23	65	60	9	53	97.9	14
EZLK-6-*-F04	73	87.5	40	22.2	23	65	60	9	53	97.9	11
EZLK-6-*-F06	73	87.5	40	22.2	23	65	60	9	53	97.9	14


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Vacuum Generator

EZL

HANVAC


General

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)



Technical parameters of pressure switch

Model number		P93
Rated pressure range		-100.0-100.0kpa
Set pressure range		-105.0-105.0kpa
Pressure resistance		500kpa
Applicable gas		Air, non-corrosive, non-flammable
The pressure unit is set to a minimum scale	Kpa	0.1
	Kgf/cm2	0.001
	Bar	0.001
	Psi	0.01
	Inhg	0.1
	Mmhg	1
Supply voltage		24V DC±10%, wave crest value below 10%
Current consumption		≤40mA（off load）
Switching output	Action display light	NPN or PNPcollector output
	output mode	125mA
	Maximum load current	24V DC
	Maximum supply voltage	≤1.5V
control input	Internal pressure drop	NPN type
		Low level input（SPST or electronic contact）
		Level voltage: below 0.4V DC, input time above 10ms
		PNP type
		High level input（SPST or electronic contact）
		Level voltage: below 20-24V DC, input time above 10ms
Solenoid valve drives maximum current		200mA@24V DC max
repeatability		±0.2% F.S. ±1 digit
Switching reaction time		≤2.5ms
		（Error prevention function: 2.5ms, 20ms, 100ms, 500ms, 1000ms and 1999ms optional）
Short-circuit protection		OUT switch: Yes, vacuum solenoid valve（V-Sol）/Broken vacuum solenoid valve（D-Sol）: No
reveal		31/2-bit LED 7-segment display（red）（sampling rate 5 times/SEC）
Display accuracy		±2% F.S. ±1 digit
Motion display light		OUT Green/V-Sol control input: red（vacuum mark）



Vacuum Generator

EZL

HANVAC


General

Maximum suction flow rate: four types 192/372/384/744L/min (ARN)

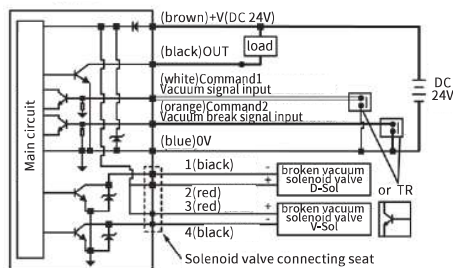


Pressure Switch Technical Data

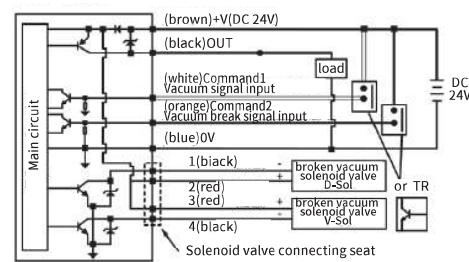
Model number	P93	
Environmental requirement	Class of protection	IP40
	Ambient temperature	Action: 0-50°C storage -10-60°C (no water dew, no freezing)
	Ambient humidity	Operation and storage: 35-80% RH (no water)
	Withstand voltage	1000VAC 1 min (between lead and housing)
	Insulation impedance	Above 500MΩ (500V DC) (between the lead and the housing)
	Vibration resistance	Complex amplitude 1.5mm or 10G, 10HZ-150HZ-10HZ every minute, 2 hours in each direction X,Y,Z
	Impact resistance	900m/s ² (100G), 3 times in each direction X,Y,Z
Temperature characteristic	±2% F.F. Comparison reference temperature 25°C (0-50°C temperature range)	
Intake form	90 ° inlet Port & None	
Wire specification	Oil resistant PVC wire (0.15mm ²)	
weight	Approx. 58g (includes 2 meters of wire)	



Pressure Switch Circuit Wiring diagram



NPN output



PNP output

Vacuum Generator SEC

Maximum vacuum flow: 35L/Min

HANVAC



General

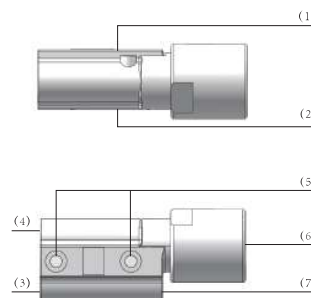
Product characteristics

- * High speed handling, strong blowing, fast release function of the generator, the automatic operation of very short beats
- * The body is made of plastic, small size, light weight, especially suitable for high dynamic systems
- * Direct mounting of suckers and connectors
- * With silencer, low noise
- * Vacuum switch option
- * Modular installation for vacuum generators in various fields, active blowing can achieve very short beat times, including sheet metal handling, automotive industry, packaging equipment and robotics



Product structure

- * (1) Body: made of plastic, small size, light weight
- * (2) Silencer: made of anodized aluminum
- * (3) Joint: compressed air joint for blowing
- * (4) Joint: compressed air joint for suction
- * (5) Connection port: used to connect with tooling
- * (6) Connector: vacuum connector
- * (7) Mounting screw: M4x2



Product advantages

- * Suitable for various occasions that require blowing and short working cycle, such as sheet metal Processing, automotive industry, packaging machinery and industrial robots



*Example of vacuum generator SECV directly connected to ball chuck

*Vacuum generator ECG-10H combination



Vacuum Generator

SEC

Maximum vacuum flow: 35L/Min

HANVAC



General



SECV-10 Ordering NO

SECV	10
1	2

1-Series	2-Nozzle size
SECV	Vacuum Generator
	10
	10mm

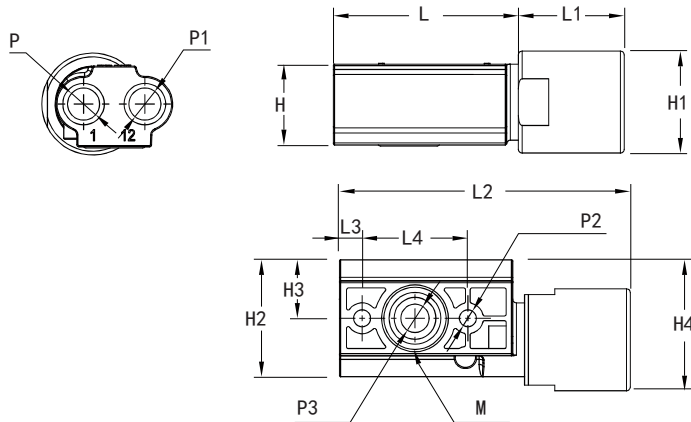


SECV-10 Technical Data

Models	Nozzle	Use fluid	Temperature [°C]	Inlet pressure [Mpa]	Air consumption [L/Min]	Vacuum pressure reached [-Kpa]	Maximum vacuum flow [L/Min]	Weight [KG]
SECV-10	1mm	air	0~60(non-freezing)	0.4~0.6	50	85	35	0.1



SECV-10 Design Data



SECV-10

Size[mm]

Models	P	P1	P2	P3	L	L1	L2	L3	L4	H	H1	H2	H3	H4	M
SECV-10	G1/8	G1/8	2-Ø4,5	Ø7,5	49	28	77	6	28	21,4	Ø27	31	15,5	35	1.5*1.6



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Cup

HAB

1.5 fold corrugated suction cup

HAF

Flat suction cup

HBX

Elliptical vacuum suction cup

HFA

Plastic film special suction cup

HFB

1.5 fold corrugated suction cup

HMX

Plastic film special suction cup

HMX3

Plastic film special suction cup

HPS

Rim ripple suction cup

HSP

Multi-functional corrugated sucker

HSC

2.5 fold corrugated suction cup

HSCP

Corrugated suction cup

HSD

Corrugated suction cup

HSE

Special for spherical workpieces

HPE4

Skirt corrugated suction cup

HSBX

Tight fit on uneven workpiece surface

HGX

Special for crispy bags

HSB

1.5 fold corrugated suction cup

HSA

Flat suction cup

HSA-S

Flat suction cup

HSXA

Packaging industry specific

HSXB

Packaging industry specific

HXB

Oil based sheet metal corrugated suction cups

HXF

Oil based sheet metal flat suction cups

HSN100

Needle suction cup

HZN25

Needle suction cup

HMP

Magnetic suction cup

Suction Cups

HAB

1.5 fold the corrugated suction cup

HANVAC


Glass



anti-slip



Metal



Oil proof

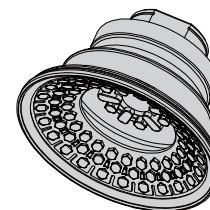
Product characteristics

- * Used for fast handling of sheet metal
- * The sheet metal is handled without dents or deformations
- * The corrugated shape fits well with the workpiece
- * Handling systems for stamping production lines in the automotive industry
- * The bottom of the sucker has a special groove structure to prevent the oily metal plate from sliding during handling, ensuring accurate positioning of the workpiece in the press



Product structure

- * Rugged, wear-resistant 1.5 fold corrugated suction cup
- HAB, made of NBR material, with special grooves and internal support structure
- * The suction cups and joints are fixed by vulcanization
- * Suction cups are available in a variety of connection forms



Product advantages

- * Suitable for workpieces of different shapes and sizes
- * Perfect fit with uneven workpiece surface, with good sealing and cushioning performance
- * Strong horizontal and lateral grasping power
- * Does not cause workpiece deformation, even when handling metal sheets with oily surfaces can still provide strong anti-slip side forces



*HAB suction cups transport concave and convex workpiece surfaces

Suction Cups

HAB

1.5 fold the corrugated suction cup



Glass



anti-slip



Metal



Oil proof

HANVAC



HAB Ordering NO

HAB	22	FG02	NBR
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HAB	22~125	F Internal thread
Suction Cup	22mm~125mm	G02-G1/4
		G03-G3/8
		M External thread
		G02-G1/4
		G03-G3/8

4-Material ⁽¹⁾	
NBR	Nitrile rubber
HT1	High temperature material(blue)
HT2	High temperature material(black)

(1) Other materials can also be made, please contact us



HAB Selection specification

Models	F-G02-G1/4	F-G03-G3/8	M-G02-G1/4	M-G03-G3/8
HAB22	◎		◎	
HAB30	◎		◎	
HAB40	◎		◎	
HAB50	◎	◎	◎	
HAB60	◎	◎	◎	
HAB80	◎	◎	◎	
HAB100	◎	◎	◎	
HAB125	◎	◎	◎	

Suction Cups

HAB

1.5 fold the corrugated suction cup

HANVAC


Glass



anti-slip



Metal



Oil proof



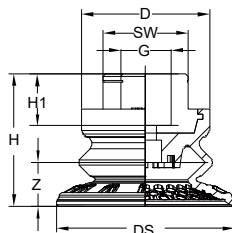
HAB Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Oily surface lateral force [N] ⁽²⁾	Inner volume [cm ³]
HAB-22-**	16	18	6	2.5
HAB-30-**	22	30	13	5.7
HAB-40-**	38	36	33	8.7
HAB-50-**	53	55	52	16.1
HAB-60-**	82	82	77	28.8
HAB-80-**	135	145	140	67.6
HAB-100-**	190	220	214	115
HAB-125-**	250	352	335	220

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor.
Depending on the surface condition of the workpiece, the value may change.



HAB Design Data



Size[mm] ⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HAB22-FG02	24.5	25	12	G1/4"	21	SW16	5.8	9.06
HAB30-FG02	26.5	28	12	G1/4"	32	SW17	9	13.51
HAB40-FG02	26	29	15	G1/4"	42	SW17	10	15.07
HAB50-FG03	37	37	15	G3/8"	52	SW22	11.5	35.17
HAB60-FG03	38	41.5	15	G3/8"	63	SW22	14.5	41.35
HAB80-FG03	40	50	15	G3/8"	83	SW22	22	63.38
HAB100-FG03	40.8	57	15	G3/8"	103	SW22	26	100.42
HAB125-FG03	54	68	15	G3/8"	128	SW22	32	168.87

HAB22~125 Dimension



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Suction Cups

HAB

1.5 fold the corrugated suction cup

HANVAC


Glass



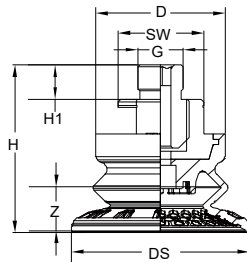
anti-slip



Metal



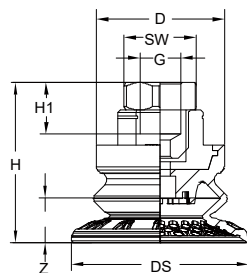
Oil proof



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HAB22-MG02	24.5	34	9	G1/4	21	SW16	5.8	13.74
HAB30-MG02	26.5	37	9	G1/4	32	SW17	9	13.74
HAB40-MG02	26	38	9	G1/4	42	SW17	10	19.75
HAB50-MG02	37	46	9	G1/4	52	SW22	11.5	43.37
HAB60-MG02	38	50.5	9	G1/4	63	SW22	14.5	49.55
HAB80-MG02	40	59	9	G1/4	83	SW22	22	71.58
HAB100-MG02	40.8	66	9	G1/4	103	SW22	26	108.62
HAB125-MG02	54	77	9	G1/4	128	SW22	32	177.07

HAB22~125 External thread



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HAB50-FG02	37	46	15	G1/4	52	SW22	11.5	51.19
HAB60-FG02	38	50.5	15	G1/4	63	SW22	14.5	57.37
HAB80-FG02	40	59	15	G1/4	83	SW22	22	79.4
HAB100-FG02	40.8	66	15	G1/4	103	SW22	26	116.44
HAB125-FG02	54	77	15	G1/4	128	SW22	32	184.89

HAB50~125 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HAB

1.5 fold the corrugated suction cup

HANVAC



Glass



anti-slip



Metal



Oil proof

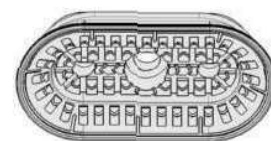
Product characteristics

- * Used for fast handling of sheet metal
- * The sheet metal is handled without dents or deformations
- * The corrugated shape fits well with the workpiece
- * Handling systems for stamping production lines in the automotive industry
- * The bottom of the sucker has a special groove structure to prevent the oily metal plate from sliding during handling, ensuring accurate positioning of the workpiece in the press



Product structure

- * Rugged, wear-resistant 1.5 fold corrugated suction cup
- HAB, made of NBR material, with special grooves and internal support structure
- * The suction cups and joints are fixed by vulcanization
- * Suction cups are available in a variety of connection forms



Product advantages

- * Suitable for workpieces of different shapes and sizes
- * Perfect fit with uneven workpiece surface, with good sealing and cushioning performance
- * Strong horizontal and lateral grasping power
- * Does not cause workpiece deformation, even when handling metal sheets with oily surfaces can still provide strong anti-slip side forces



*HAB suction cups carry long workpiece surfaces

Suction Cups

HAB

1.5 fold the corrugated suction cup



Glass



anti-slip



Metal



Oil proof

HANVAC



HAB Order Code

HAB 1	—	22 2	—	FG02 3	—	NBR 4
1-Series		2-Diameter		3-Screw thread		
HAB		Suction Cup		F Internal thread		G01-G1/8
						G02-G1/4
				M External thread		G02-G1/4
4-Material ⁽¹⁾						
NBR		Silicone rubber				
HT1		High temperature material(blue)				
HT2		High temperature material(black)				

(1) Other materials can also be made, please contact us



HAB Selection Specifications

Models	F-G01-G1/8	F-G02-G1/4	M-G02-G1/4
HAB60X30		⊙	⊙
HAB80X40		⊙	⊙
HAB110X55		⊙	⊙
HAB140X70		⊙	⊙



HAB Technical Parameters

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Oily surface lateral force [N]	Inner volume [cm ³]
HAB60X30	38	73	42	10.5
HAB80X40	65	153	74	21.8
HAB110X55	110	299	124	53.1
HAB140X70	165	473	246	106.0

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HAB

1.5 fold the corrugated suction cup

HANVAC


Glass



anti-slip



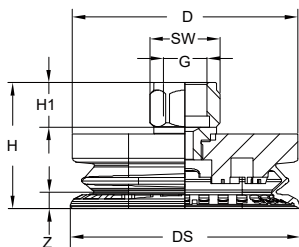
Metal



Oil proof



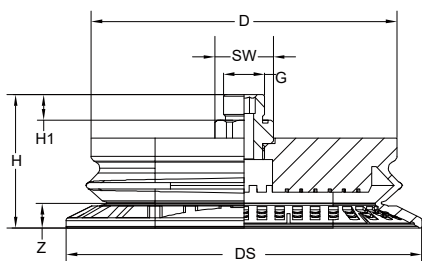
HAB Design Parameters



Size[mm]⁽³⁾

Models	D	H	H1	G	SW	DS	Z	Weight [g]
HAB60X30-FG02	62	34.5	8	G1/4"	SW17	63	7	34.81
HAB80X40-FG02	67	37.2	8	G1/4"	SW17	82	9	42.49
HAB110X55-FG02	96.5	43.5	9	G1/4"	SW17	112	13	91.12
HAB140X70-FG02	111	47.5	9	G1/4"	SW17	143	16.5	139.53

HAB60×30~140×70 Internal thread



Size[mm]⁽³⁾

Models	D	H	H1	G	SW	DS	Z	Weight [g]
HAB60X30-FG02	62	33.8	8	G1/4"	SW17	63	7	33.82
HAB80X40-FG02	67	37	8	G1/4"	SW17	82	9	41.5
HAB110X55-FG02	96.5	42.3	8	G1/4"	SW17	112	13	92.09
HAB140X70-FG02	111	46.8	8	G1/4"	SW17	143	16.5	140.5

HAB60×30~140×70 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



Suction Cups

HAF

Flat Suction Cups

HANVAC



Glass



Anti-slip



Metal



Oil proof

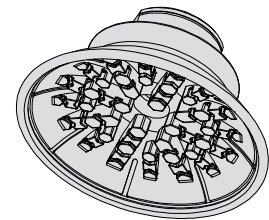
Product characteristics

- * For fast handling of sheet metal
 - * The sheet metal will not be dented or deformed when handled
 - * The corrugated shape fits well with the workpiece
- Handling systems for stamping production lines in the automotive industry
- * The bottom of the sucker has a special groove structure to prevent the oily metal plate from sliding during handling, ensuring the precise positioning of the workpiece in the press



Product structure

- * Solid and wear-resistant flat suction cup HAF, made of NBR material, with special grooves and internal support structure
- * Suckers and joints are vulcanized
- * Suction cups are available in a variety of connection forms



Product advantages

- * Suitable for workpieces of different shapes and sizes
- * Perfect fit with uneven workpiece surface, with good sealing and cushioning performance
- * Strong horizontal and lateral grasping power
- * Does not cause workpiece deformation, even when handling metal sheets with oily surfaces can still provide strong anti-slip side forces



*HAF product application

Suction Cups

HAF

Flat Suction Cups

HANVAC


Glass



Anti-slip



Metal



Oil proof



HAF Ordering NO

HAF	30	FG02	NBR
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HAF	Suction Cup	F Internal thread
	30~125	30mm~125mm
		G02-G1/4
		G03-G3/8
		M External thread
		G02-G1/4

4-Material ⁽¹⁾	
NBR	Nitrile rubber
HT1	High temperature material(blue)
HT2	High temperature material(black)

(1)Other materials can also be made, please contact us



HAF Selection specification

Models	F-G02-G1/4	F-G03-G3/8	M-G02-G1/4
HAF30	◎		◎
HAF40	◎		◎
HAF50	◎	◎	◎
HAF60	◎	◎	◎
HAF80	◎	◎	◎
HAF100	◎	◎	◎
HAF125	◎	◎	◎



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Suction Cups

HAF

Flat Suction Cups

HANVAC


Glass



Anti-slip



Metal



Oil proof



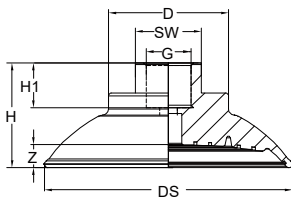
HAF Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Oily surface lateral force [N]	Inner volume [cm ³]
HAF30	38	30	28	1.7
HAF40	69	52	50	3.8
HAF50	100	80	76	7.0
HAF60	150	105	85	13.0
HAF80	272	205	180	36.0
HAF100	430	310	300	58.0
HAF125	660	475	400	115.0

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



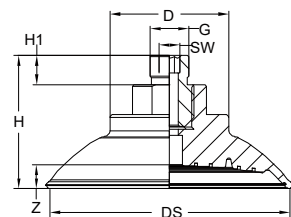
HAF 30~125 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HAF30-FG02	25.3	20.1	12	G1/4"	32	SW17	3	11.31
HAF40-FG02	25.4	21.7	12	G1/4"	42	SW17	3.9	13.29
HAF50-FG03	37	28	15	G3/8"	52.5	SW22	4.6	30.9
HAF60-FG03	38	31	15	G3/8"	63	SW22	6	37.74
HAF80-FG03	40	35	15	G3/8"	83	SW22	7.6	53.99
HAF100-FG03	40	36	15	G3/8"	103	SW22	9.5	66.24
HAF125-FG03	50.8	43	15	G3/8"	128	SW22	12.5	124.99

HAF30~125 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HAF30-MG02	25.3	30.1	8	G1/4"	32	SW6	3	15.99
HAF40-MG02	25.4	31.7	8	G1/4"	42	SW6	3.9	17.97
HAF50-MG02	37	38	10	G1/4"	52.5	SW6	4.6	39.1
HAF60-MG02	38	41	10	G1/4"	63	SW6	6	45.94
HAF80-MG02	40	45	10	G1/4"	83	SW6	7.6	62.19
HAF100-MG02	40	46	10	G1/4"	103	SW6	9.5	74.44
HAF125-MG02	50.8	53	10	G1/4"	128	SW6	12.5	133.19

HAF30~125 External thread



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Suction Cups

HAF

Flat Suction Cups

HANVAC


Glass



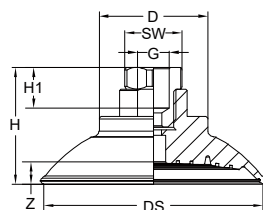
Anti-slip



Metal



Oil proof

Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HAF50-FG02	37	36	15	G1/4"	52.5	SW20	4.6	46.92
HAF60-FG02	38	39	15	G1/4"	63	SW20	6	53.76
HAF80-FG02	40	43	15	G1/4"	83	SW20	7.6	70.01
HAF100-FG02	40	44	15	G1/4"	103	SW20	9.5	82.26
HAF125-FG02	50.8	51	15	G1/4"	128	SW20	12.5	141.01

HAF30~125 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HAF

Flat Suction Cups (Oval)

HANVAC



Section



Anti-slip



Metal



Oil proof

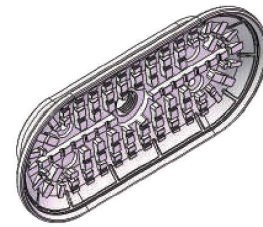
Product characteristics

- * For fast handling of sheet metal
 - * The sheet metal will not be dented or deformed when handled
 - * The corrugated shape fits well with the workpiece
- Handling systems for stamping production lines in the automotive industry
- * The bottom of the sucker has a special groove structure to prevent the oily metal plate from sliding during handling, ensuring the precise positioning of the workpiece in the press



Product structure

- * Strong and wear-resistant oval flat suction cup HAF, made of NBR material, with special grooves and internal support structure
- * Suckers and joints are vulcanized
- * Suction cups are available in a variety of connection forms



Product advantages

- * Suitable for workpieces of different shapes and sizes
- * Perfect fit with uneven workpiece surface, with good sealing and cushioning performance
- * Strong horizontal and lateral grasping power
- * Does not cause workpiece deformation, even when handling metal sheets with oily surfaces can still provide strong anti-slip side forces



*HAF suction cups carry long workpiece surfaces

Suction Cups

HAF

Flat Suction Cups (Oval)

HANVAC


Section



Anti-slip



Metal



Oil proof



HAF Ordering NO

HAF	50×16	FG02	NBR
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HAF	Suction Cup	F Internal thread
	50×16	50×16~140×70mm
		G01-G1/8
		G02-G1/4
		M External thread
		G02-G1/4
4-Material ⁽¹⁾		
NBR	Nitrile rubber	
HT1	High temperature material(blue)	
HT2	High temperature material(black)	

(1)Other materials can also be made, please contact us



HAF Selection specification

Models	F-G01-G1/8	F-G02-G1/4	M-G02-G1/4
HAF50X16		◎	◎
HAF60X23		◎	◎
HAF80X40		◎	◎
HAF90X30		◎	◎
HAF100X50		◎	◎
HAF120X60		◎	◎
HAF140X70		◎	◎



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Suction Cups

HAF

Flat Suction Cups (Oval)

HANVAC


Section



Anti-slip



Metal



Oil proof



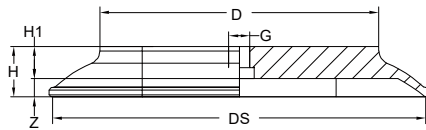
HAF Technical Data

Models	Suction ⁽²⁾ [N]	Lateral force ⁽²⁾ [N]	Oily surface lateral force [N] ⁽²⁾	Inner volume [cm ³]
HAF50X16	31	24	12	2.0
HAF60X23	57	37	33	3.0
HAF80X40	122	96	64	7.0
HAF90X30	140	110	100	10.7
HAF100X50	217	181	121	20.0
HAF120X60	312	254	170	35.0
HAF140X70	425	344	230	52.0

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



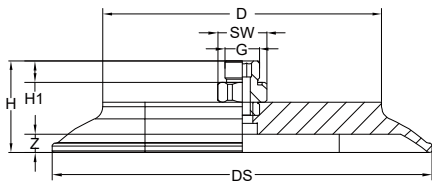
HAF 50×16~140×70 Technical Data



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	Z	Weight [g]
HAF50X16-FG01	45	18.5	15	G1/8"	50	3	16.82
HAF60X23-FG01	54.4	12.2	9	G1/8"	62.4	2.5	10.96
HAF80X40-FG01	67	14	10	G1/8"	82	4	26.18
HAF90X30-FG01	85	12	10	G1/8"	92	3	32.46
HAF100X50-FG02	88	16.5	11	G1/4"	102	5	53.77
HAF120X60-FG02	99	18	12	G1/4"	123	6	70.74
HAF140X70-FG02	105	19	12	G1/4"	143	7	80.86

HAF50×16~140×70 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	Z	Weight [g]
HAF50X16-MG02	45	34.9	8	G1/4"	50	3	24.02
HAF60X23-MG02	54.4	28.6	8	G1/4"	62.4	2.5	18.16
HAF80X40-MG02	67	30.4	8	G1/4"	82	4	33.38
HAF90X30-MG02	85	28.4	8	G1/4"	92	3	39.66
HAF100X50-MG02	88	32	8	G1/4"	102	5	58.45
HAF120X60-MG02	99	33.5	8	G1/4"	123	6	75.42
HAF140X70-MG02	105	34.5	8	G1/4"	143	7	85.54

HAF50×16~140×70 External thread



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Suction Cups

HAF

Flat Suction Cups (Oval)

HANVAC


Section



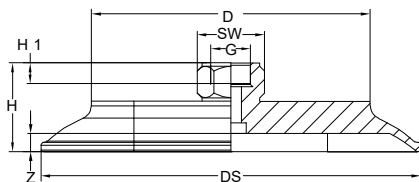
Anti-slip



Metal



Oil proof



Size[mm] ⁽³⁾

Models	D	H	H1	G	DS	Z	Weight [g]
HAF50X16-FG02	45	32.5	8	G1/4"	50	3	23.03
HAF60X23-FG02	54.4	26.2	8	G1/4"	62.4	2.5	17.17
HAF80X40-FG02	67	28	8	G1/4"	82	4	32.39
HAF90X30-FG02	85	26	8	G1/4"	92	3	38.67
HAF100X50-FG02	88	31	9	G1/4"	102	5	59.42
HAF120X60-FG02	99	32.5	9	G1/4"	123	6	76.39
HAF140X70-FG02	105	33.5	9	G1/4"	143	7	86.51

HAF50×16~140×70 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HBX

Special suction cups for slender workpieces

HANVAC


packing



plastic bag

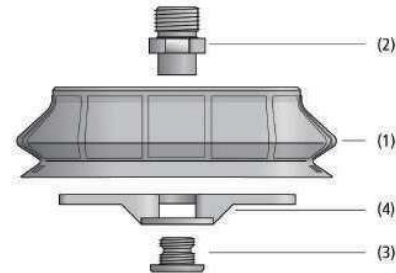
Product characteristics

- *1.5 fold elliptical corrugated pipe suction cup, used for cardboard boxes and pallet racks
- *Handling cardboard, hard packaging, or soft packaging
- *Used for palletizing and unloading
- *HBX suction cups have excellent sealing and low wear resistance



Product structure

- *1.5 fold oval corrugated pipe suction cup (1)
- *Machine side components (2) and suction side components (3) are composed of
- *Additional suction cup inserts (4)



Product advantages

- *Silicone material that meets FDA standards
- *Extremely flexible suction bellows and sealing lips
- *Anti rotation protective cover ensures accurate positioning
- *Large diameter can achieve high flow rate within short cycle time



*HBX Examples of suction cup handling

Suction Cups

HBX

Special suction cups for slender workpieces

HANVAC


packing



plastic bag



HBX Ordering NO

HBX	35X15	FG01	SI
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HBX	Suction cup	F Internal thread
	35X15	G01-G1/8
	60X25	G02-G1/4
	80X35	M External thread
		G01-G1/8
		G02-G1/4

4-Material ⁽¹⁾	
SI	Silicon rubber

(1) Other materials can also be made, please contact us



HBX Selection specification

Models	F-G01-G1/8	F-G02-G1/4	M-G01-G1/8	M-G02-G1/4
HBX35X15	◎		◎	
HBX60X25		◎		◎
HBX80X35		◎		◎



Suction Cups

HBX

Special suction cups for slender workpieces

HANVAC


packing



plastic bag



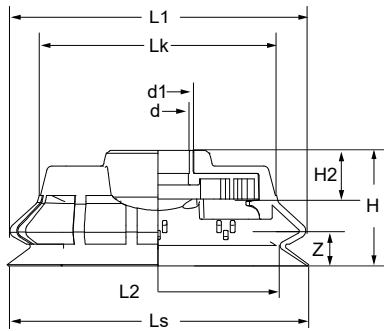
HBX Technical Data

Models	Volume [cm ³]	Suction [N] ⁽²⁾
HBX35X15	2.14	12.6
HBX60X25	11.54	36.6
HBX80X35	26.12	74.7

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.

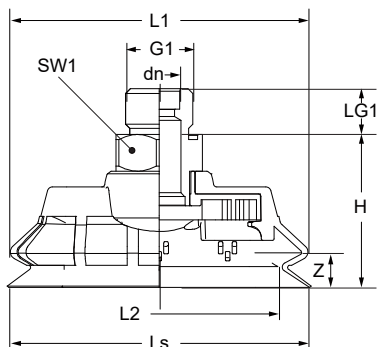


HBX Design Data


 Size[mm]⁽³⁾

Models	L1	LK	d1	d	L2	Ls	H2	Z	H
HBX35X15	35	28.5	11	8.3	28	34.6	5	4	13
HBX60X25	60	46.9	17.3	12.4	48.8	59.5	6.9	9	23
HBX80X35	80	61.1	17.3	12.4	66	79.5	6.9	11	27

HBX35X15~80X35 Dimension


 Size[mm]⁽³⁾

Models	L1	G1	dn	L2	Ls	LG1	H	Z	SW1	Weight [g]
HBX35X15-MG01	35	G1/8"	4.1	28	34.6	7.5	19	4	14	6.9
HBX60X25-MG02	60	G1/4"	6.1	48.8	59.5	10	30.2	9	17	19.7
HBX80X35-MG02	80	G1/4"	6.1	66	79.5	10	34.2	11	17	25.6

HBX35X15~80X35 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts


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Suction Cups

HBX

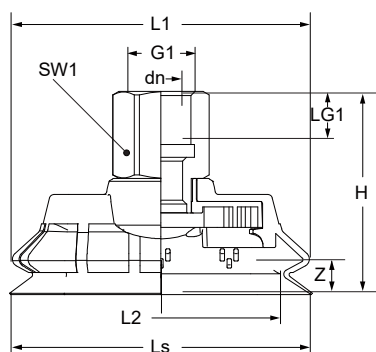
Special suction cups for slender workpieces

HANVAC


packing



plastic bag



Size[mm] ⁽³⁾

Models	L1	G1	dn	L2	Ls	LG1	H	Z	SW1	Weight [g]
HBX35X15-MG01	35	G1/8"	8.3	28	34.6	8	19	4	14	8.3
HBX60X25-MG02	60	G1/4"	12.4	48.8	59.5	10	30.2	9	17	20.3
HBX80X35-MG02	80	G1/4"	12.4	66	79.5	10	34.2	11	17	26.2

HBX35X15~80X35 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts

Suction Cups

HFA

Special sucker for plastic film and paper

HANVAC



Package



Plastic bag

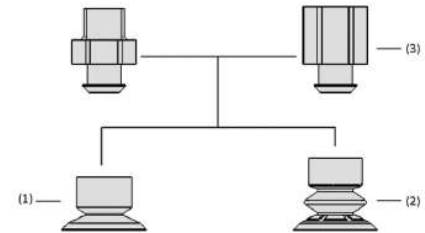
Product characteristics

- * Thin, large-angle, skirted corrugated suction cup with shunt blades
- * Extremely soft and flexible skirt seal
- * Body and corrugated reinforcement design
- * Large size increases vacuum flow
- * Made of FDA-compliant silicone and equipped with suction cup fixing pads
- * Built-in suction cup fixing gasket (yellow)



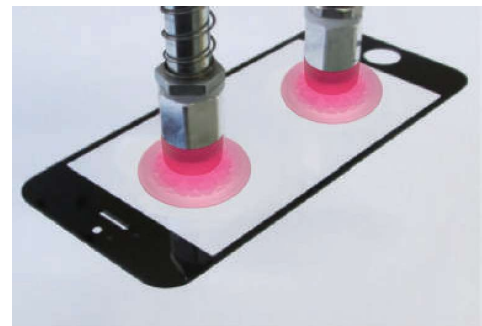
Product structure

- * Suction cups with thin and flexible sealing lips including flat suction cups HFA (1) or corrugated sucker HFA1.5 fold (2) and connecting elements (3)
- * The inner support surface has a honeycomb structure and excellent vacuum distribution
- * Suction area (+) from 10 mm to 40 mm



Product advantages

- * Balance the internal and external pressure of the vacuum gripper to quickly release the product
- * Energy saving effect when handling non-breathable workpieces
- * Any installation location, suitable for small spaces



*HFA transporting mobile phone screens

Suction Cups

HFA

Special sucker for plastic film and paper

HANVAC


Package



Plastic bag



HFA Ordering NO

HFA	10	FG01	SI
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HFA	Suction Cup	
	10	10mm
	15	15mm
	20	20mm
	25	25mm
	30	30mm
	40	40mm

4-吸盘材质⁽¹⁾

SI	Silicone rubber
NBR	Nitrile rubber
NK	Natural rubber
HT1	High temperature material(blue)
HT2	High temperature material(black)
CR	Chloroprene rubber

(1)Other materials can also be made, please contact us



HFA Selection specification

Models	F-G01-G1/8	F-G02-G1/4	M-M5	M-G01-G1/8	M-G02-G1/4
HFA10			◎		
HFA15	◎			◎	
HFA20	◎			◎	
HFA25	◎			◎	
HFA30	◎			◎	
HFA40		◎			◎



Suction Cups

HFA

Special sucker for plastic film and paper

HANVAC


Package



Plastic bag



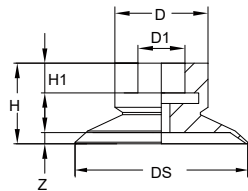
HFA Technical Data

Models	Inner volume		SuctionN ⁽²⁾ [-600mbar]
		[cm ³]	
HFA-10		0.25	2.70
HFA-15		0.6	6.6
HFA-20		0.8	11.6
HFA-25		1.2	18.5
HFA-30		1.7	26.9
HFA-40		4.3	48.6

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.

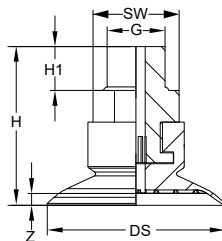


HFA 10~40 Design Data


 Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	Z	Weight [g]
HFA10	13	10.36	5	10	7.5	0.7	0.74
HFA15	13	12.5	5	15	7.5	1	1.16
HFA20	13	12.83	5	20	7.5	1.3	1.41
HFA25	13	13.16	5	25	7.5	1.7	1.98
HFA30	13	13.5	5	30	7.5	2	3.2
HFA40	21.9	18.9	7	40	11	2.7	6.69

HFA10~40 Dimension


 Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight [g]
HFA10-M5-M	20.1	4.7	M5	10	8	0.7	1.32
HFA15-MG01	26	7.5	G1/8"	15	14	1	5.36
HFA20-MG01	26.3	7.5	G1/8"	20	14	1.3	5.61
HFA25-MG01	26.7	7.5	G1/8"	25	14	1.7	6.18
HFA30-MG01	29.5	10	G1/8"	30	14	2	7.4
HFA40-MG02	36.2	10	G1/4"	40.6	14	2.7	17.1

HFA10~40 External thread


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Suction Cups

HFA

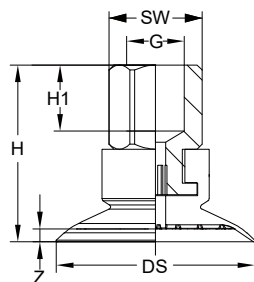
Special sucker for plastic film and paper

HANVAC


Package



Plastic bag



Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight [g]
HFA15-FG01	26.5	9	G1/8"	15	14	1	6.01
HFA20-FG01	26.8	9	G1/8"	20	14	1.3	6.26
HFA25-FG01	27.2	9	G1/8"	25	14	1.7	6.83
HFA30-FG01	30.8	12	G1/8"	30	14	2	8.05
HFA40-FG02	36.2	12	G1/4"	40	17	2.7	17.06

HFA15~40 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HFB

Suction Cups for the Packaging Industry

HANVAC



Package



Plastic bag

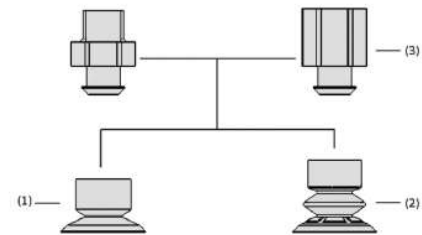
Product characteristics

- * Flexible, thin sealing lip and stable support surface for particularly unstable work pieces
- * Safe component handling due to good vacuum distribution
- * Large selection of materials to meet various requirements (food safety, chemical resistance, temperature resistance)



Product structure

- * Suction cups with thin and flexible seal lip including flat suction cups HFA (1)
- Or corrugated suction cup HFB1.5 fold (2)
- And connecting elements (3)
- * The inner support surface has a honeycomb structure and very good vacuum distribution
- * Suction area (+) from 10 mm to 40 mm



Product advantages

- * Balance the internal and external pressure of the vacuum grab, quickly release the product
- * Energy saving when handling non-permeable workpieces
- * Arbitrary installation position, suitable for small Spaces



*HFB Transport mobile phone film surface

Suction Cups

HFB

Suction Cups for the Packaging Industry

HANVAC


Package



Plastic bag



HFB Ordering NO

HFB	–	10	–	FG01	–	SI
1		2		3		4

1-Series	2-Diameter	3-Screw thread
HFB	Suction Cup	
	10	10mm
	15	15mm
	20	20mm
	25	25mm
	30	30mm
	40	40mm
		F Internal thread
		G01-G1/8
		G02-G1/4
		M External thread
		M5
		G01-G1/8
		G02-G1/4

4-Material ⁽¹⁾	
SI	Silicone rubber
NBR	Nitrile rubber
NK	Natural rubber
HT1	High temperature material(blue)
HT2	High temperature material(black)
CR	Neoprene rubber

(1) Other materials can also be made, please contact us



HFB Selection specification

Models	F-G01-G1/8	F-G02-G1/4	M-M5	M-G01-G1/8	M-G02-G1/4
HFB10			⊙		
HFB15	⊙			⊙	
HFB20	⊙			⊙	
HFB25	⊙			⊙	
HFB30	⊙			⊙	
HFB40		⊙			⊙



Suction Cups

HFB

Suction Cups for the Packaging Industry

HANVAC


Package



Plastic bag

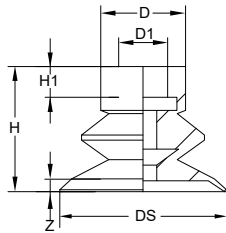


HFB Technical Data

Models	Volume [cm ³]	SuctionN ⁽²⁾ [-600mbar]
HFB10	0.3	0.5
HFB15	0.8	2
HFB20	1.2	2.1
HFB25	1.9	3.2
HFB30	2.9	4.6
HFB40	7.5	8.8

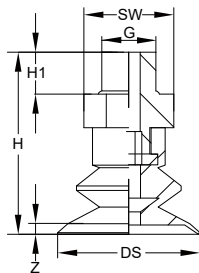


HFB 10~40 Design Data


 Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	Z	Weight[g]
HFB10	13	10	4.7	10	7.5	0.7	0.64
HFB15	13	12.7	4.7	15	7.5	1	1.19
HFB20	13	17	4.7	20	7.5	1.3	1.69
HFB25	13	19.2	4.7	25	7.5	1.7	2.33
HFB30	13	20.4	4.7	30	7.5	2	3.35
HFB40	20	29.7	6.6	40	11.4	2.7	8.3

HFB10~40Dimension


 Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight[g]
HFB10-M5-M	22	4.7	M5	10	8	0.7	1.49
HFB15-MG01	29.54	4.7	G1/8"	15	14	1	5.39
HFB20-MG01	31	7.5	G1/8"	20	14	1.3	5.89
HFB25-MG01	32.7	7.5	G1/8"	25	14	1.7	6.53
HFB30-MG01	36.4	10	G1/8"	30	14	2	7.55
HFB40-MG02	45.7	10	G1/4"	40	14	2.7	18.71

HFB 10~40 External thread


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Suction Cups

HFB

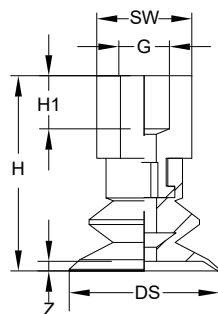
Suction Cups for the Packaging Industry

HANVAC


Package



Plastic bag



Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight[g]
HFB15-FG01	30	6	G1/8"	15	14	1	6.04
HFB20-FG01	31.5	9	G1/8"	20	14	1.3	6.54
HFB25-FG01	33.2	9	G1/8"	25	14	1.7	7.18
HFB30-FG01	37.7	12	G1/8"	30	14	2	8.2
HFB40-FG02	46.9	12	G1/4"	40	17	2.7	18.67

HFB15~40 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HMX

Suction Cups for the Packaging Industry

HANVAC



Plastic bag



Glass



Materials Deformability



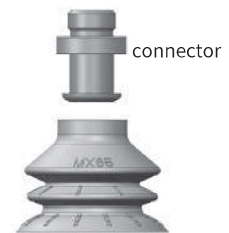
Product characteristics

- * For logistics, warehousing, e-commerce and recycling applications
- * Excellent for picking different objects
- * This is a versatile suction cup with excellent gripping ability, suitable for any surface
- * Good for handling difficult bags, bags, cartons, recycled objects



Product structure

- * 2.5 fold hem suction cup, soft flexible sealing lip
- * Very large shaft diameter, large flow
- * Specially reinforced suction bellows for improved stability
- * Installation using connecting elements; Or connect directly to the pipe via a hose clamp
- * All connection elements with external threads are equipped with integrated seals



Product advantages

- * Suckers are made of food-grade silicone, which combines the excellent elasticity and wear resistance of rubber
- * This material has excellent elastic memory and "traceless" characteristics



*HMX examples of handling soft bags

Suction Cups

HMX

Suction Cups for the Packaging Industry

HANVAC


Plastic bag



Glass



Materials Deformability



HMX Ordering NO

HMX 1	—	65 2	—	MG03 3	—	SI 4
1-Series	2-Diameter		3-Crew thread			
HMX	Suction Cup	65	65mm	M External thread	G03-G3/8	
4-Material ⁽¹⁾						
SI	Food grade silicone					

1) Other materials can also be made, please contact us



HMX Technical Data

Models	Diameter[mm]	Material	Weight[g]	Curve radius[mm]	Screw thread	Number of folds
HMX-65	65	SI	36.9	32.0	M-G03-G3/8-	2.5
Models	Perpendicularity			Level		
	20 -kPa	40 -kPa	60 -kPa	20 -kPa	40 -kPa	60 -kPa
HMX-65	29.1 N	42.0 N	52.2 N	20.4 N	29.4 N	36.5 N

Suction Cups

HMX

Suction Cups for the Packaging Industry

HANVAC


Plastic bag



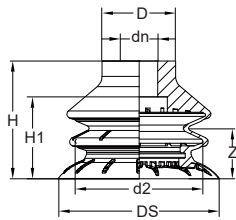
Glass



Materials Deformability



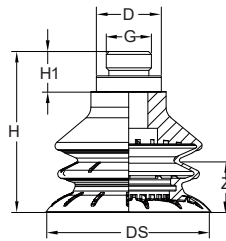
HMX Design Data



Size[mm]⁽³⁾

Models	D	H	H1	DS	d2	dn	Z	Weight[g]
HMX-65	14.35	44.62	31.02	60.61	48.26	14.35	19	29.76

HMX65 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	Z	Weight[g]
HMX-65-MG03	24	59.5	15	G3/8"	60.61	19	43.35

HMX65 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HMX3

Suction Cups for the Packaging Industry

HANVAC



Plastic bag



Glass



Materials Deformability



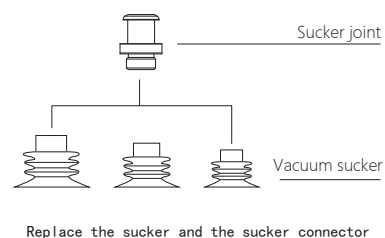
Product characteristics

- * For logistics, warehousing, e-commerce and recycling applications
- * Excellent for picking different objects
- * This is a versatile suction cup with excellent gripping ability, suitable for any surface



Product structure

- * 3.5 fold hem suction cup, soft flexible sealing lip
- * Very large shaft diameter, large flow
- * Specially reinforced suction bellows for improved stability
- * Installation using connecting elements; Or connect directly to the pipe via a hose clamp
- * All connection elements with external threads are equipped with integrated seals



Product advantages

- * Good for handling difficult bags, bags, cartons, recycled objects
- * Suckers are made of food-grade silicone, which combines the excellent elasticity and wear resistance of rubber
- * This material has excellent elastic memory and "traceless" characteristics



*HMX3 Sucker transport case

Suction Cups

HMX3

Suction Cups for the Packaging Industry

HANVAC


Plastic bag



Glass



Materials Deformability



HMX3 Ordering NO

HMX3 1	—	35 2	—	MG03 3	—	SI 4
1-Series		2-Diameter		3-Crew thread		
HMX3	Suction Cup	35	35mm	F Internal thread	G03-G3/8	
		50	50mm		G02-G1/4	
				M External thread	G02-G1/4	
4-Material ⁽¹⁾						
SI-RR	High performance					

1) Other materials can also be made, please contact us



HMX3 Selection specification

Models	M-G02-G1/4	M-G03-G3/8
HMX3-35*	⊙	⊙
HMX3-50*	⊙	⊙



HMX3 Technical Data

Models	Diameter[mm]	Material	Screw thread	Number of folds
HMX3-35**	35	SI-RR	F-G03-G3/8、M-G02-G1/4	3.5
HMX3-50**	50	SI-RR	F-G03-G3/8、M-G02-G1/4	3.5

Models	Perpendicularity			Level		
	20 -kPa	40 -kPa	60 -kPa	20 -kPa	40 -kPa	60 -kPa
HMX3-35**	9.4 N	15.0 N	17.0 N	6.6 N	10.5 N	11.9 N
HMX3-50**	19.8 N	24.9 N	33.0 N	13.9 N	17.4 N	23.1 N



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Suction Cups

HMX3

Suction Cups for the Packaging Industry

HANVAC


Plastic bag



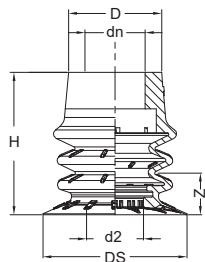
Glass



Materials Deformability



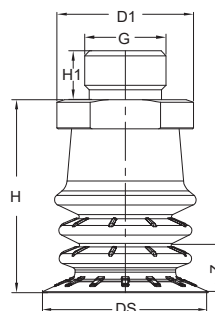
HMX3 Design Data



Size[mm]⁽³⁾

Models	D	H	DS	dn	d2	Z	Weight[g]
HMX3-35	22	33.6	34	14.2	13.5	7.5	7.46
HMX3-50	24.4	41.4	48	14.2	22	11	14.95

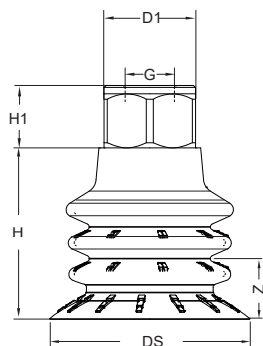
HMX3-35 Dimension



Size[mm]⁽³⁾

Models	D1	H	H1	G	DS	Z	Weight[g]
HMX3-35-MG02	28	39.6	8.5	G1/4"	34	7.5	18.26
HMX3-35-MG03	28	39.6	10	G3/8"	34	7.5	21.05
HMX3-50-MG02	28	57.1	8.5	G1/4"	48	11	25.75
HMX3-50-MG03	28	57.1	10	G3/8"	48	11	28.54

HMX3-35 External thread



Size[mm]⁽³⁾

Models	D1	H	H1	G	DS	Z	Weight[g]
HMX3-35-FG02	22	33.6	15	G1/4"	34	7.5	23.36
HMX3-50-FG02	22	41.1	15	G1/4"	48	11	30.85

HMX3-35 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HPS

Corrugated suction cup at skirt edge



Plastic bag



Glass



Materials Deformability



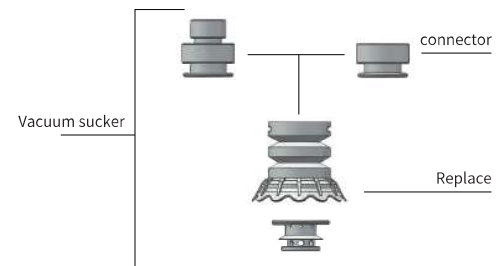
Product characteristics

- * Reinforced body, 1.5 times for safe grip and stability even at high speeds
- * Large nominal flow rate enables high flow rate and short cycle time
- * Circular bellows suction cup, 1.5x, very flexible handling of bags and other types of packaging reliably grabs and handles bags containing liquids, solids or powders as well as packages that are not very full



Product structure

- * 1.5 fold skirt suction cup, soft flexible sealing lip, with segmented flow vane and integrated bag stabilizer
- * Installation using connecting elements; Or connect directly to the pipe via hose clamps all externally threaded connection elements are equipped with integrated seals
- * Optional plug-in filter for pre-filter



Product advantages

- * Very large shaft diameter, large flow
- * Specially reinforced suction bellows for improved stability
- * Silicone SI that meets FDA standards allows direct contact with food
- * Integrated bag stabilizer prevents film and film from being pulled in



Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



Glass



Materials Deformability



HPS Ordering NO

HPS	35	FG02	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HPS	Suction Cup	F Internal thread
	35	G02-G1/4
	35mm	M External thread
		G02-G1/4

4-Material ⁽¹⁾	
SI	Food grade silicone (transparent)
SI-RR	High performance (pink)

(1) Other materials can also be made, please contact us



HPS Selection specification

Models	F-G02-G1/4	M-G02-G1/4
HPS35	⊙	⊙



HPS Technical Data

Models	Diameter[mm]	Number of folds
HPS-35	35	1.5



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Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



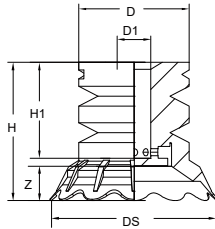
Glass



Materials Deformability



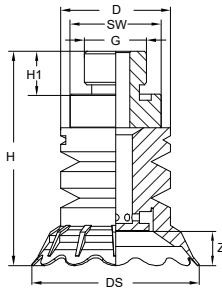
HPS35 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	D1	DS	Z	Weight[g]
HPS35	23	29	20	7	35	7	4.57

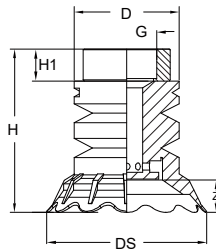
HPS35 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HPS35-MG02	23	45	9	G1/4"	35	19	7	11.56

HSB35 External thread



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HPS35-FG02	23	36	7	G1/4"	35	19	7	7.92

HSB35 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



Glass



Materials Deformability



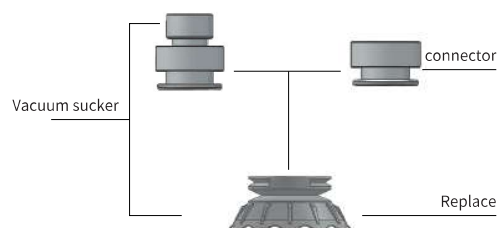
Product characteristics

- * Corrugated suction cups are used for handling very flexible products, such as plastic bags, aluminum foil bags and other soft bag packaging
- * The flat thin lip can safely and reliably grasp the packaging bag containing solid material, powder or liquid, and has extraordinary sealing performance on flexible work such as grasping packaging bags



Product structure

- * 1.5 fold skirt suction cup, soft flexible sealing lip, with segmented flow vane and integrated bag stabilizer
- * Installation using connecting elements; Or connect directly to the pipe via hose clamps all externally threaded connection elements are equipped with integrated seals
- * Optional plug-in filter for pre-filter



Product advantages

- * The suction cup does not wrinkle or stick when absorbing the film
- * Suitable for vacuum pumps, vacuum blowers and multistage vacuum generators
- * Food grade silicone material, can directly contact food



Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



Glass



Materials Deformability



HPS Ordering NO

HPS	60	FG03	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread	
HPS	Suction Cup	60	60mm
		F Internal thread	G03-G3/8
		M External thread	G02-G3/8

4-Material ⁽¹⁾	
SI	Food grade silicone (transparent)
SI-RR	High performance (pink)

(1) Other materials can also be made, please contact us



HPS Selection specification

Models	F-G03-G3/8	M-G03-G3/8
HPS60	⊙	⊙



HPS Technical Data

Models	Diameter[mm]	Number of folds
HPS-60	60	monolayer

Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



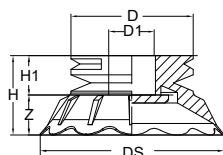
Glass



Materials Deformability



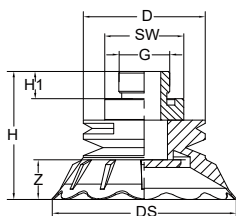
HPS60 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	D1	DS	Z	Weight[g]
HPS60	40	26	13	15	60	13	11.91

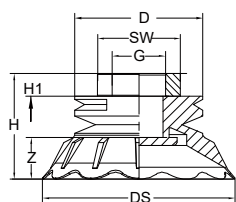
HPS60 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HPS60-MG03	40	42	7	G3/8"	60	SW26	13	26.08

HSB60 External thread



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight[g]
HPS60-FG03	40	33	7	G3/8"	60	SW26	13	22.27

HSB60 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC



Plastic bag



Glass



Materials Deformability



Product characteristics

- * Corrugated suction cups are used for handling very flexible products, such as plastic bags, aluminum foil bags and other soft bag packaging
- * Good cushioning performance and strong suction when touching the workpiece
- * Long contraction stroke of the sucker



Product structure

- * Corrugated sucker seal thin lip flexible and flexible
 - * Specially designed corrugated structure is more stable
 - * Installation via connector. It can also be installed on a 3/8 "air pipe and fixed with a tube hoop
- All male fittings are fitted with O-rings



Product advantages

- * Strong adaptability to curved surfaces and uneven workpieces
- * Handling thin-walled workpieces will not cause permanent deformation
- * Corrugated flexibility, seal lip soft and taper
- * Waterproof, high temperature resistance, low temperature is the unique advantage of the product



Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



Glass



Materials Deformability



HPS Ordering NO

HPS	120	MG03	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread	
HPS	Suction Cup	120	120mm
		F Internal thread	G03-G3/8
		M External thread	G02-G3/8

4-Material⁽¹⁾

SI	Food grade silicone (transparent)
SI-RR	High performance (pink)

(1) Other materials can also be made, please contact us



HPS Selection specification

Models	F-G03-G3/8	M-G03-G3/8
HPS120	⊙	⊙



HPS Technical Data

Models	Diameter[mm]	Number of folds
HPS-120	120	monolayer

Suction Cups

HPS

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



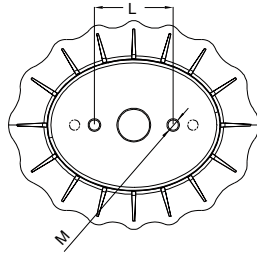
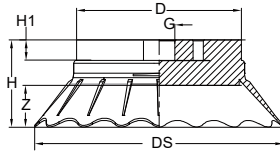
Glass



Materials Deformability



HPS 120 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	Z	L	M	Weight[g]
HPS120-FG03	80	34.9	10	G3/8"	120	20	38	2*M6	76.5

HPS120 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSP

Multifunctional corrugated suction cups

HANVAC



Packaging



Food grade



Bag

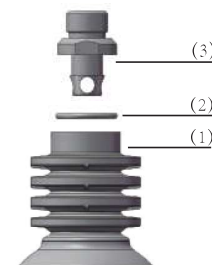
Product characteristics

- * The suction cup does not wrinkle or stick when absorbing the film
- * Suitable for vacuum pumps, vacuum blowers and multistage vacuum generators
- * Food grade silicone material, can directly contact food



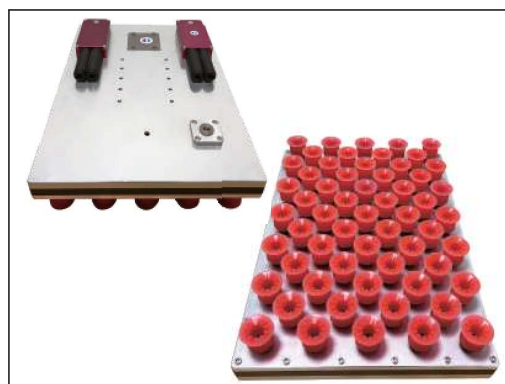
Product structure

- * 4.5 Corrugated suction cups (1) Seal thin lips flexible
 - * Specially designed corrugated structure is more stable
 - * Install by connector (3). It can also be installed in 1/2 "or 3/8" gas
- On the tube, secure it with a tube hoop
- * All male fittings are fitted with O-rings
 - * Accessories: Filter (2)



Product advantages

- * Round 4.5 corrugated suction cups are used for handling very flexible products, such as plastic bags, aluminum foil bags and other soft bag packaging
- * The flat thin lip can safely and reliably grasp the packaging bag containing solid material, powder or liquid, and has extraordinary sealing performance on flexible work such as grasping packaging bags



Suction Cups

HSP

Multifunctional corrugated suction cups



Packaging



Food grade



Bag

HANVAC



HSP Ordering NO

HSP	—	40	—	MG02
1		2		3

1-Series		2-Diameter		3-Screw thread	
HSP	4.5 Folding cups	40	40mm	M External thread	G02-G1/4
					G03-G3/8
					G04-G1/2
4-Material ⁽¹⁾					
SI	Silicone rubber				

(1) Other materials can also be made, please contact us



HSP Selection specification

Models	M-G02	M-G03-G3/8	M-G04-G1/2
HSP40-M	⊙	⊙	⊙



HSP Technical Data

Models	Suction[N] ⁽²⁾ -60Kpa	Inner volume [cm ³]	Minimum radius of curvature [mm]	Diameter [mm]
HSP40	15	15.0	15	40

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HSP

Multifunctional corrugated suction cups

HANVAC


Packaging



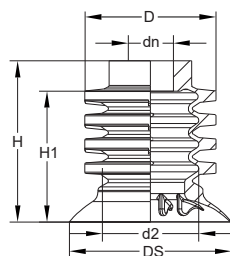
Food grade



Bag



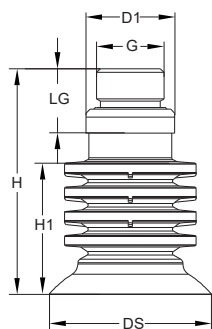
HSP Design Data



Size[mm]⁽³⁾

Models	D	H	H1	dn	DS	d2	Weight [g]
HSP40	32.47	39.91	32.41	11.21	40.12	23.86	13.56

HSP40 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	LG	G	DS	D1	Weight [g]
HSP40-M	32.47	55.91	32.41	13	G1/4"	40.12	13	24.59

HSP40 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances, Z is the trip



Suction Cups

HSC

2.5 fold corrugated suction cup

HANVAC


Packing



Plastic



Electronics

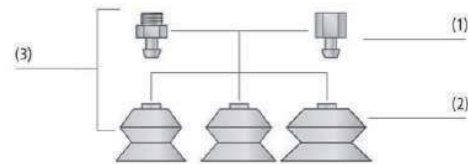
Product characteristics

- *Handling fragile and vulnerable workpieces, such as electronic components, injection molded parts, etc
- *The best fit for handling workpieces with flat or uneven surfaces, such as cardboard boxes, pipes, etc
- *Wide size range
- *The suction cup with a diameter of 52mm and above is equipped with a supporting structure inside, which can prevent the workpiece from being sucked in
- *The suction cup is soft and can be customized with multiple materials



Product structure

- *Durable and wear-resistant 2.5-fold corrugated suction cup HSC (3), with special grooves and internal support structure
- *The suction cup has multiple connection forms to choose from (1)
- *Multiple sizes and materials of suction cups are available (2)



Product advantages

- *Suitable for workpieces of different shapes and sizes
- *Strong adaptability to uneven surface workpieces
- *Compensating for height differences in workpieces, providing good cushioning performance when in contact with workpieces
- *Handling thin-walled workpieces will not cause permanent deformation



*HSC handling large packaging

Suction Cups

HSC

2.5 fold corrugated suction cup

HANVAC


Packing



Plastic



Electronics



HSC Ordering NO

HSC	3	FG02	NBR
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HSC	Suction Cup	3~88
		φ3~88mm
		F Internal thread
		G02-G1/4
		M External thread
		M3
		M5
		G01-G1/8
		G02-G1/4
		G03-G3/8

4-Material ⁽¹⁾	
SI	Silicon rubber
SI-W	Anti static (white)
NBR	Nitrile rubber
NBR-B	Anti static (black)
H1	High temperature material(blue)
H2	High temperature material(black)

(1)Other materials can also be made, please contact us



HSC Model Selection

Models	F-G02-G1/4	M3	M5	M-G01-G1/8	M-G02-G1/4	M-G03-G3/8
HSC3		⊙	⊙			
HSC4			⊙			
HSC5			⊙			
HSC7			⊙			
HSC9			⊙			
HSC12				⊙		
HSC14				⊙		
HSC18				⊙		
HSC20				⊙		
HSC25				⊙		
HSC32	⊙				⊙	
HSC42	⊙				⊙	
HSC52	⊙				⊙	
HSC62	⊙				⊙	
HSC88						⊙



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Suction Cups

HSC

2.5 fold corrugated suction cup

HANVAC


Packing



Plastic



Electronics



HSC Technical Data

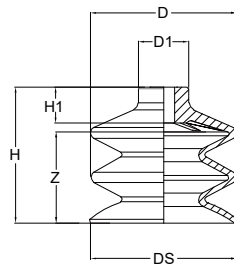
Models	Suction[N] ⁽²⁾	Suction[N] ⁽²⁾	Internal volume [cm ³]
	-60Kpa	-60Kpa	
HSC3	0.2	0.4	0.02
HSC4	0.3	0.6	0.05
HSC5	0.2	0.8	0.03
HSC7	0.1	0.9	0.04
HSC9	0.7	2.3	0.2
HSC12	0.9	3.5	0.6
HSC14	1.2	5.7	1.0
HSC18	2.3	8.5	1.4
HSC20	3.8	12.1	2.0
HSC25	4.5	19	5.4
HSC32	12	36.9	10
HSC42	13.6	44	20
HSC52	27	96	38
HSC62	39.6	137	73
HSC88	45.2	286	144

(2) The measured surface of the workpiece is smooth and dry, with a vacuum degree of -60KPa.

The above data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.



HSC 3~88 Design Data



HSC3~88 Dimension

Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	Z	Weight [g]
HSC-3	3	6.7	2	3	3.6	3.3	0.03
HSC-4	5	14	4	3.8	7	4.7	0.33
HSC-5	6	14	8	5	7	5.2	0.36
HSC-7	6	12	5	6.5	7.5	6.6	0.23
HSC-9	9	14.7	8	8.8	9.2	5	0.72
HSC-12	12	21	7	11.2	12	11	1.28
HSC-14	14	23	7	14	10	13	1.42
HSC-18	18	23	7	17.5	10	13	1.92
HSC-20	20	22	8	20	10	13	2
HSC-25	25	34.5	9	25	10	21.5	4.64
HSC-32	32	38	14	32	18	20	9.57
HSC-42	44	48	13	43	19	30	22.46
HSC-52	52	48	13	52	18	32	30.5
HSC-62	62	55	13	62	21	32.5	39.2
HSC-88	88	86.3	24	87.5	25	52.4	165.7

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HSC

2.5 fold corrugated suction cup

HANVAC



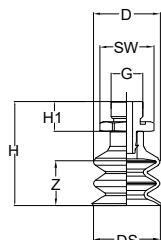
Packing



Plastic



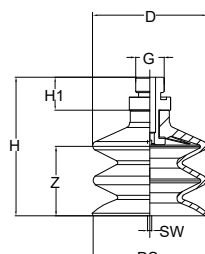
Electronics



HSC3~25 External thread

Size[mm]⁽³⁾

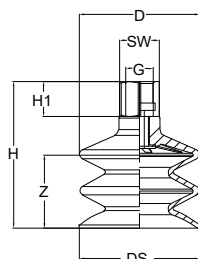
Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSC3-M3-M	3	13.7	7	M3	3	SW5	4	0.24
HSC3-M5-M	3	15.2	8.5	M5	3	SW8	5.8	0.88
HSC4-M5-M	5	22.5	8.5	M5	3.8	SW8	7.6	1.18
HSC5-M5-M	6	22.5	8.5	M5	5	SW8	9.4	1.21
HSC7-M5-M	6	20.5	8.5	M5	6.5	SW8	7.6	1.08
HSC9-M5-M	9	23.5	8.5	M5	8.8	SW8	9.4	1.57
HSC12-MG01	12	30	9	G1/8"	11.2	SW14	7	3.6
HSC14-MG01	14	32	9	G1/8"	14	SW14	6	3.74
HSC18-MG01	18	32	9	G1/8"	17.5	SW14	14.5	4.24
HSC20-MG01	20	31	9	G1/8"	20	SW14	7	4.32
HSC25-MG01	25	43.5	9	G1/8"	25	SW14	10.5	6.96



HSC32~88 External thread

Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSC32-MG02	32	52.5	14	G1/4"	32	SW4	10	17.07
HSC42-MG02	44	62.5	13	G1/4"	43	SW4	10	29.96
HSC52-MG02	52	63.3	13	G1/4"	52	SW4	14.3	38
HSC62-MG02	62	70	13	G1/4"	62	SW4	16.8	46.7
HSC88-MG02	88	102.3	24	G3/8"	87.5	SW4	21.5	173.2



HSC32~62 Internal thread

Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSC32-FG02	32	52.5	15.2	G1/4"	32	SW17	10	17.27
HSC42-FG02	44	62.7	15.2	G1/4"	43	SW17	10	30.16
HSC52-FG02	52	63.5	15.2	G1/4"	52	SW17	14.3	38.2
HSC62-FG02	62	70.2	15.2	G1/4"	62	SW17	16.8	46.9

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSCP

Bellows suction cup



Bag



Packaging



Metal



Oil proof

HANVAC

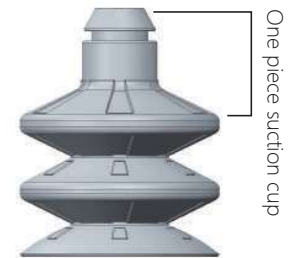
Product characteristics

- * Excellent sealing performance, reduce energy consumption
- * The seal lip is soft and adaptable, ensuring the absorption of curved surfaces and non-rigid work
- * The suction cup is a plug-in connection, fast disassembly, reduce system maintenance and downtime



Product structure

- * Strong and wear-resistant 2.5 fold corrugated suction cup, soft and flexible sealing lip
- * Specially thickened joints and corrugated suction cups are integrated for improved stability



Product advantages

- * One piece suction cup, easy to replace, fast
- * 2.5 corrugated structure has buffer protection effect on the workpiece
- * Long compression stroke
- * Large suction



Suction Cups

HSCP

Bellows suction cup

HANVAC


Bag



Packaging



Metal



Oil proof



HSCP Ordering NO

HSCP	—	42	—	SI-RR
1		2		3

1-Series	2-Diameter	3-Material/Colour ⁽¹⁾
HSCP	20	SI-RR
Suction Cup	42	High-performance/Cherry red
	20mm	
	42mm	

(1) Other materials can also be made, please contact us

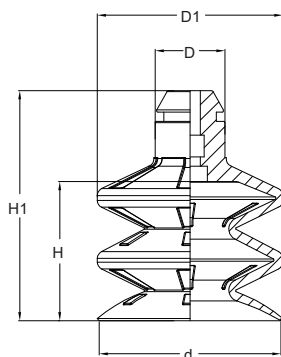


HSCP Technical Data

Models	Diameter[mm]	Material	Number of folds
HSCP-42	42	High performance silicone	2.5
HSCP-20	20	High performance silicone	2.5



HSCP Design Data



Size[mm]⁽²⁾

Models	D	H	H1	d	D1	Weight [g]
HSCP-42	16	32	53	42	43	17.9
HSCP-20	11.6	14.56	29.20	20	20	2.12

HSCP20-42 Dimension

(2) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HSD

Bellows suction cup



Bag



Packaging



Composite



Stabilize

HANVAC

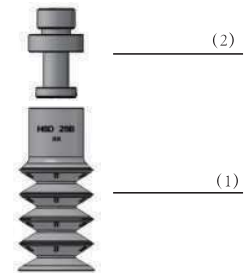
Product characteristics

- * Circular corrugated suction cups are used for handling very flexible products, such as plastic bags, aluminum foil bags and other soft bag packaging
- * Safely and reliably handle bags containing solids, powders or liquids
- * Suitable for high-speed sports, perfect for high-speed robots



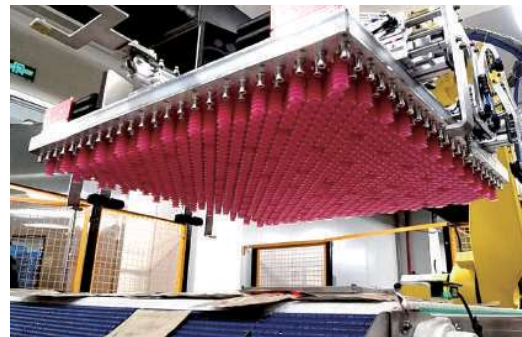
Product structure

- * (1) 4.5 Corrugated suction cup HSD seal lip is flexible
- * (2) Optional accessories: connectors
- * The specially designed corrugated structure is more stable



Product advantages

- * It has extraordinary sealing properties on flexible workpieces such as grab bags
- * The seal lip does not wrinkle or stick when absorbing the film
- * Suitable for vacuum pump, vacuum blower and multistage vacuum generator
- * Direct contact with food



Suction Cups

HSD

Bellows suction cup

HANVAC


Bag



Packaging



Composite



Stabilize



HSD Ordering NO

HSD	25	B	MG03	SI
1	2	3	4	5

1-Series	2-Diameter	3-Fold number
HSD	25	A
Suction Cup	25mm	B
		3.5fold
		4.5fold
4-Screw thread	5-Material	
M External thread	G03-G3/8	SI
		Food grade silicone

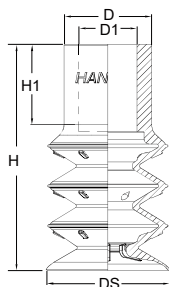


HSD Selection specification

Models	M-G02-G1/4	M-G03-G3/8
HSD-25-A		◎
HSD-25-B		◎



HSD Design Data



Size[mm]⁽¹⁾

Models	D	H	H1	G	DS	D1	Weight [g]
HSD-25-A	18	46.6	18	G1/4"	25.3	12	6.85

HSD25-A

(1) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



Suction Cups

HSD

Bellows suction cup

HANVAC


Bag



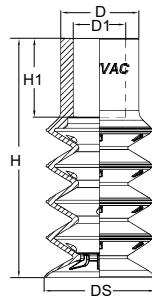
Packaging



Composite



Stabilize



Size[mm] ⁽¹⁾

Models	D	H	H1	G	DS	D1	Weight [g]
HSD-25-A	18	54.8	18	G1/4"	25.3	12	7.15

HSD25-B

(1) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSE

Special corrugated suction cup for spherical workpiece

HANVAC


Food grade

Ball

Product characteristics

- * Super soft large conical seal lip
- * Various special cavity structures
- * Food grade silicone material
- * Direct contact handling round, oval, shaped candy food
- * Handle food with irregular surfaces or decorative shapes
- * Multi-fold corrugated suction cups are suitable for handling foods that require soft contact, such as eggs



Product structure

- * Special sealing lip, easy to handle irregular products
- * Ultra-thin and soft conical sealing lip, suitable for handling fragile objects



Product advantages

- * Maximum product coverage for fast handling
- * Good tightness when grabbing alien candies
- * The corresponding sucker can be accurately selected according to the shape of the adsorbed food
- * Can be used in the food industry in direct contact with food



*HSE suction cups handling egg application example

Suction Cups

HSE

Special corrugated suction cup for spherical workpiece

HANVAC


Food grade

Ball



HSE Ordering NO

HSE	30
1	2

1-Series		2-Models		3-Screw thread	
HSE	Suckers for fruits and eggs	30	Lip diameter30mm	M External thread	G02-G1/4
		33	Lip diameter33mm		G03-G3/8
		36	Lip diameter36mm		
		43	Lip diameter43mm		
		55	Lip diameter55mm		



HSE Selection specification

Models	M-G02-G1/4	M-G03-G3/8
HSE30	◎	
HSE33	◎	
HSE36	◎	
HSE43	◎	
HSE55		◎



HSE Technical Data

Models	Lip diameter [mm]	Suction [lbf] ⁽¹⁾	Minimal package [pcs]	Weight [G]
HSE30	30	0.24	1	17
HSE33	33	0.24	1	8
HSE36	36	0.24	1	16.36
HSE43	43	1.79	1	12.6
HSE55	55	2.25	1	17.3

(1) In 30% vacuum, the safety factor is 2



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Suction Cups

HSE

Special corrugated suction cup for spherical workpiece

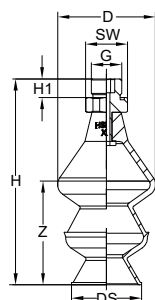
HANVAC


Food grade

Ball



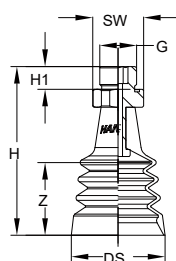
HSE Design Data



Size[mm]⁽²⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSE30	41.8				30		44.5	17.23
HSE30-MG02	41.8	88.4	8	G1/4"	30	SW17	44.5	23.36

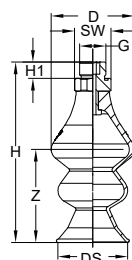
HSE30 External thread(egg)



Size[mm]⁽²⁾

Models	H	H1	G	DS	SW	Z	Weight [g]
HSE33	/	/	/	33	/	25	17.23
HSE33-MG02	59.4	8	G1/4"	33	SW17	25	23.36

HSE33 External thread(egg)



Size[mm]⁽²⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSE36	41.1	/	/	/	34.5	/	46	16.66
HSE36-MG02	41.1	89.1	8	G1/4"	34.5	SW17	46	22.93

HSE-36 External thread

(2) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

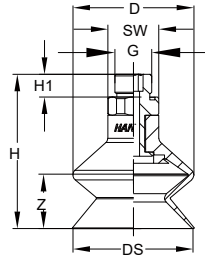
HSE

Special corrugated suction cup for spherical workpiece

HANVAC


Food grade

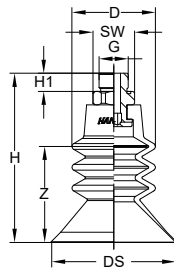
Ball



Size[mm]⁽²⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSE43	42.6	/	/	/	42.3	/	19.2	14.01
HSE43-MG02	42.6	54.4	8	G1/4"	42.3	SW17	19.2	28.56

HSE43 External thread(egg)



Size[mm]⁽²⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSE55	37	/	/	/	55	/	42.5	19.17
HSE55-MG02	37	75	8	G3/8"	55	SW17	42.5	31.89

HSE55 Enternal thread

(2) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HPE4

Corrugated suction cup at skirt edge

HANVAC



Plastic bag



Glass



Materials Deformability

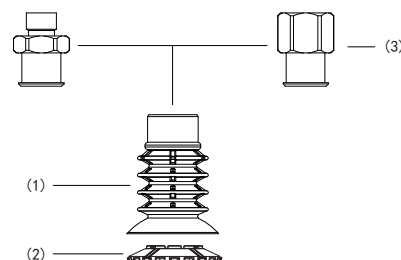
Product characteristics

- * Thin type, large vertebral degree, skirt corrugated suction cups with diverting blades
- * Extremely soft and flexible hemline seal
- * Body and corrugated reinforcement design
- * Large size diameter increases vacuum flow
- * Made of FDA-compliant silicone and fitted with suction retaining pads
- * Built-in sucker fixed gasket (yellow)



Product structure

- * Corrugated sucker HPE4 with 4.5 fold (1) and soft, flexible seal lip with segmented flow vane and integrated bag stabilizer
- * Very large shaft diameter for high volume flow
- * Specially reinforced suction bellows for increased stability (2)
- * Install by connecting element (3); Or connect directly to 3/8 "- or 1/4" pipe on the machine side and install using hose clamps



Product advantages

- * It has extraordinary sealing properties on flexible workpieces such as grab bags
- * Even under high-speed conditions, it can be reliably absorbed and abnormally stable;
- * Can be used in the food industry in direct contact with food
- * Suction cup fixing gasket
- * Reliable absorption of ultra-thin PE and PP films up to 30µm
- Reliable absorption of ultra-thin PE and PP films up to 30µm



*HPE4 sucker carrying soft bag

Suction Cups

HPE4

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



Glass



Materials Deformability



HPE4 Ordering NO

HPE4	30	FG02	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HPE4	Suction Cup	
	30	30mm
	40	40mm
	50	50mm
		F Internal thread
		G03-G3/8
		G02-G1/4
		M External thread
		G03-G3/8
		G02-G1/4

4-Material ⁽¹⁾
SI Food grade silicone

(1) Other materials can also be made, please contact us



HPE4 Selection specification

Models	F-G03-G3/8	F-G02-G1/4	M-G03-G3/8	M-G02-G1/4
HPE4-30	◎	◎	◎	◎
HPE4-40	◎	◎	◎	◎
HPE4-50	◎	◎	◎	◎



HPE4 Technical Data

Models	Suction ⁽²⁾ [-60kpa]	Pull-out force ⁽²⁾ [-40kpa]	Volume [cm ³]
HPE4-30	16.0	13	15.6
HPE4-40	25.0	23	35.7
HPE4-50	49.5	37	64.5

(2) Vacuum degree is -60KPa, the above data does not include the safety factor.

Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HPE4

Corrugated suction cup at skirt edge

HANVAC


Plastic bag



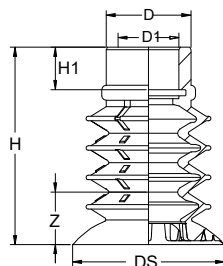
Glass



Materials Deformability



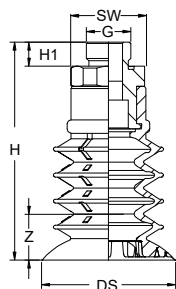
HPE4-30~50 Design Data



Size[mm]⁽³⁾

Models	H	H1	D	D1	DS	Z	Weight[g]
HPE4-30	40	13	24	19.6	31.16	20	9
HPE4-40	52	13	31	24.8	40.16	27	18
HPE4-50	65	14	31	24.8	50.12	37	30

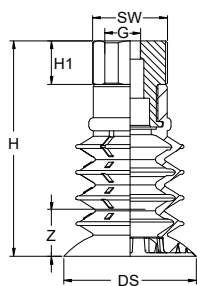
HPE4-30~50 Dimension



Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight[g]
HPE4-30-MG02	56.5	9	G1/4"	31.16	22	20	24
HPE4-30-MG03	56.5	9	G3/8"	31.16	22	20	25
HPE4-40-MG02	68.5	9	G1/4"	40.16	22	27	41
HPE4-40-MG03	68.5	9	G3/8"	40.16	22	27	40
HPE4-50-MG02	81.5	9	G1/4"	50.12	27	37	52
HPE4-50-MG03	81.5	9	G3/8"	50.12	27	37	54

HPE4-30~50 External thread



Size[mm]⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight[g]
HPE4-30-FG02	56.5	16.5	G1/4"	31.16	22	20	29
HPE4-30-FG03	56.5	16.5	G3/8"	31.16	22	20	26
HPE4-40-FG02	68.5	16.5	G1/4"	40.16	22	27	61
HPE4-40-FG03	68.5	16.5	G3/8"	40.16	22	27	53
HPE4-50-FG03	81.5	16.5	G3/8"	50.12	27	37	73

HPE4-30~50 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSBX

Tight fit on uneven workpiece surface

HANVAC


Food grade Plastic bag

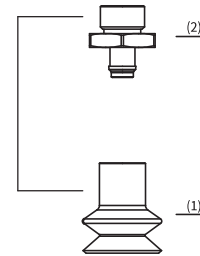
Product characteristics

- *Dynamic handling of packaging bags and other highly flexible packaging
- *Can be directly used in the food industry
- *Thin and flexible plastic film (LDPE) will not inhale
- *High rigidity top ripple



Product structure

- *Circular corrugated suction cup with 1.5 fold HSBX (1) sealing lip material is soft and highly flexible
- *Push in function, connector (2) directly integrated into suction cup HSBX (1) can be installed without the need for tools



Product advantages

- *Handling flexible packaging products such as express bags, aluminum foil bags, laundry detergent bags, water bags, etc
- *Handling food packaging: bread, cookies, milk, etc
- *Suitable for opening bags, such as thin film soft bags,



*HSBX Case

Suction Cups

HSBX

Tight fit on uneven workpiece surface

HANVAC


Food grade Plastic bag



HSBX Ordering NO

HSBX	17	MG01	SI
1	2	3	4

1-Series	2-Diameter	3-Threaded	4-material quality ⁽¹⁾
HSBX	17	M external thread	SI
Suction cup	17mm	G01-G1/8 G02-G1/4	Food grade silicone
			NBR
			Nitrile rubber

(1) Materials other than the above can also be produced. Please negotiate with our company



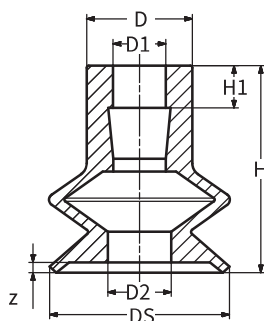
HSBX Technical Data

Model	Volume [cm ³]	Suction force N ⁽²⁾ [-600mbar]
HSBX17	1.17	5.9

(2) The measured surface of the workpiece is smooth and dry, with a vacuum degree of -60KPa. The above data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.



HSBX Design Data



Size [mm] ⁽³⁾	D	H	H1	DS	D1	D2	Z
model							
HSBX17	10	19.8	4	17	5	6	1.0

HSBX17 DimensionD

(3) Complies with DIN ISO 3302-1 M3 rubber parts with allowable dimensional tolerances. Z represents the journey



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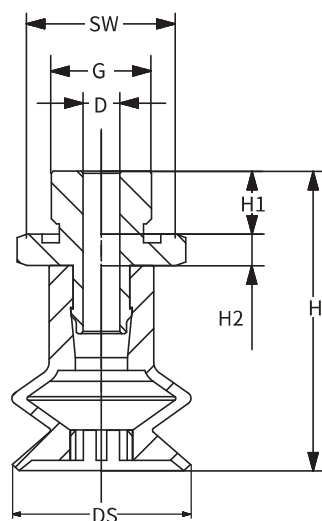
Suction Cups

HSBX

Tight fit on uneven workpiece surface

HANVAC


Food grade Plastic bag



Size [mm]⁽³⁾

model	D	H	H1	H2	DS	SW	G
HSBX17-MG01	3.5	29.8	6	4	17	14.2	G1/8
HSBX17-MG02	3.5	31.8	8	4	17	17	G1/4

HSBX17 Internal thread

(3) Complies with DIN ISO 3302-1 M3 rubber parts with allowable dimensional tolerances. Z represents the journey

Suction Cups

HGX

Suction Cups for the Packaging Industry

HANVAC



Package



Plastic bag

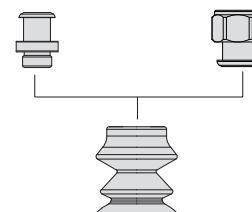
Product characteristics

- * Perfect for picking up fragile bags.
- * Thin lip for excellent sealing even at low vacuum.
- * Integrated suction cups secure and stable products in fast/semi-fast robotic applications.
- * Multi-bellows design compensates for height differences and uneven surfaces.
- * Silicone materials comply with FDA 21 CFR 177.2600 and EU 1935/2004.



Product structure

- * Suction cups with thin and flexible seal lip including flat suction cups HFA (1)
- Or corrugated suction cup HFB1.5 fold (2)
- And connecting elements (3)
- * The inner support surface has a honeycomb structure and very good vacuum distribution



Replace the sucker and the sucker connector

Product advantages

- * Balance the internal and external pressure of the vacuum grab, quickly release the product
- * Energy saving when handling non-permeable workpieces



*HGX

Suction Cups

HGX

Suction Cups for the Packaging Industry

HANVAC


Package



Plastic bag



HGX Ordering NO

HGX	35	FG01	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HGX	Suction Cup	
	35	35mm
	42	42mm
	50	50mm
		F Internal thread
		G02-G1/4
		M External thread
		G01-G1/8
		G02-G1/4

4-Material ⁽¹⁾	
SI	Silicone rubber

1) Other materials can also be made, please contact us



HGX Selection specification

Models	F-G02-G1/4	M-G02-G1/4	M-G03-G3/8
HGX35	◎	◎	◎
HGX42	◎	◎	◎
HGX50	◎	◎	◎



HGX Technical Data

Models	Inner volume [cm ³]	Weight [g]	Number of folds
HGX35	14.0	19	2.5
HGX42	20.0	16	2.5
HGX50	32.0	37	2.5

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.


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Suction Cups

HGX

Suction Cups for the Packaging Industry

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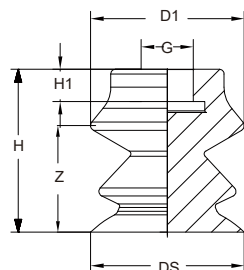

Package



Plastic bag



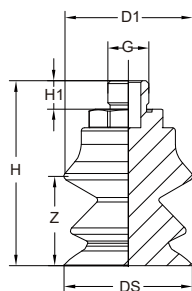
HGX35~50 Design Data



Size[mm]⁽²⁾

Models	D1	H	H1	DS	D1	Z	Weight[g]
HGX-35	34	38.9	8.7	33.8	34	23.7	10
HGX-42	41	44	8.7	40.8	41	28.3	17.9
HGX-50	48.6	52.5	8.7	48.5	48.6	34.9	25.32

HGX35~50 Dimension



Size[mm]⁽²⁾

Models	D1	H	H1	G	DS	Z	Weight[g]
HGX-35-MG02	34	53.8	9	G1/4"	33.8	23.7	24.11
HGX-35-MG03	34	54.8	10	G3/8"	33.8	23.7	26.50
HGX-42-MG02	41	59	9	G1/4"	40.8	28.3	30.82
HGX-42-MG03	41	59	10	G3/8"	40.8	28.3	32.82
HGX-50-MG02	48.6	67.5	9	G1/4"	48.5	34.9	38.95
HGX-50-MG03	48.6	67.5	10	G3/8"	48.5	34.9	40.02

HGX35~50 External thread

(2) 符合DIN ISO 3302-1 M3橡胶零件允许的尺寸公差。Z是行程

Suction Cups

HGX

Suction Cups for the Packaging Industry

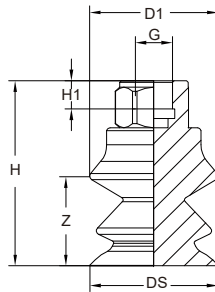
HANVAC



Package



Plastic bag



Size[mm]⁽²⁾

Models	H	H1	G	DS	Z	Weight[g]
HGX-35-FG02	53.8	12	G1/4"	33.8	23.7	24.11
HGX-42-FG02	59	9	G1/4"	40.8	29.3	30.82
HGX-50-FG02	67.4	12	G1/4"	48.5	34.9	38.95

HGX35~50 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Vacuum
Clamping
Technology

Vacuum
Suction
Foams

Vacuum
Suction
Cups

Customized
products

Vacuum
Transmitters

Cups

Compact
Valves

Attachment

Suction Cups

HSB

1.5 fold corrugated suction cup

HANVAC


Universal



Packing



Plastic

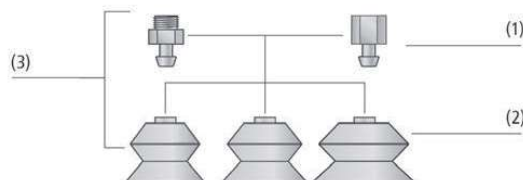
Product characteristics

- *Handling fragile and vulnerable workpieces, such as electronic components, injection molded parts, etc
- *Handling workpieces with flat or uneven surfaces, such as cardboard boxes, pipes, etc
- *Wide size range
- *The top of the suction cup has a reinforced rib structure
- *The suction cup is soft and can be customized with multiple materials



Product structure

- *Durable and wear-resistant 1.5-fold corrugated suction cup HSB (3), with special grooves and internal support structure
- *The suction cup has multiple connection forms to choose from (1)
- *Multiple sizes and materials of suction cups are available (2)



Product advantages

- *Suitable for workpieces of different shapes and sizes
- *Strong adaptability to uneven surface workpieces
- *Compensating for height differences in workpieces, providing good cushioning performance when in contact with workpieces
- *Handling thin-walled workpieces will not cause permanent deformation



*HSB moving car glass



Suction Cups

HSB

1.5 fold corrugated suction cup



Universal



Packing



Plastic

HANVAC



HSB Ordering NO

HSB	5	FG02	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HSB	Suction Cup	5~150
		φ5~150mm
		F Internal thread
		G02-G1/4
		G04-G1/2
		M External thread
		M5
		G01-G1/8
		G02-G1/4
		G03-G3/8

4-Material ⁽¹⁾	
SI	Silicon rubber
SI-W	Anti static (white)
NBR	Nitrile rubber
NBR-B	Anti static (black)
H1	High temperature material(blue)
H2	High temperature material(black)

(1)Other materials can also be made, please contact us



HSB Selection specification

Models	F-G02-G1/4	F-G04-G1/2	M-M5	M-G01-G1/8	M-G02-G1/4	M-G03-G3/8
HSB5			⊙			
HSB6			⊙			
HSB8			⊙			
HSB10			⊙			
HSB11				⊙		
HSB14				⊙		
HSB16				⊙		
HSB20				⊙		
HSB22				⊙		
HSB25				⊙		
HSB33	⊙				⊙	
HSB43	⊙				⊙	
HSB53	⊙				⊙	
HSB63	⊙				⊙	
HSB78	⊙				⊙	⊙
HSB110		⊙				
HSB150		⊙				



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Suction Cups

HSB

1.5 fold corrugated suction cup

HANVAC


Universal



Packing



Plastic



HSB Technical Data

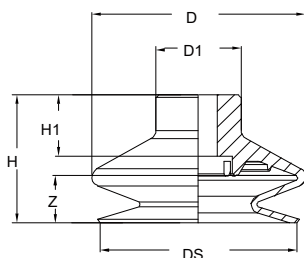
Models	Suction[N] ⁽²⁾	Pull-out force[N] ⁽²⁾	Internal volume
	-60Kpa	-60Kpa	[cm ³]
HSB-5	0.3	0.8	0.1
HSB-6	0.4	1.4	0.12
HSB-8	0.6	1.6	0.15
HSB-10	0.8	3.4	0.18
HSB-11	0.95	3.8	0.2
HSB-14	1.2	5	0.4
HSB-16	2.3	6.7	0.8
HSB-20	4.7	10.7	1.2
HSB-22	5.0	15.2	1.4
HSB-25	5.3	17.3	3.2
HSB-33	13.6	39.6	4.8
HSB-43	22.8	64.5	11.4
HSB-53	51.3	95	26
HSB-63	85	135	44
HSB-78	137.4	218	76
HSB-110	280	570	330
HSB-150	570	1000	800

(2) The measured surface of the workpiece is smooth and dry, with a vacuum degree of -60KPa.

The above data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.



HSB 5~78 Design Data



HSB5~78 Dimension

Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	Z	Weight [g]
HSB5	6.2	6.9	2	5.2	7.4	2.3	0.07
HSB6	7.4	9	2	6	7.4	4	0.16
HSB8	9.8	12.9	2	8	7.4	4.4	0.44
HSB10	12	14.9	2	10	7.4	5.3	0.71
HSB11	12	16.2	7	10.3	10.3	5.8	0.87
HSB14	13.6	15.7	7	12.9	10.3	7	0.92
HSB16	17	19	7	15.7	10.3	7.5	1.18
HSB20	20	15	7	17.7	10.3	6	1.39
HSB22	24.3	18.5	7	22.4	10.3	7	1.76
HSB25	24.8	23	7	22.6	10.3	10.5	2.56
HSB33	36	27	13	32	18.4	10	6.98
HSB43	46	28	13	43	18.4	10	12.12
HSB53	58.5	33.8	13	52.7	18.4	14.3	18.82
HSB63	67	34	13	63.1	18.6	16.8	26.37
HSB78	83	47	21	78	25	21.5	60.9



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Suction Cups

HSB

1.5 fold corrugated suction cup

HANVAC

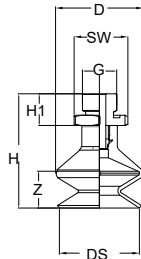

Universal



Packing



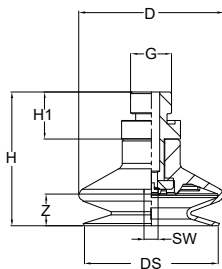
Plastic



HSB5~25 External thread

 Size[mm]⁽³⁾

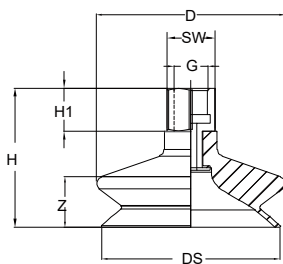
Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSB5-M5-M	6.2	15.4	2	M5	5.2	8	2.3	0.8
HSB6-M5-M	7.4	18	2	M5	6	8	4	0.98
HSB8-M5-M	9.8	21.4	2	M5	8.2	8	4.4	1.26
HSB10-M5-M	12	23.4	2	M5	10.1	8	5.3	1.53
HSB11-MG01	12	25	7	G1/8"	10.3	14	5.8	3.19
HSB14-MG01	13.6	25	7	G1/8"	12.9	14	7	3.24
HSB16-MG01	17	28	7	G1/8"	15.7	14	7.5	3.45
HSB20-MG01	20	24	7	G1/8"	17.7	14	6	4.1
HSB22-MG01	24.3	27.4	7	G1/8"	22.4	14	7	4.47
HSB25-MG01	24.8	32.1	7	G1/8"	22.6	14	10.5	5.27



HSB33~78 External thread

 Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSB33-MG02	36	42	15	G1/4"	32	4	10	14.48
HSB43-MG02	46	43	15	G1/4"	43	4	10	19.62
HSB53-MG02	58.5	48.8	15	G1/4"	52.7	4	14.3	26.32
HSB63-MG02	67	49	15	G1/4"	63.1	4	16.8	33.87
HSB78-MG02	83	63	15	G1/4"	78	4	21.5	68.4
HSB78-MG03	83	64	16	G3/8"	78	4	21.5	76.88



HSB33~78 Internal thread

 Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSB33-FG02	36	42	15.2	G1/4"	32	17	10	14.68
HSB43-FG02	46	43	15.2	G1/4"	43	17	10	19.82
HSB53-FG02	58.5	49	15.2	G1/4"	52.7	17	14.3	26.52
HSB63-FG02	67	49	15.2	G1/4"	63.1	17	16.8	34.07
HSB78-FG02	83	62	15.2	G1/4"	78	17	21.5	68.6

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSB

1.5 fold corrugated suction cup

HANVAC


Universal



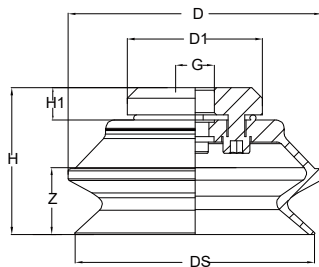
Packing



Plastic



HSB110~150 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	D1	Z	Weight [g]
HSB110-FG-G04	112	70.5	16	G1/2"	115	65	32	32
HSB150-FG-G04	168	90	16	G1/2"	156	65	38	38

HSB110~150 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



Suction Cups

HSA

Special flat chuck for wood industry

HANVAC


Metal



Plank



Heavy load

Product characteristics

- * Large area support structure at the bottom
- * Small internal volume
- * Suction cup rubber parts can be replaced separately
- * Complete size specifications
- * Handling flat workpiece with smooth or slightly rough surface
- * Handling high-temperature workpieces
- * Almost traceless and antistatic when handling pressure-sensitive workpieces



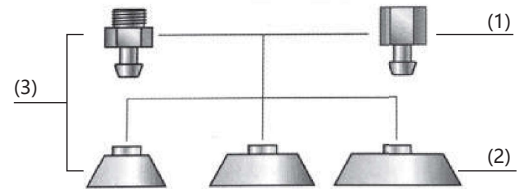
Product structure

- * Strong wear resistant flat suction cups (3) with single sealed lip, made of suction cups (2)

And a connecting head (1)

- * Diameter 50mm and below: straight insert connector
- * Diameter 60mm and above: the mounting plate is vulcanized with the suction cup

Together, the joint is screwed in directly through the screw



Product advantages

- * Can prevent permanent deformation of thin-walled workpieces
- * Excellent sealing, large adsorption force and short working cycle
- * Greatly reduce customer costs
- * Suitable for various sizes and shapes of workpieces



*HSA carrying wooden plank

Suction Cups

HSA

Special flat chuck for wood industry

HANVAC


Metal



Plank



Heavy load



HSA Ordering NO

HSA	18	FG01	SI
1	2	3	4

1-Series	2-Diameter	3-Crew thread
HSA	Suction Cup	18.....400 $\phi 18 \sim \phi 400 \text{mm}$
4-Material ⁽¹⁾		F Internal thread
SI	Silicon rubber	G01-G1/8
SI-W	Anti static (white)	G02-G1/4
NBR	Nitrile rubber	G04-G1/2
NBR-B	Anti static (black)	M External thread
H1	High temperature material(blue)	G01-G1/8
H2	High temperature material(black)	G02-G1/4

(1)Other materials can also be made, please contact us



HSA Selection specification

Models	F-G01-G1/8	F-G02-G1/4	F-G04-G1/2	M-G01-G1/8	M-G02-G1/4
HSA18	⊙			⊙	
HSA20	⊙			⊙	
HSA22	⊙			⊙	
HSA25	⊙			⊙	
HSA30	⊙			⊙	
HSA35	⊙			⊙	
HSA40	⊙			⊙	
HSA45	⊙			⊙	
HSA60		⊙			⊙
HSA80		⊙			⊙
HSA95		⊙			⊙
HSA100		⊙			
HSA125		⊙			
HSA160			⊙		
HSA210			⊙		
HSA250			⊙		
HSA300			⊙		
HSA360			⊙		
HSA400			⊙		



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Suction Cups

HSA

Special flat chuck for wood industry

HANVAC


Metal



Plank



Heavy load



HSA Technical Data

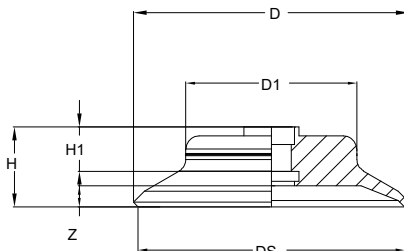
Models	Suction[N] ⁽²⁾ -60Kpa	Inner volume [cm ³]	Curve radius [mm]	Weight [g]
HSA-18	6.3	0.6	14	1.7
HSA-20	7.8	0.8	17	8.8
HSA-22	9.5	1	20	9.7
HSA-25	12.3	1.3	25	1.8
HSA-30	17.6	2.5	40	9.3
HSA-35	24	2.7	50	9.8
HSA-40	31.4	3.8	50	2.2
HSA-45	39.8	4.9	60	9.3
HSA-60	125	10	100	33.7
HSA-80	260	25	150	48.2
HSA-95	350	35	200	51.4
HSA-100	425	36	210	100
HSA-125	660	70	220	200
HSA-160	1090	123	350	400
HSA-210	1870	226	750	800
HSA-250	2650	332	2200	1360
HSA-300	3810	492	3500	2200
HSA-360	5500	1170	3000	3660
HSA-400	6780	907	6500	3900

(2) The measured surface of the workpiece is smooth and dry, with a vacuum degree of -60KPa.

The above data does not include the safety factor. The values may vary depending on the surface condition of the workpiece.



HSA18~95 Design Data



Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	Z
HSA18	18	12	9.5	18	8	2.5
HSA20	20	12	9.5	20	8	2.5
HSA22	22	13	10	22	8	3
HSA25	25	16	11.5	25	12	4.5
HSA30	30	17	12.5	30	12	4.5
HSA35	35	16	11.5	35	15	4.5
HSA40	40	18	12.5	40	15	5.5
HSA45	45	23	14.5	45	15	8.5
HSA60	62.1	18	12.3	60	38.5	4.7
HSA80	82.8	20	14	80	52	6
HSA95	97.8	20.5	14.5	95	68	6

HSA18~95 Dimension

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HSA

Special flat chuck for wood industry

HANVAC

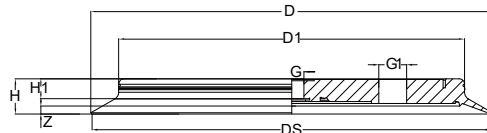

Metal



Plank



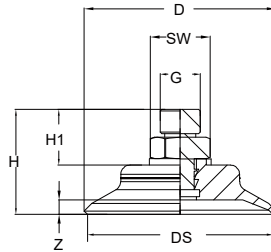
Heavy load



Size[mm]⁽³⁾

Models	D	H	H1	DS	D1	G	G1	Z
HSA100-FG02	101.2	26	15.5	100	66	G1/4"	/	8
HSA125-FG02	126.2	25	15.5	125	91	G1/4"	G1/4"	8
HSA160-FG04	161.8	26.5	16	160	120	G1/2"	G1/4"	6
HSA210-FG04	211.8	26.5	16	210	170	G1/2"	G1/4"	6
HSA250-FG04	251.8	26.5	16	250	210	G1/2"	G1/2"	8
HSA300-FG04	301.8	26.5	16	300	260	G1/2"	G1/2"	6
HSA360-FG04	361.8	35.5	24	360	323	G1/2"	G1/2"	9.5
HSA400-FG04	401.8	29	24	400	360	G1/2"	G1/2"	6

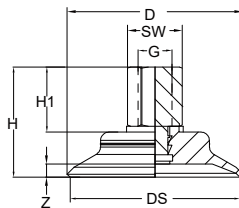
HSB100~400 Dimension



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z
HSA18-MG01	18	25	13	G1/8"	18	SW14	2.5
HSA20-MG01	20	25	13	G1/8"	20	SW14	2.5
HSA22-MG01	22	26	13	G1/8"	22	SW14	3
HSA25-MG01	25	29	13	G1/8"	25	SW14	4.5
HSA30-MG01	30	30	13	G1/8"	30	SW14	4.5
HSA35-MG01	35	38	22	G1/8"	35	SW14	4.5
HSA40-MG01	40	40	22	G1/8"	40	SW14	5.5
HSA45-MG01	45	45	22	G1/8"	45	SW14	8.5
HSA60-MG02	62.1	34	18	G1/4"	60	SW17	4.7
HSA80-MG02	82.8	36	18	G1/4"	80	SW17	6
HSA95-MG02	97.8	36.5	18	G1/4"	95	SW17	6

HSA18~95 External thread



Size[mm]⁽³⁾

Models	D	H	H1	G	DS	SW	Z
HSA18-FG01	18	25	13	G1/8"	18	SW14	2.5
HSA20-FG01	20	25	13	G1/8"	20	SW14	2.5
HSA22-FG01	22	26	13	G1/8"	22	SW14	3
HSA25-FG01	25	29	13	G1/8"	25	SW14	4.5
HSA30-FG01	30	30	13	G1/8"	30	SW14	4.5
HSA35-FG01	35	38	17	G1/8"	35	SW14	4.5
HSA40-FG01	40	40	17	G1/8"	40	SW14	5.5
HSA45-FG01	45	45	17	G1/8"	45	SW14	8.5
HSA60-FG02	62.1	34	23	G1/4"	60	SW17	4.7
HSA80-FG02	82.8	36	23	G1/4"	80	SW17	6
HSA95-FG02	97.8	36.5	23	G1/4"	95	SW17	6

HSA18~95 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HSA-S

Flat suction cup

HANVAC



board



Breathable

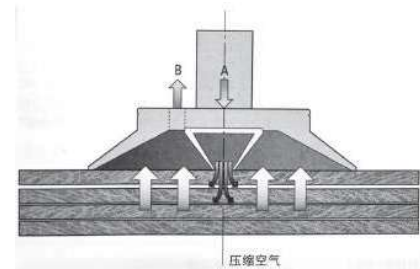
Product characteristics

- *Circular suction cups are used for handling and separating workpieces with porous or flat surfaces and breathability
- *When absorbing stacked breathable workpieces, blowing compressed air into the separation chamber in the suction cup can achieve the separation of the workpieces



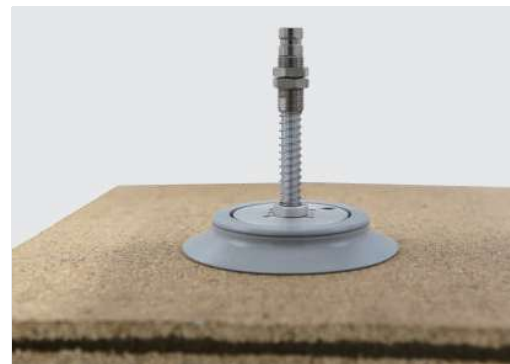
Product structure

- *HSA vacuum suction cup with separated inner suction cup, composed of sealing gasket and aluminum support plate
- *The support plate is embedded into the sealing gasket of a special structure
- *The inner sealing lip separates the compressed air chamber in the center from the vacuum chamber
- *The suction cup sealing gasket can be replaced separately after wear, and the aluminum support plate can be reused
- *The central threaded hole of the support plate (compressed air inlet A) is used to separate the workpiece; (Vacuum connection port B) for vacuum suction



Product advantages

- *Suitable for various flat and breathable workpieces, such as medium density boards, high-density boards, etc
- *Prevent stacked breathable workpieces from sticking together during suction and lifting
- *Short work cycle
- *Strong suction force



Suction Cups

HSA-S

Flat suction cup

HANVAC


board



Breathable



HSA-S Ordering NO

HSA	—	S	—	160
1		2		3

1-Series		2- Special functions		3-Diameter	
HSA	Suction Cup	S	Stripping function	160~250	φ160~250mm



HSA-S Replace parts

Replace parts

HSA-S

* Separate the inner suction cup

* Size:33,00

* Material: Nitrile rubber HNBR Material hardness:65,0 Shore A



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Suction Cups

HSA-S

Flat suction cup

HANVAC


board



Breathable

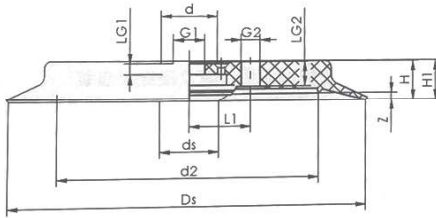


HSA-S Technical Data

Models	Suction	Suction	Internal volume	Adapted hose diameter
	[Ds]	[d2]	[cm ³]	[mm]
HSA-S-160	975	475	98	12
HSA-S-210	1760	1125	202	12
HSA-S-250	2540	1815	310	12



HSA-S 160~250 Design Data



Size[mm]⁽³⁾

Models	d	H	H1	DS	D2	Z	ds
HSA-S-160	34	25	26.5	160	113	7	33.5
HSA-S-210	34	23	24.5	210	163	5	33.5
HSA-S-250	34	25	26.5	250	203	7	33.5

Size[mm]⁽³⁾

Models	L1	G1	G2	LG1	LG2
HSA-S-160	36.5	G1/2"	G1/4"	13.5	15
HSA-S-210	36.5	G1/2"	G1/4"	13.5	15
HSA-S-250	76.0	G1/2"	G1/2"	13.5	15

HSA-S Dimension



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Suction Cups

HSXA

Flat suction cups for packaging industry

HANVAC


Packaging



Long life

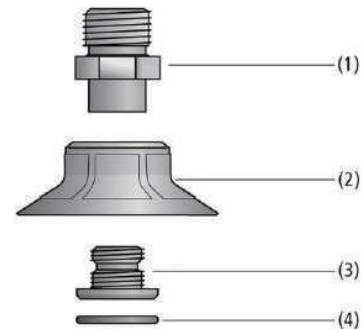
Product characteristics

- * The adaptable seal lip provides the best seal for cardboard boxes and hard packaging
- * High intrinsic stability of suction cups during dynamic processes
- * Maximum effective diameter is achieved due to the high suction of the support ribs on the suction area
- * Elastomer HX material minimizes wear (approximately 3 times longer service life than NBR)



Product structure

- * Round flat suction cups HSXA (2) with soft, flexible sealing lip and suction surface support studs made of wear-resistant elastomer HX
- * Models up to 30 mm in diameter have plug-in connection elements for quick replacement of suckers
- * Diameter from 40 mm, with 2-piece connection element: consisting of machine side assembly (1) and suction side assembly (3)
- * Clamp filter (4) as pre-filter (filter diameter 250 µm)
- * All external threaded connection elements are equipped with an integrated seal on the fastening thread



Product advantages

- * Bottom with support filter structure
- * Complete size specifications
- * Handling thin-walled workpieces will not cause permanent deformation
- * Suitable for various sizes and shapes of workpieces



*Examples of packaged workpieces handled by HSXA suction cups

Suction Cups

HSXA

Flat suction cups for packaging industry

HANVAC


Packaging



Long life



HSXA Ordering NO

HSXA	20	FG01	HX
1	2	3	4

1-Series	2-Diameter	3-Screw thread	
HSXA	1.5 Folding cups	F Internal thread	G01-G1/8
	20~60		G02-G1/4
	φ20~60mm	M External thread	G01-G1/8
			G02-G1/4
4-Material ⁽¹⁾			
HX	High performance		

(1) Other materials can also be made, please contact us



HSXA Models Selection

Models	F-G01-G1/8	M-G01-G1/8	F-G02-G1/4	M-G02-G1/4
HSXA-20	⊙	⊙		
HSXA-25	⊙	⊙		
HSXA-30	⊙	⊙		
HSXA-40			⊙	⊙
HSXA-50			⊙	⊙
HSXA-60			⊙	⊙



HSXA Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Curve radius [mm]	Inner volume [cm ³]
HSXA-20	16.0	10.5	20	1.2
HSXA-25	22.7	17.0	30	1.7
HSXA-30	29.5	22.5	35	2.6
HSXA-40	49.5	25.0	70	5.0
HSXA-50	74.2	44.0	75	8.0
HSXA-60	107.0	65.0	75	12.7

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HSXA

Flat suction cups for packaging industry

HANVAC

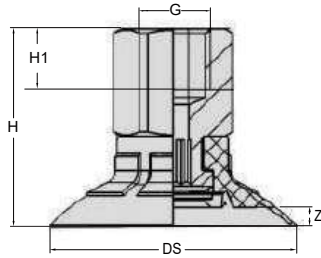

Packaging



Long life



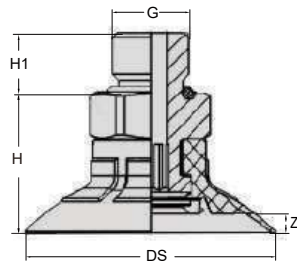
HSXA Design Data



Size[mm] ⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight [g]
HSXA-20-FG01	25	8	G1/8"	21.4	SW14	2.0	7
HSXA-25-FG01	25	8	G1/8"	26.4	SW14	2.0	7
HSXA-30-FG01	26	8	G1/8"	31.4	SW14	2.5	8
HSXA-40-FG02	33	12	G1/4"	41.4	SW17	2.5	19
HSXA-50-FG02	34	12	G1/4"	51.4	SW17	3.5	20
HSXA-60-FG02	36	12	G1/4"	61.2	SW17	5.1	23

HSXA20-60 Internal thread



Size[mm] ⁽³⁾

Models	H	H1	G	DS	SW	Z	Weight [g]
HSXB-20-MG01	17	7.5	G1/8"	21.4	SW14	2.0	6
HSXB-25-MG01	17	7.5	G1/8"	26.4	SW14	2.0	6
HSXB-30-MG01	18	7.5	G1/8"	31.4	SW14	2.5	7
HSXB-40-MG02	23	10.0	G1/4"	41.4	SW17	2.5	18
HSXB-50-MG02	24	10.0	G1/4"	51.4	SW17	3.5	19
HSXB-60-MG02	26	10.0	G1/4"	61.2	SW17	5.1	22

HSXA20-60 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HSXB

Flat suction cups for packaging industry

HANVAC


Packaging



Long life

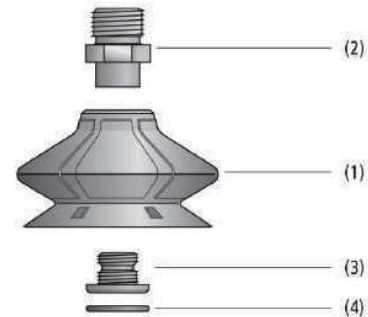
Product characteristics

- * Suction cups for optimal sealing on cardboard boxes and hard packaging
- * High intrinsic stability of suction cups during dynamic processes
- * The spacing element between the seal lip and the fold prevents the suction cup from moving
- * Large effective suction area, small suction, small suction
- * Elastomer HX material minimizes wear (approximately 3 times longer service life than NBR)



Product structure

- * Round corrugated sucker HSXB (1) with 1.5 fold and soft, flexible sealing lip
- * Made of wear-resistant elastomer HX
- * Models up to 30 mm in diameter have plug-in connection elements
- * Diameter from 40 mm, with two-piece connection element: consisting of machine side assembly (2) and suction side assembly (3)
- * Clamp filter (4) as pre-filter
- * All external threaded connection elements are equipped with an integrated seal on the fastening thread



Product advantages

- * 1.5 Fold corrugated suction cups
- * Internal support filter structure
- * Complete size specifications
- * Easy to fit the workpiece with an uneven surface, and has a certain cushioning effect to prevent permanent deformation
- * Suitable for various sizes and shapes of workpieces



* Installation example of the HSXB suction cup

Suction Cups

HSXB

Flat suction cups for packaging industry

HANVAC


Packaging



Long life



HSXBOrdering NO

HSXB	20	FG01	HX
1	2	3	4

1-Series	2-Diameter	3-Screw thread
HSXB	20~80	F Internal thread
1.5 Folding cups	φ10~80mm	G01-G1/8
		G02-G1/4
		M External thread
		G01-G1/8
		G02-G1/4

(1) Other materials can also be made, please contact us



HSXB Models Selection

Models	F-G01-G1/8	F-G02-G1/4	M-G01-G1/8	M-G02-G1/4
HSXB-20	◎		◎	
HSXB-25	◎		◎	
HSXB-30	◎		◎	
HSXB-40		◎		◎
HSXB-50		◎		◎
HSXB-60		◎		◎
HSXB-80		◎		◎



HSXB Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Curve radius [mm]	Inner volume [cm ³]
HSXB-20	9.9	9.8	20	3.2
HSXB-25	14.9	13.0	20	5.3
HSXB-30	20.7	15.5	35	8.0
HSXB-40	35.9	24.8	70	18.4
HSXB-50	54.7	31.2	100	30.2
HSXB-60	78.0	49.4	100	49.3
HSXB-80	166.0	59.0	150	98.4

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HSXB

Flat suction cups for packaging industry

HANVAC

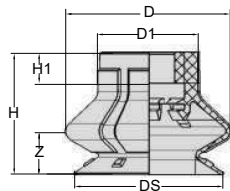

Packaging



Long life



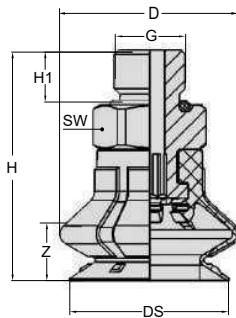
HSXB Design Data



Size[mm] ⁽³⁾

Models	D	H	H1	DS	D1	Z	Weight [g]
HSXB20	24.6	18.0	4.6	21.4	15.1	8.0	1.4
HSXB25	29.0	21.0	4.6	26.4	15.1	11.0	1.8
HSXB30	34.2	23.0	4.6	31.4	15.1	13.0	2.2
HSXB40	44.6	30.0	7.0	41.4	21.6	16.0	4.5
HSXB50	55.2	32.0	7.0	51.4	21.6	18.0	5.8
HSXB60	65.7	36.0	7.0	61.4	21.6	22.0	6.3
HSXB80	82.7	45.9	15.3	81.4	27.1	23.5	7.3

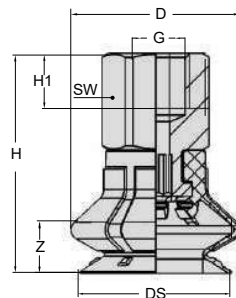
HSXB20-80 Dimension



Size[mm] ⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSXB-20-MG01	26.3	32	8.0	G1/8"	21.4	SW14	8	6
HSXB-25-MG01	31.3	35	8.0	G1/8"	26.4	SW14	11	7
HSXB-30-MG01	36.7	37	8.0	G1/8"	31.4	SW14	13	8
HSXB-40-MG02	48.0	48	12.0	G1/4"	41.4	SW17	16	21
HSXB-50-MG02	58.4	50	12.0	G1/4"	51.4	SW17	18	26
HSXB-60-MG02	69.6	54	12.0	G1/4"	61.4	SW17	22	33
HSXB-80-MG02	88.0	64	12.0	G1/4"	81.4	SW22	24	74

HSXB20-80 External thread



Size[mm] ⁽³⁾

Models	D	H	H1	G	DS	SW	Z	Weight [g]
HSXB-20-FG01	26.3	32	8.0	G1/8"	21.4	SW14	8	7
HSXB-25-FG01	31.3	35	8.8	G1/8"	26.4	SW14	11	8
HSXB-30-FG01	36.7	37	8.0	G1/8"	31.4	SW14	13	9
HSXB-40-FG02	48.0	48	12	G1/4"	41.4	SW17	16	22
HSXB-50-FG02	58.4	50	12	G1/4"	51.4	SW17	18	27
HSXB-60-FG02	69.6	54	12	G1/4"	61.4	SW17	22	34
HSXB-80-FG02	88.0	64	12	G1/4"	81.4	SW22	24	78

HSXB20-80 Internal thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip

Suction Cups

HXB

1.5 Fold the corrugated suction cup
for oil-based sheet metal

HANVAC


Long life



Camber



Anti-slip



Metal



Oil proof

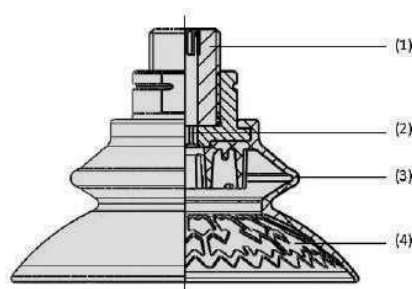
Product characteristics

- * Large suction cup stroke, good flexib
- * The lightweight design of the mold is ideal for high-speed applications
- * The top of the sucker has reinforcing ribs and a large area of internal support structure
- * Modular design, each part can be separated and quickly replaced
- * Complete size specifications



Product structure

- * Lightweight round bell suction cups with flexible sealing lip and optimal internal structure (3)
- * Sucker elastic wear-resistant material (HX)
- * Vulcanized joint made of reinforced plastic (high strength) (1)
- * Key surface, easy to install (2)
- * Available as assembled suckers with various connection types



Product advantages

- * Easy to fit workpiece with different shape surface
- * Long life, and its wear resistance, ozone resistance, oil resistance to effectively improve the grasp of the workpiece
- Lateral friction
- * Each component can be recycled
- * Suitable for various sizes and shapes of workpieces



*Examples of HXF suction cup handling curved workpiece surfaces

Suction Cups

HXB

1.5 Fold the corrugated suction cup
for oil-based sheet metal



Long life



Camber



anti-slip



Metal



Oil proof

HANVAC



HXB Ordering NO

HXB	40	FG01	HX
1	2	3	4

1-Series	2-Diameter	3-Screw thread	
HXB	40~60	F Internal thread	G02-G1/4 G03-G3/8
	φ40~60mm	M External thread	G02-G1/4 G03-G3/8
4-Material ⁽¹⁾			
HX	High-performance		

(1) Other materials can also be made, please contact us



HXB Models Selection

Models	F-G02-G1/4	F-G03-G3/8	M-G02-G1/4	M-G03-G3/8
HXB-40	◎		◎	
HXB-50		◎		◎
HXB-60		◎		◎



HXB Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Oily surface lateral force [N]	Inner volume [cm ³]	Weight [g]
HXB-40	42	49	45	8.7	9.8
HXB-50	58	74	78	18.9	11.6
HXB-60	90	107	105	31.9	14.5

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HXB

1.5 Fold the corrugated suction cup
for oil-based sheet metal

HANVAC


Long life



Camber



anti-slip



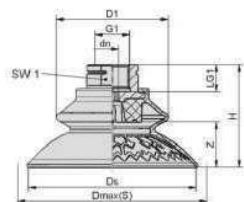
Metal



Oil proof



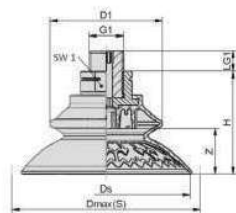
HXB Design Data



Size[mm]⁽³⁾

Models	dn	Dmax(S)	DS	D1	G1	H	SW1	Z	LG1
HXB-40-FG02	4.1	44	39.4	33.8	G1/4"	28.8	SW17	9.8	11
HXB-50-FG03	6.1	55	49.6	43.2	G3/8"	36.9	SW22	11.6	13
HXB-60-FG03	6.1	66	59.6	49.4	G3/8"	41.3	SW22	14.5	13

HXB40-60 Dimension



Size[mm]⁽³⁾

Models	Dmax(S)	DS	D1	G1	H	SW1	Z	LG1
HXB-40-MG02	44	39.4	33.8	G1/4"	28.8	SW17	9.8	10
HXB-50-MG03	55	49.6	43.2	G3/8"	36.9	SW22	11.6	10
HXB-60-MG03	66	59.6	49.4	G3/8"	41.3	SW22	14.5	10

HXB40-60 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances, Z is the trip



Suction Cups

HXF

Flat suction cups for oil-based sheet metal

HANVAC



Long life



Camber



Anti-slip



Metal



Oil proof

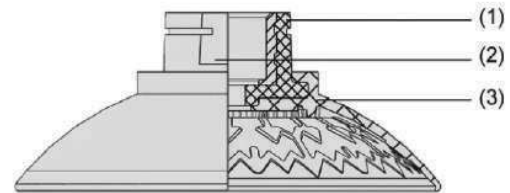
Product characteristics

- * The suction cup has a large stroke and good flexibility
- * The lightweight design of the mold is ideal for high-speed applications
- * The top of the sucker has reinforcing ribs and a large area of internal support structure
- * Modular design, each part can be separated and quickly replaced
- * Complete size specifications



Product structure

- * Lightweight round bell suction cups with flexible sealing lip and optimal internal structure (3)
- * Sucker elastic wear-resistant material (HX)
- * Vulcanized joint made of reinforced plastic (high strength) (1)
- * Key surface, easy to install (2)
- * Available as assembled suckers with various connection types



Product advantages

- * Easy to fit workpiece with different shape surface
- * Long life, and its wear resistance, ozone resistance, oil resistance to effectively improve the grasp of the workpiece
- Lateral friction
- * Each component can be recycled
- * Suitable for various sizes and shapes of workpieces



*Examples of HXF suction cup handling oily workpiece surfaces

Suction Cups

HXF

Flat suction cups for oil-based sheet metal

HANVAC


Long life



Camber



anti-slip



Metal



Oil proof



HXF Ordering NO

HXF	—	40	—	FG01	—	HX
1		2		3		4

1-Series		2-Diameter		3-Screw thread	
HXF	Flat Suction cup	40~60	φ40~60mm	F Internal thread	G03-G3/8
				M External thread	G03-G3/8
4-Material ⁽¹⁾					
HX	High-performance				

(1) Other materials can also be made, please contact us



HXF Models Selection

Models	F-G03-G3/8	M-G03-G3/8
HXF-40	⊙	⊙
HXF-50	⊙	⊙
HXF-60	⊙	⊙



HXF Technical Data

Models	Suction [N] ⁽²⁾	Lateral force [N] ⁽²⁾	Oily surface lateral force [N]	Inner volume [cm ³]	Weight [g]
HXF-40	69	49	71	8.5	5.0
HXF-50	109	74	110	15.2	8.5
HXF-60	154	107	155	25.2	11

(2) The surface of the workpiece is smooth and dry, and the vacuum degree is -60KPa. The above data does not include the safety factor. Depending on the surface condition of the workpiece, the value may change.



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Suction Cups

HXF

Flat suction cups for oil-based sheet metal

HANVAC


Long life



Camber



anti-slip



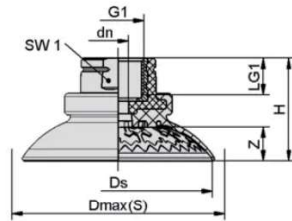
Metal



Oil proof



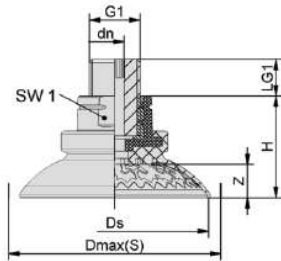
HXF Design Data



Size[mm]⁽³⁾

Models	dn	Dmax(S)	Ds	G1	H	SW1	Z	LG1
HXF-40-FG03	6.75	45.5	41.3	G3/8"	29.3	SW22	7.1	12
HXF-50-FG03	6.75	58.4	51.5	G3/8"	29.6	SW22	8.4	12
HXF-60-FG03	6.75	69.7	61.5	G3/8"	33.4	SW22	10.9	12

HXF40-60 Dimension



Size[mm]⁽³⁾

Models	dn	Dmax(S)	DS	G1	H	SW1	Z	LG1
HXF-40-MG03	6.10	45.5	41.3	G3/8"	29.3	SW22	7.1	12
HXF-50-MG03	6.10	58.4	51.5	G3/8"	29.6	SW22	8.4	12
HXF-60-MG03	6.10	69.7	61.5	G3/8"	33.4	SW22	10.9	12

HXF40-60 External thread

(3) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances, Z is the trip



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Suction Cups

HSN

Needle suction

HANVAC



Composite



Textile

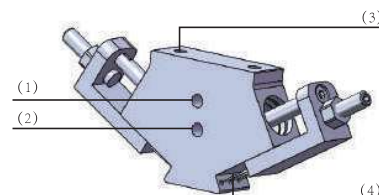
Product characteristics

- * Needle suckers for handling non-rigid and porous materials (mainly textiles)
- * Handling materials that are difficult to pick up with vacuum, such as composite fibers, fluff fabrics, filtration materials, insulation and foam materials
- * Small needle inserted deep money, can be quickly released
- * Adjustable needle stroke
- * Prevents workpiece from falling even in the event of power failure
- * Firmly absorb high-permeability difficult-to-use vacuum handling parts



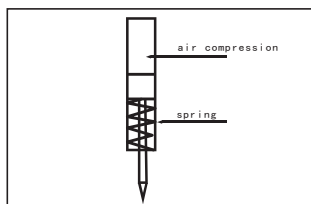
Product structure

- * Body: made of aluminum alloy, small size, light weight
- * (1) Connection port: used for compressed air connection "control needle ejection"
- * (2) Connection port: used for compressed air connection "control needle ejection"
- * (3) Mounting screw: M5x2
- * (4) Steel needle: The steel needle insertion Angle is 30°

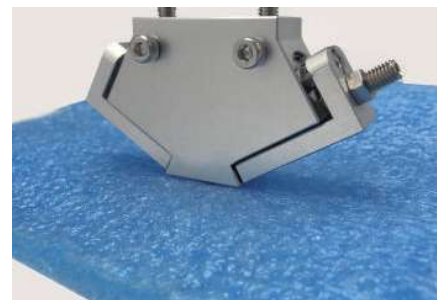


Product advantages

- * Especially suitable for installation in confined Spaces
- * Only one control signal
- * Perfect for other mounting parts
- * Can handle small workpieces
- * Simple control pneumatic valve, simple control
- * Can handle slender or diverse workpieces



Schematic diagram of gas path



*Example of needle suction composite material

Suction Cups

HSN

Needle suction

HANVAC


Composite



Textile



HSN100 Ordering NO

HSN	100
1	2

1-Series	2-Operating stroke
HSN	100 10mm



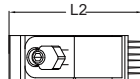
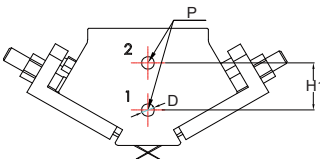
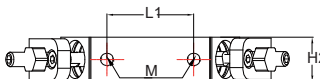
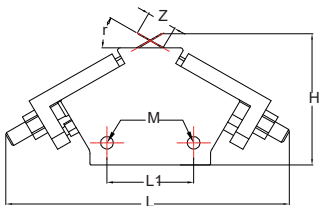
HSN100 Technical Data

Models	Number of needles	Needle diameter [mm]	Operating angle [°]	Manner of execution	Stroke [mm]
HSN100	6	φ1	30	double-acting	2

Models	Operating temperature [°C]	Maximum working pressure [MPa]	Minimum working pressure [MPa]	Inlet diameter	Weight [g]
HSN100	5~60	0.7	0.4	M5	85



HSN100 Design Data



Size[mm]⁽¹⁾

Models	L	L1	L2	H	H1	H2	M2
HSN100	95	29	44.6	45	16	15	2-M5

Size[mm]⁽³⁾

Models	P	D	r	Z
HSN100	M5	φ4	30°	10

HSN100

(1) Compliant with DIN ISO 3302-1 M3 rubber parts allowable dimensional tolerances. Z is the trip



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Suction Cups

HZN

Needle suction

HANVAC



Composite



Textile

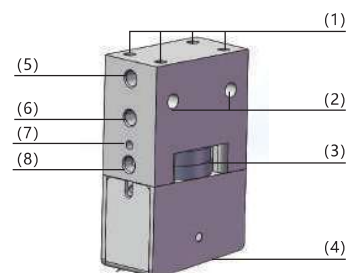
Product characteristics

- * Needle suckers for handling non-rigid and porous materials (mainly textiles)
- * Handling materials that are difficult to pick up with vacuum, such as composite fibers, fluff fabrics, filtration materials, insulation and foam materials
- * Small needle inserted deep money, can be quickly released
- * Adjustable needle stroke



Product structure

- * (1) 4 mounting holes
- * (2) Mounting holes
- * (3) Knob for adjusting needle travel
- * (4) 32 steel needles
- * (5) Compressed air inlet
- * (6) Compressed air inlet 2
- * (7) Lock the mouth of the screw
- * (8) Back mouthpiece



Product advantages

- * Especially suitable for installation in confined Spaces
- * Only one control signal
- * Perfect for other mounting parts



*Example of needle suction composite material

Suction Cups

HZN

Needle suction

HANVAC


Composite



Textile



HZN25 Ordering NO

HZN	—	25
1		2

1-Series	2-Operating stroke
HZN	Suction cup
	25
	2.5mm



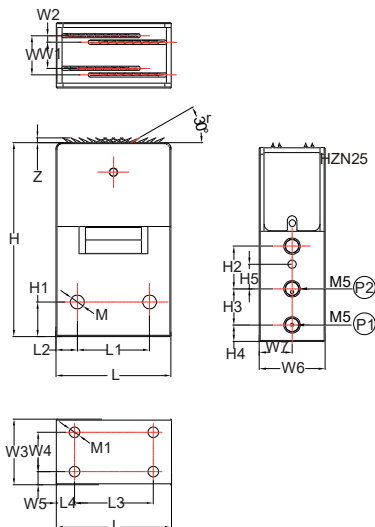
HZN25 Technical Data

Models	Number of needles	Needle diameter [mm]	Operating angle [°]	Manner of execution	Stroke [mm]
HZN25	32	φ0.7	30	double-acting	2.5

Models	Operating temperature [°C]	Maximum working pressure [MPa]	Minimum working pressure [MPa]	Inlet diameter	Weight [g]
HZN25	0~70	0.7	0.4	M5	114



HZN25 Design Data



HZN25

Size[mm]

Models	L	L1	L2	L3	L4	H	H1
HZN25	35	22	6.5	24	5.5	59	10.5

Size[mm]

Models	H2	H3	H4	H5	W	W1	W2
HZN25	13	11	5	7.5	12	8	2

Size[mm]

Models	W3	W4	W5	W6	W7	M	M1
HZN25	20	12	4	20	10	2-M5	4-M4

Size[mm]

Models	Z	r	P1	P2
HZN25	2.5	30°	M5	M5



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Special sucker

Magnetic sucker

Maximum suction 290 (N)

HANVAC


General

Product characteristics

- * Use permanent magnet to absorb the workpiece safely
- * Compact design and lightweight structure
- * Easy to replace friction washer
- * Optional side mount components
- * Two suckers can be installed in parallel
- * Piston control

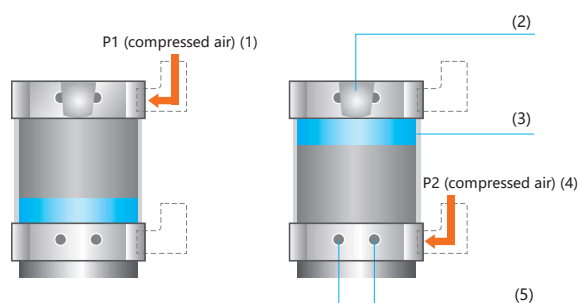


Product structure

- * P1(Compressed air port) (1)
- * Standard thread (2)
- * Permanent Magnet (3)
- * P2(Compressed air port) (4)
- * Bracket mounting interface (on all three sides) (5)

Absorption=magnet descent

Release=magnet rising



Product advantages

- * No electric drive occupies small space, light total weight
- * Achieve high lateral force
- * Personalized assembly available
- * Ideal for handling long workpieces
- * Magnetically adsorbed workpiece preferred (risk of magnetization of product)



*HMP suction cups carry porous metal plates

Special sucker

Magnetic sucker

Maximum suction 290 (N)

HANVAC



General



HMP Ordering NO

HMP	—	30
1		2

1-Series		2-Fixture size	
HMP	Magnetic sucker	30	Ø30.0mm
		40	Ø40.6mm
		50	Ø50.6mm
		70	Ø68.7mm



HMP Technical Data

Models	Suction [N]	Residual magnetic force [N]	working pressure [bar]	installation site	working principle	operating temperature [°C]	Weight [g]
HMP-30	35	0.3	3.5~6.0	arbitrarily	Bistable state	5~70	130
HMP-40	100	0.3	3.5~6.0	arbitrarily	Bistable state	5~70	240
HMP-50	180	0.3	3.5~6.0	arbitrarily	Bistable state	5~70	440
HMP-70	290	0.3	3.5~6.0	arbitrarily	Bistable state	5~70	715

(Note) The specified suction is a theoretical value, excluding the safety factor; Measured when the thickness of the transported plate is 2mm.
The safety factor S=3 is usually selected when the magnetic chuck HMP is used to design the system.

Special sucker

Magnetic sucker

Maximum suction 290 (N)

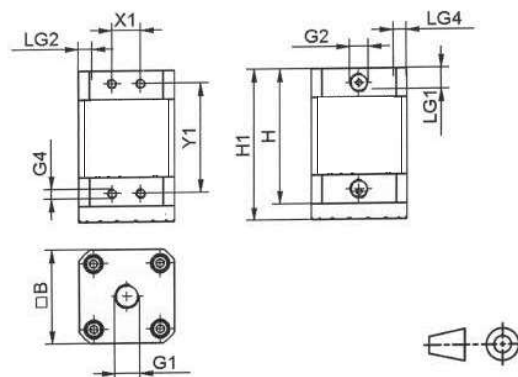
HANVAC



General



HAB Design Data



HMP

Size[mm]

Models	B ⁽¹⁾	G1	G2	G4	H	H1	LG1	LG2	LG4	X1	Y1
HMP-30	30.0	G1/8-F(depth:7)	G1/8-F(depth:6)	M4-F(depth:5)	61.4	70.2	7	6	5	12	46
HMP-40	40.6	G1/4-F(depth:11)	G1/8-F(depth:6)	M4-F(depth:7)	61.4	70.2	11	6	7	12	46
HMP-50	50.6	G1/4-F(depth:11)	G1/8-F(depth:6)	M5-F(depth:7)	71.4	80.2	11	6	7	15	58
HMP-70	68.7	G1/4-F(depth:11)	G1/8-F(depth:6)	M5-F(depth:8)	71.4	80.2	11	6	8	15	58

(1) The diameter of the contact surface of the magnetic sucker (circular) is equivalent to B



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Compact **V**alves



DVG

IThree way pilot type valve body

HAKH

Unidirectional vacuum valve

HIVR

Vacuum pressure regulating valve

HDV

Link thread: G1/8 "

HKSH

Internal bearing valve body joint

HKSL

High speed rotating valve body joint

HPV

Vacuum air valve body

HRV

Vacuum air valve body

HVHK

Valve body joint (manual)

SVK/SVKG

Vacuum check valve

OFR

Filter pressure reducing valve

OR

Pressure regulating valve

OL

Oil mist eliminator

Vacuum valve

Three way pilot type valve DVG

Pressure range: 0.15~0.8MPa

HANVAC


Utility

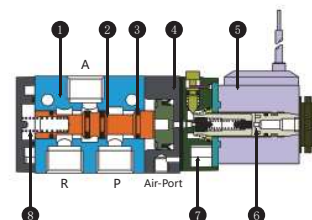
Product characteristics

- *Small size and light weight
- *Sliding column structure, good sealing performance, and sensitive response
- *The inner hole adopts special processing technology, with low friction resistance and low pneumatic pressure, making Long service life
- *No need for oil lubrication
- *Equipped with manual push, convenient for installation and debugging
- *There are multiple standard voltage levels available for selection



Product structure

1. Product name: Valve body NAME: BODY Material: AL6061
2. Product name: Valve core NAME: SPOOL Material: AL6061
3. Product name: Valve core sealing ring NAME: SPOOL P/K Material: NBR
4. Product name: Guiding body NAME: PILOT Material: AL6061 NOTE: Black spray paint
5. Product name: Electromagnetic coil NAME: COIL
6. Product Name: Leading Combination NAME: CORE Material: JL45 NOTE: 430FR Soft Magnetic
7. Product name: Base NAME: SEAT Material: PBT
8. Product Name: Reset Spring NAME: SPRING Material: SUS304



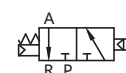
Product advantages

- *The opening and closing time is extremely short
- *Suitable for high traffic applications
- *Avoid vacuum on/off or ventilation function
- *Can be integrated with the base valve group to save installation space

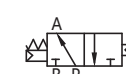
Electromagnetic coil insulation

Insulation type	Temperature(℃)
A	Below 65
E	Below 80
B	Below 90
F(Standard)	Below 115
H	Below 140

Normally closed (Standard)



Normally open type



Vacuum valve

HANVAC

Three way pilot type valve DVG

Pressure range: 0.15~0.8MPa



Utility



DVG Ordering NO

DVG	3	0	1	DZ	E
1	2	3	4	5	6

1-Series	2- Connecting pipe diameter	3- Switching method
DVG	Valve	
	3	1/4
	5	3/8
	6	1/2
		0 Normally closed type
		1 Normally open type

4- Voltage	5-Outgoing method	6-Explosion-proof
1	DC12V	DZ DIN socket with light type
2	DC24V	E Explosion-proof
3	AC110V	
4	AC220V	



DVG Specification

Models	Use fluid	Intake pressure [MPa]	Take over caliber	Action mode	Temperature	Reaction time	Maximum frequency
DVG-300-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC1/4	Pneumatic drive +Spring return	-5~50°C	20ms以下	5c/sec
DVG-301-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC1/4	Pneumatic drive +Spring return	-5~50°C	20ms以下	5c/sec
DVG-500-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC3/8	Pneumatic drive +Spring return	-5~50°C	20ms以下	3c/sec
DVG-501-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC3/8	Pneumatic drive +Spring return	-5~50°C	20ms以下	3c/sec
DVG-600-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC1/2	Pneumatic drive +Spring return	-5~50°C	30ms以下	2c/sec
DVG-601-2-DZ-E	air	-0.1MPa(Work) 0.5MPa(Drive)	RC1/2)	Pneumatic drive +Spring return	-5~50°C	30ms以下	2c/sec


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Vacuum valve

Three way pilot type valve DVG

Pressure range: 0.15~0.8MPa

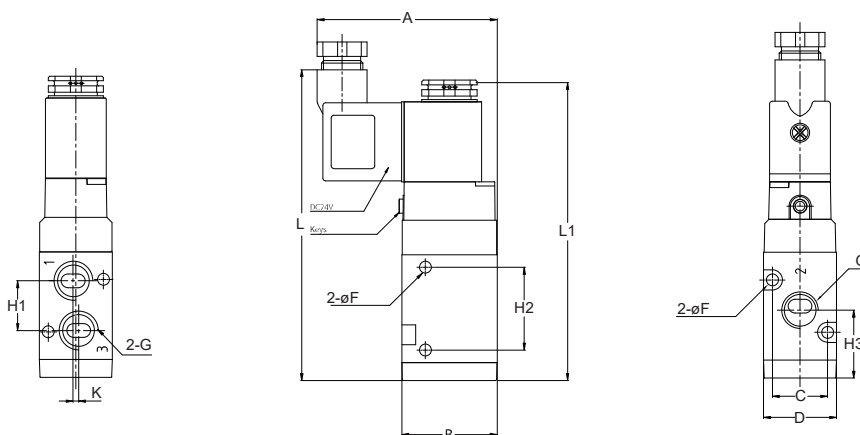
HANVAC


Utility

Models	Manual operation	Heat resistance level	Protection level IP65	Rated voltage	Permissible voltage	Effective interception area [CV]	Power consumption [W]
DVG-300-2-DZ-E	Keys	F	(IN40050) IP65	DC24V,DC12V AC220V,AC110V	-10%~+10%	19mm ² (1.0)	DC 3W(With lights)
DVG-301-2-DZ-E	Keys	F	(IN40050) IP65	DC24V,DC12V AC220V,AC110V	-10%~+10%	19mm ² (1.0)	AC 3.7VA(60Hz)
DVG-500-2-DZ-E	Keys	F	(IN40050) IP65	DC24V,DC12V AC220V,AC110V	-10%~+10%	19mm ² (1.0)	DC 3W(With lights)
DVG-501-2-DZ-E	Keys	F	(IN40050) IP65	DC24V,DC12V AC220V,AC110V	-10%~+10%	19mm ² (1.0)	AC 3.7VA(60Hz)
DVG-600-2-DZ-E	Keys	F	(IN40050) IP65	DC24V,DC12V AC220V,AC110V	-10%~+10%	65mm ² (3.5)	DC 3W(With lights)
DVG-601-2-DZ-E	Keys	F	(IN40050)	DC24V,DC12V AC220V,AC110V	-10%~+10%	65mm ² (3.5)	AC 3.7VA(60Hz)



DVG Specification



DVG-300/301



Vacuum valve

Three way pilot type valve DVG

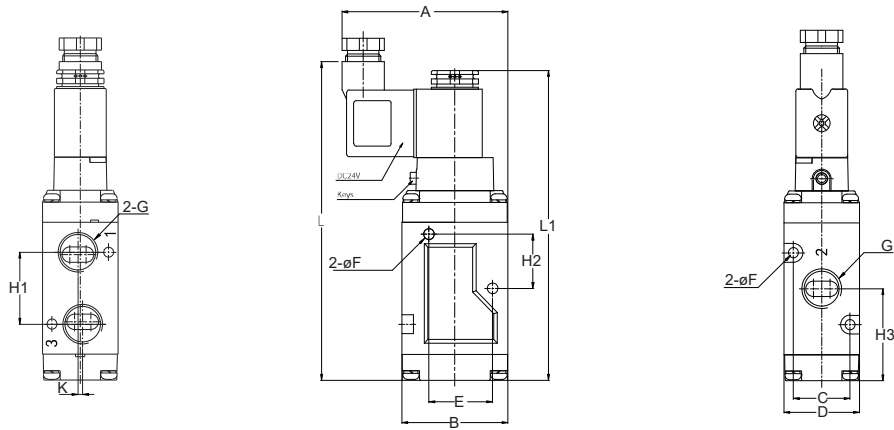
Pressure range: 0.15~0.8MPa

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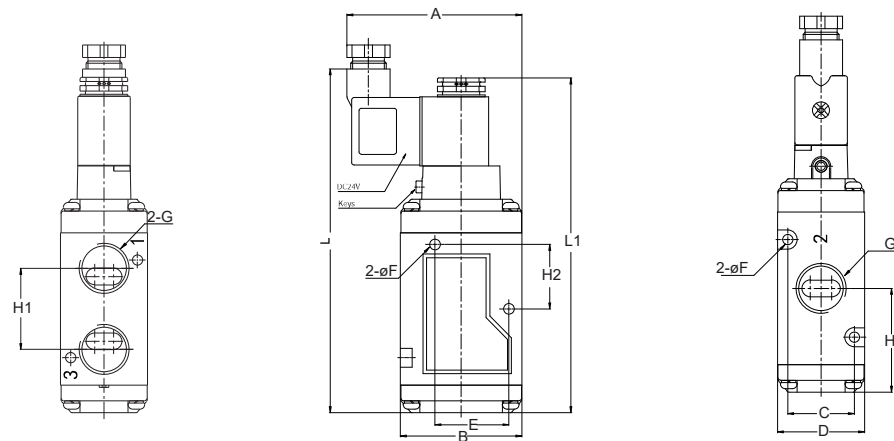

Utility



DVG Specification



DVG-500/501



DVG-600/601

model

Size[mm]	A	B	C	D	E	ΦF	G	H1	H2	H3	L1	L
DVG-300-2-DZ-E	65	34.5	20	26.4	/	4.2	G1/4	18	30	24.5	109	113
DVG-301-2-DZ-E	65	34.5	20	26.4	/	4.2	G1/4	18	30	24.5	109	113
DVG-500-2-DZ-E	70.5	45	24	32	27	4.2	G3/8	30.5	23	39	132	135
DVG-501-2-DZ-E	70.5	45	24	32	27	4.2	G3/8	30.5	23	39	132	135
DVG-600-2-DZ-E	73.5	51	28	36.5	31	4.2	G1/2	34	27	43.5	140	144
DVG-601-2-DZ-E	73.5	51	28	36.5	31	4.2	G1/2	34	27	43.5	140	144



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Vacuum valve

Five way pilot type valve DVG

Pressure range: 0.15~0.9MPa

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Utility

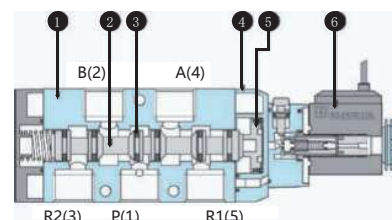
Product characteristics

- *Width 32mm
- *Sliding column structure, good sealing performance, and sensitive response
- *The inner hole adopts special processing technology, with low friction resistance and low pneumatic pressure, making Long service life
- *No need for oil lubrication
- *Equipped with manual push, convenient for installation and debugging
- *There are multiple standard voltage levels available for selection



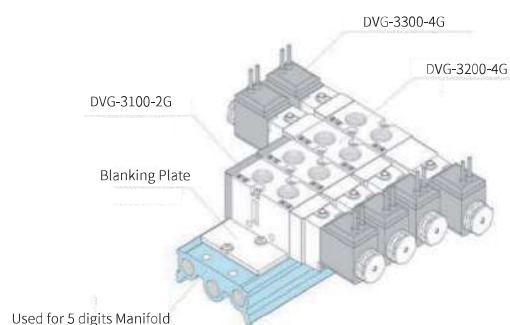
Product structure

	Product Name	Material quality
1	vacuum valve	ALDC
2	spool	AL
3	valve core sealing ring	NBR
4	guiding the ontology	ZnDC
5	piston	PLASTIC
6	coil	



Product advantages

- *The opening and closing time is extremely short
- *Suitable for high traffic applications
- *Avoid vacuum on/off or ventilation function
- *Can be integrated with the base valve group to save installation space



*Integrated structure diagram of valve group

Vacuum valve

HANVAC

Five way pilot type valve DVG

Pressure range: 0.15~0.9MPa



Utility



DVG Ordering NO

DVG	3	1	00	1	G
1	2	3	4	5	6

1-Series	2-Connecting pipe diameter	3-Switching method
DVG	Valve	
	3	G1/4
	5	G3/8
	6	G1/2
		1 Single electronic control
		2 Dual electronic control
		3 Double central closure
		4 Dual center exhaust
		5 Double central pressurization
4-Tubing method	5-Voltage	6-Entry cable
00	Direct Piping	
	1	DC12V
	2	DC24V
	3	AC110V
	4	AC220V
		G Directly output line
		D DIN socket
		DZ DIN socket with light



DVG switching method

	Central closure
	Single electronic control
	Central exhaust
	Dual electronic control
	Central pressurization

Vacuum valve

Five way pilot type valve DVG

Pressure range: 0.15~0.9MPa

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Utility



DVG Specification

Models		DVG-3100	DVG-3200	DVG-3300	DVG-3400	DVG-3500	DVG-5100	DVG-5200	DVG-5300	DVG-5400	DVG-5500
Working medium		Clean air					Clean air				
Pressure range [MPa]		0.15~0.7	0.1~0.9	0.2~0.9			0.15~0.7	0.1~0.9	0.2~0.9		
Pipe Size		G1/4					G3/8				
Action mode		Pilot					Pilot				
Working temperature		-5~50℃					-5~50℃				
Reaction time		Below 25ms		Below 35ms			Below 30ms		Below 40ms		
Maximum actuation frequency		5c/sec		3c/sec			5c/sec		3c/sec		
Lubrication		No lubrication					No lubrication				
Manual operation		Button type					Button type				
Heat resistance level		F-level					F-level				
Protection level		IP65(IN40050)					IP65(IN40050)				
Rated voltage		DC24V,DC12V,AC220V,AC110V					DC24V,DC12V,AC220V,AC110V				
Permissible voltage		Rated voltage:-10% +10%					Rated voltage:-10% +10%				
Effective interception area [CV value]		19mm ² (1.0)		11.5mm ² (0.6)			45mm ² (2.5)		30mm ² (1.6)		
Power consumption [W]	DC	2.5W (With indicator lights)					2.5W (With indicator lights)				
	AC	5.5VA (60Hz)					5.5VA (60Hz)				

Models	DVG-6100	DVG-6200	DVG-6300	DVG-6400	DVG-6500	
Working medium	Clean air					
Pressure range [MPa]	0.15~0.7	0.1~0.9	0.2~0.9			
Pipe Size	G1/2					
Action mode	Pilot					
Working temperature	-5~50℃					
Reaction time	Below 30ms		Below 40ms			
Maximum actuation frequency	2c/sec		1c/sec			
Lubrication	No lubrication					
Manual operation	Button type					
Heat resistance level	F-level					
Protection level	IP65(IN40050)					
Rated voltage	DC24V,DC12V,AC220V,AC110V					
Permissible voltage	Rated voltage:-10% +10%					
Effective interception area [CV value]	65mm²(3.5)		50mm²(2.6)			
Power consumption [W]	DC	2.5W (With indicator lights)				
	AC	5.5VA (60Hz)				


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Vacuum valve

Five way pilot type valve DVG

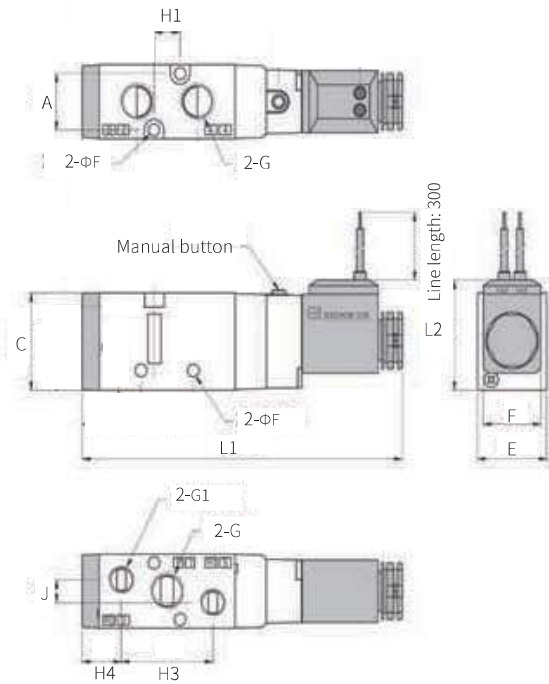
Pressure range: 0.15~0.9MPa

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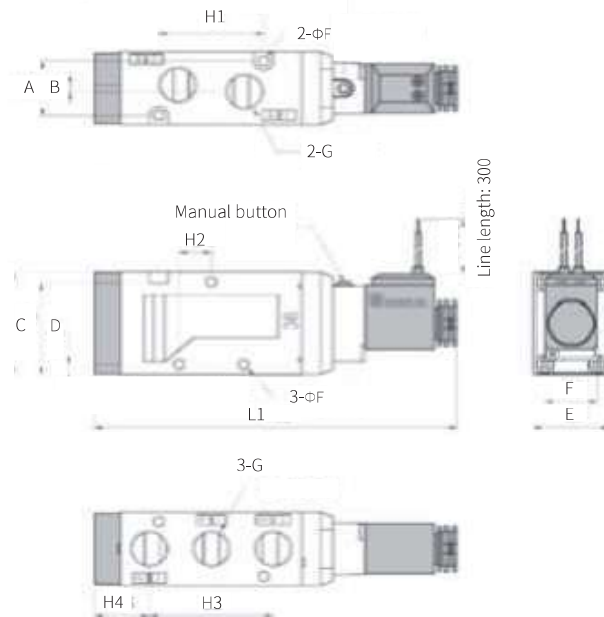

Utility



DVG Specification



DVG-3100 Directly output line type



DVG-5100/6100 Directly output line type

Models	A	B	C	D	E	F	ΦF	G	G1	H1	H2	H3	H4	J	L1	L2
DVG-3100-*-G	20	/	34.5	/	26.5	22	4.3	G1/4	G1/8	10	/	35	15	8	122.5	39
DVG-5100-*-G	24	3	40	35.5	32	22	4.3	G3/8	/	44	13.5	52	23	/	152	/
DVG-6100-*-G	28	/	46	40.5	/	/	4.3	G1/2	/	41	/	60	26.5	4	140	/


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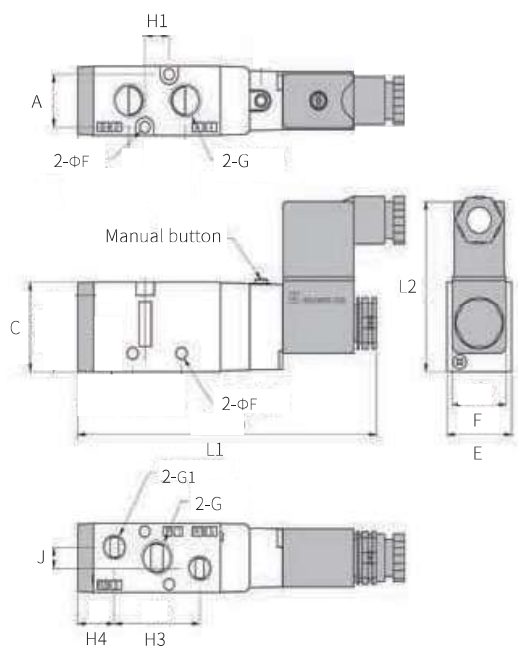
Vacuum valve

Five way pilot type valve DVG

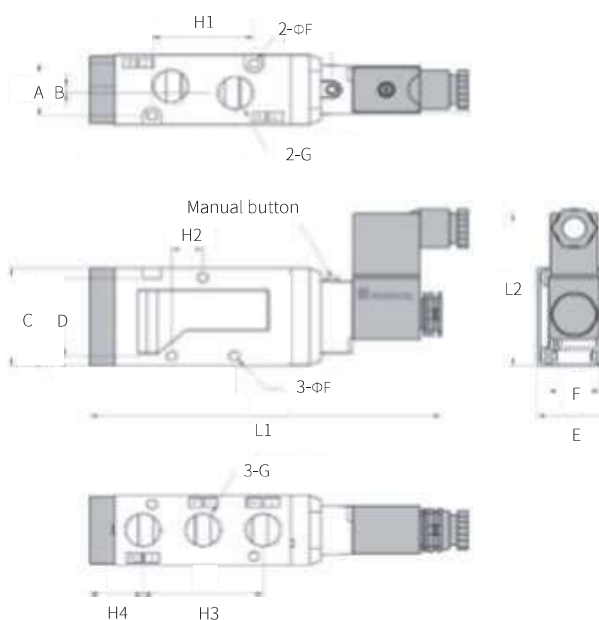
Pressure range: 0.15~0.9MPa

HANVAC


Utility



DVG-3100 DIN socket type



DVG-5100/6100 DIN socket type

Models	A	B	C	D	E	F	ΦF	G	G1	H1	H2	H3	H4	J	L1	L2
DVG-3100-*-D	20	/	34.5	/	26.5	22	4.3	G1/4	G1/8	10	/	35	15	8	122.5	65
DVG-5100-*-D	44	3	45	35.5	32	22	4.3	G1/8	/	44	13.5	52	23	/	152	70
DVG-6100-*-D	28	/	51	46	/	/	4.3	G1/2	/	41	/	60	26.5	/	144	/

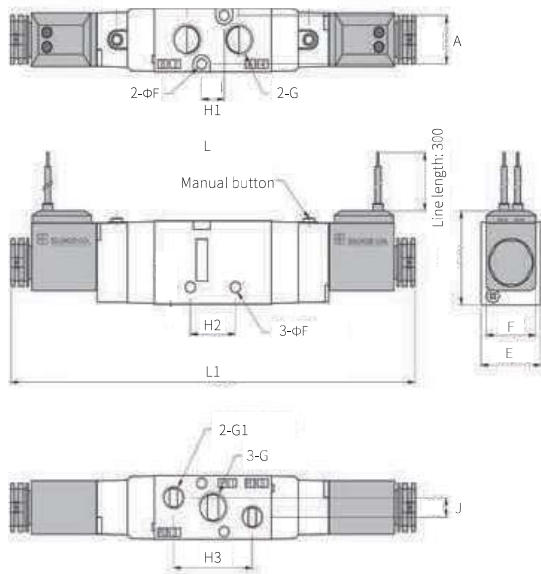
Vacuum valve

Five way pilot type valve DVG

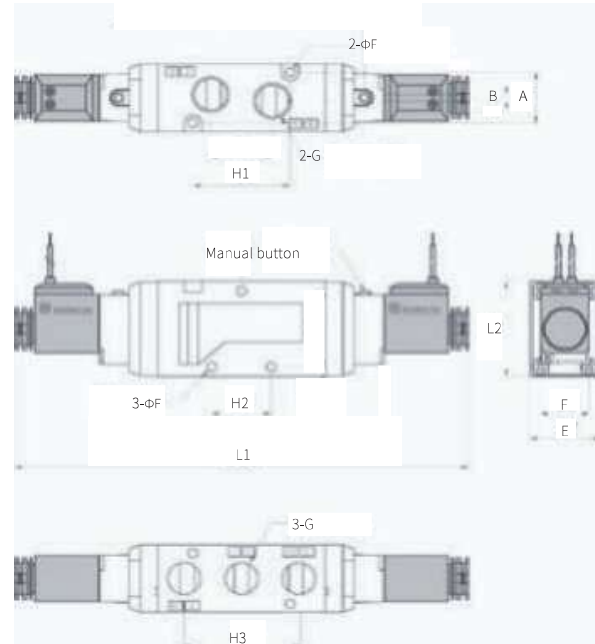
Pressure range: 0.15~0.9MPa

HANVAC


Utility



DVG-3200 Directly output line type



DVG-5200/6200 Directly output line type

Models	A	B	E	F	ΦF	G	G1	H1	H2	H3	J	L1	L2
DVG-3200-*-G	20	/	26.5	22	4.3	G1/4	G1/8	10	20	35	8	180	39
DVG-5200-*-G	24	3	32	22	4.3	G3/8	/	44	27	52	/	206	45
DVG-6200-*-G	28	/	/	/	4.3	G1/2	/	41	30	60	4	228	/

Vacuum valve

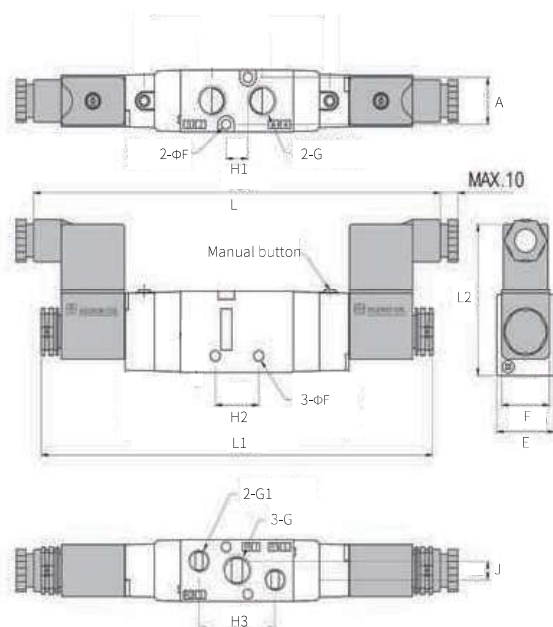
Five way pilot type valve DVG

Pressure range: 0.15~0.9MPa

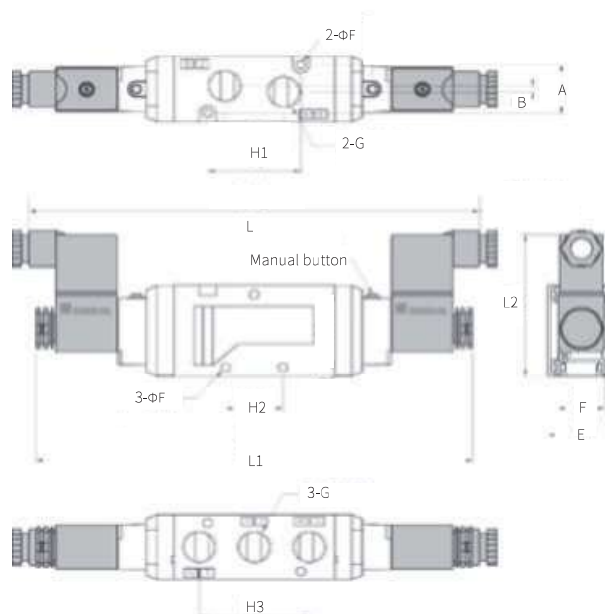
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Utility



DVG-3200 DIN socket type



DVG5200/6200 DIN socket type

Models	A	B	E	F	ΦF	G	G1	H1	H2	H3	J	L	L1	L2
DVG-3200-*-D	20	/	26.5	22	4.3	G1/4	G1/8	10	20	35	8	187	180	65
DVG-5200-*-D	24	3	32	22	4.3	G3/8	/	44	27	52	/	213	206	70
DVG-6200-*-D	28	/	/	/	4.3	G1/2	/	41	30	60	4	235	/	/

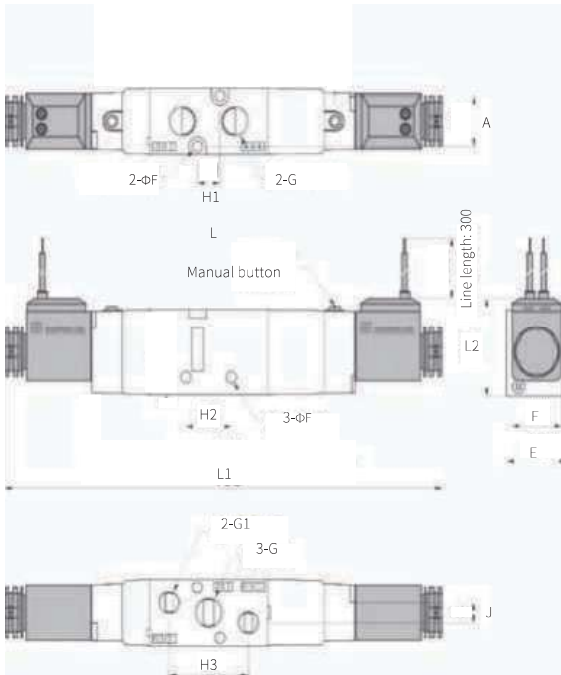
Vacuum valve

Five way pilot type valve DVG

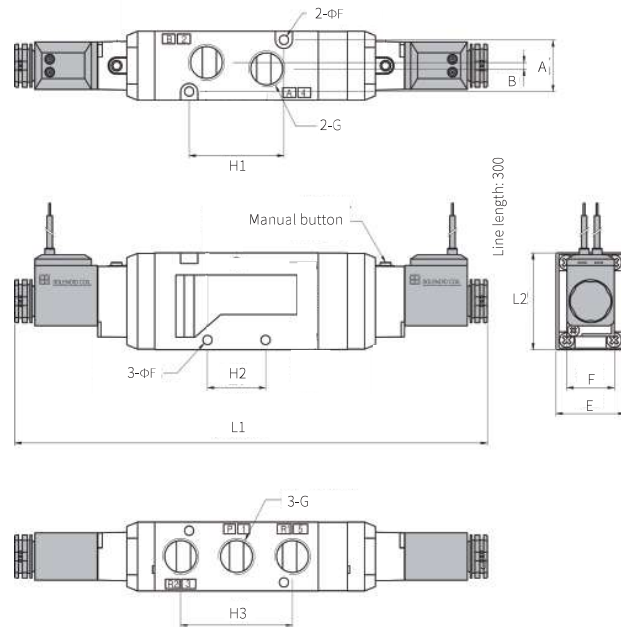
Pressure range: 0.15~0.9MPa

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Utility



DVG-3300/3400/3500 Directly output line type



DVG-5300/5400/5500、DVG-6300/6400/6500
Directly output line type

Models	A	B	E	F	ΦF	G	G1	H1	H2	H3	L1	L2
DVG-3*00-*-G	20	/	26.5	22	4.3	G1/4	G1/8	10	20	35	193	39
DVG-5*00-*-G	24	3	32	22	4.3	G3/8	/	44	27	52	219.5	45
DVG-6*00-*-G	28	/	/	/	4.3	G1/2	/	41	30	60	250.5	/

Vacuum valve

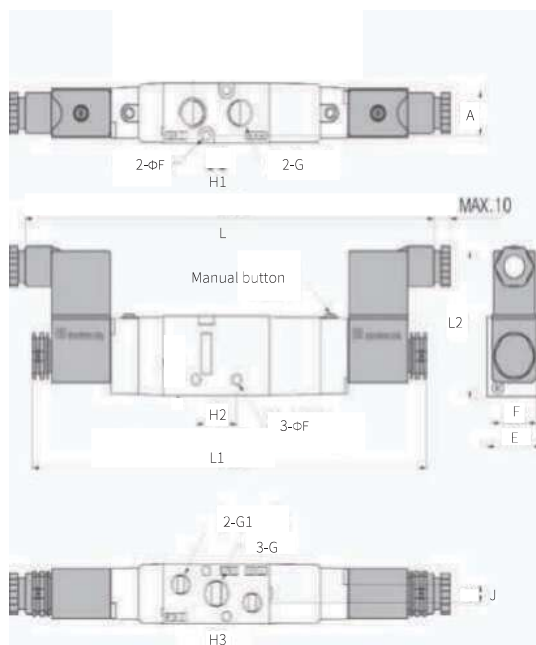
Five way pilot type valve DVG

Pressure range: 0.15~0.9MPa

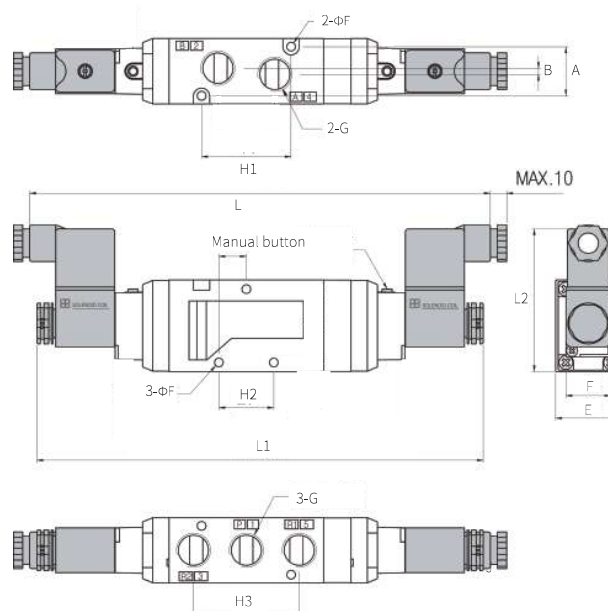
HANVAC



Utility



DVG-3300/3400/3500 DIN socket type



DVG-5300/5400/5500、DVG-6300/6400/6500 DIN socket type

Models	A	B	E	F	ΦF	G	G1	H1	H2	H3	J	L	L1	L2
DVG-3*00-*-D	20	/	26.5	22	4.3	G1/4	G1/8	10	20	35	8	200	193	65
DVG-5*00-*-D	24	3	32	22	4.3	G3/8	/	44	27	52	/	226.5	219.5	70
DVG-6*00-*-D	28	/	/	/	4.3	G1/2	/	41	30	60	4	257.5	/	/

One-way valve HAKH

One side quick change connector

HANVAC



Utility

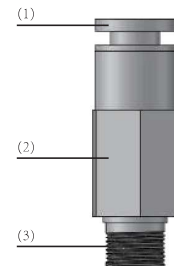
Product characteristics

- *Prevent gas backflow
- *Vacuum systems are also suitable for use with (-100Pa)
- *Interchangeable connector, small size, easy to install



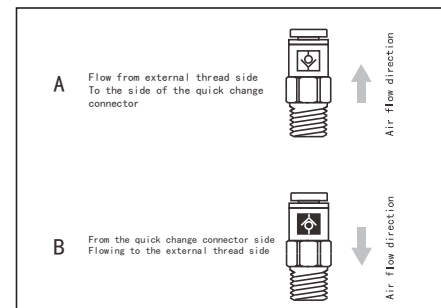
Product structure

- *As an accessory for vacuum sensors
- *Release sleeve (1)
- *Hexagonal opposite side (2)
- *Connection thread (3)



Product advantages

- *Balance the internal and external pressure of the vacuum gripper, and quickly release the product
- *Energy saving effect when handling non breathable workpieces
- *Any installation position, suitable for narrow spaces



One-way valve

HAKH

One side quick change connector

HANVAC


Utility



HAKH Ordering NO

HAKH	08	01	S
1	2	3	4

1-Series	2-Connector	3-Threaded
HAKH	Valve	
	04	Φ4
	06	Φ6
	08	Φ8
	10	Φ10
	12	Φ12

4-Sealant	
S	Sealant coated (metric) Thread not coated with sealant Add sealing gasket when needed)

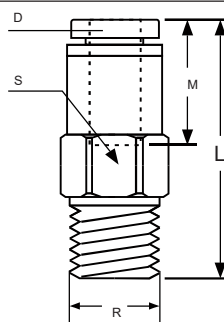


HAKH Specification

Models	Use fluid	Operating pressure range	Opening pressure	Temperature	Flexible hose material
HAKH-08-01S	air	-100kpa~1MPa	0.005MPa	-5°C~60°C	Nylon, soft nylon, polyurethane
HAKH-08-02S	air	-100kpa~1MPa	0.005MPa	-5°C~60°C	Nylon, soft nylon, polyurethane
HAKH-08-03S	air	-100kpa~1MPa	0.005MPa	-5°C~60°C	Nylon, soft nylon, polyurethane



HAKH Specification



HAKH

Size[mm]

Models	ΦD	R	S	L	M
HAKH-08-01S	Φ8	R1/8"	14	31.7	18.5
HAKH-08-02S	Φ8	R1/4"	14	42	18.5
HAKH-08-03S	Φ8	R3/8"	17	54.2	18.5


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Vacuum valve HIVR

Maximum flow rate: 240L/min (ANR)

HANVAC



Utility

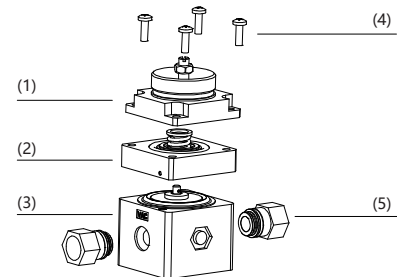
Product characteristics

- *Mechanical adjustable pressure reducing valve
- *Targeted supply of compressed air through precise pressure regulation
- *Used for detection and measurement, such as leak detection



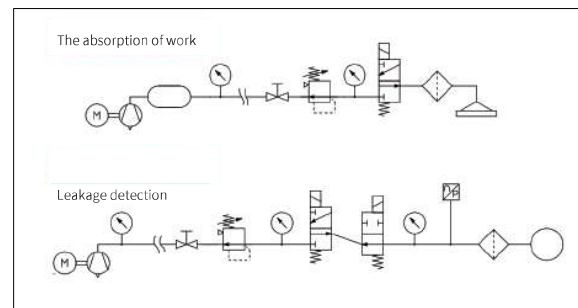
Product structure

- *Top fixing piece (1)
- *Valve body fixing parts (2)
- *Subject (3)
- *Fixed nut (4)
- *G3/8 quick change pipe joint (5)



Product advantages

- *Mechanical adjustment has extremely high repeatability accuracy
- *The set value can maintain extremely high accuracy
- *Can be installed in any position



Vacuum valve

HIVR

Maximum flow rate: 240L/min(ANR)

HANVAC



Utility



HIVR Ordering NO

HIVR	20	FG03
1	2	3

1-Series	2-Subject	3-Screw thread
HIVR	Valve	20 Maximum flow rate 240L/min(ANR)
		F Internal thread G03-G3/8

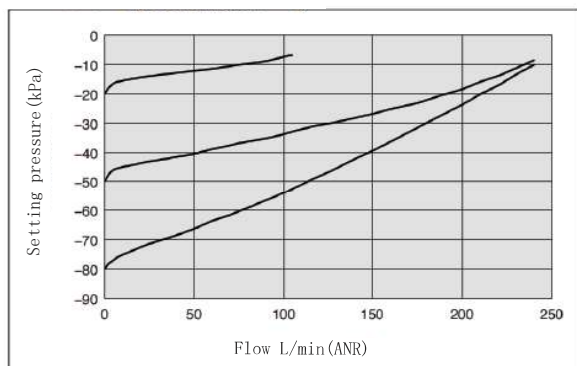


HIVR Technical Data

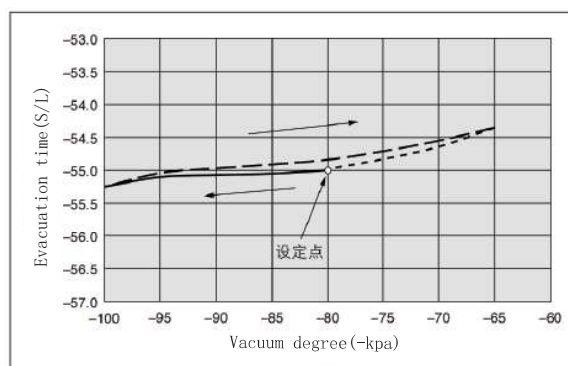
Models	Use fluid	Set pressure range ¹⁾ [kPa]	Pressure resistanc ²⁾ [kPa]	Air consumption [L/min]	Temperature [°C]	VAC [mm]	SET [mm]
IRV20	air	-100~-1.3	100	0.6(ANR)以下	5~60	φ6	φ6

1) Please note that this item may vary depending on the pressure of the vacuum pump.

2) In situations with pressure gauges, once positive pressure is input, the pressure gauge will be damaged. In the case of applying positive pressure, although the vacuum pressure regulating valve is not damaged, the main valve part inside the pressure regulating valve becomes "open", and positive pressure will be input into the vacuum pump, which may malfunction. When using a vacuum pressure regulating valve in the suction handling system, please refer to the following piping example and be careful not to introduce positive pressure into the vacuum pump. In addition, the vacuum valve cannot adjust the positive pressure.



Flow characteristics (representative values)



Pressure characteristics (representative values)



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Vacuum valve HIVR

Maximum flow rate: 240L/min(ANR)

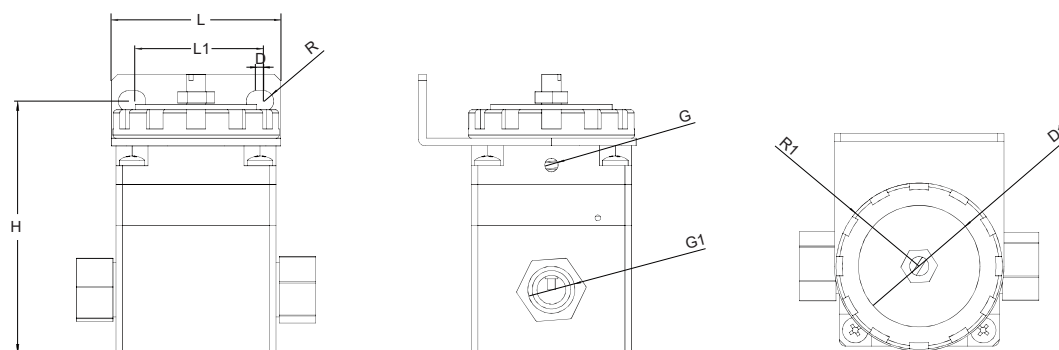
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Utility



HIVR Specification



HIVR

Models	L	L1	D	D1	R	R1	H	G	G1
IRV20	53	40	2	38	3.30	26	79	M5	G3/8



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Vacuum valve

Vacuum release valve HDV

Link thread: G1/8 "

HANVAC


Utility

Product characteristics

- * Prevent vacuum from passing through the vacuum breaking pipeline, which means faster response time and completely independent vacuum units
- * Isolate the suction cups of the unabsorbed workpiece from the vacuum system and maintain the vacuum degree of the system
- * Extremely low work pressure



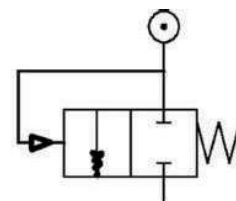
Product structure

- *1. Connect negative pressure air
- *2. Connect positive pressure air



Product advantages

- * Suitable for applications such as vacuum suction cup filters or items to be picked up



HDV Circuit diagram

Vacuum valve

Vacuum release valve HDV

Link thread: G1/8 "

HANVAC


Utility



HDV Ordering NO

HDV	G01
1	2

1-Series	2-Joint
HDV	G01
Vacuum release valve	G1/8



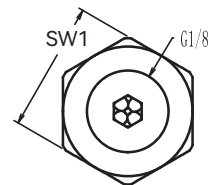
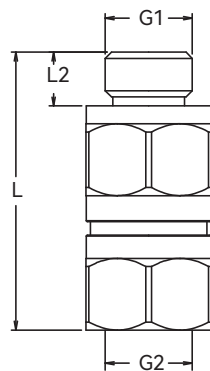
HDV Technical Data

Models	Inlet pressure 0.1Mpa Blow air flow rate [L/min]	Inlet pressure 0.2Mpa Blow air flow rate [L/min]	Inlet pressure 0.3Mpa Blow air flow rate [L/min]
HDV-G01	55	121	167

Models	Inlet pressure 0.4Mpa Blow air flow rate [L/min]	Inlet pressure 0.5Mpa Blow air flow rate [L/min]	Inlet pressure 0.6Mpa Blow air flow rate [L/min]
HDV-G01	210	252	291



HDV Specification



Size[mm]

Models	G1	G2	L	L2	SW1
HDV-G01	M-G1/8	F-G1/8	31	6	14


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Vacuum valve (Joint) HKSH

Maximum operating pressure: 1.0Mpa

HANVAC



Utility

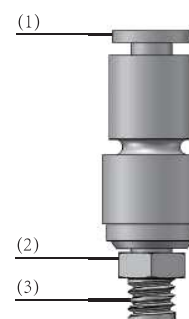
Product characteristics

- *Built in bearings for 360 ° high-speed rotation around the central axis
- *Basic material: copper
- *Maximum operating pressure: 1.0Mpa, can be used for vacuum systems (vacuum degree below 100kPa)
- *Suitable hose materials: nylon and PU
- *Standard type with sealant, M thread with sealing gasket



Product structure

- *As an accessory for vacuum sensors
- *Release sleeve (1)
- *Hexagonal opposite side (2)
- *Connection thread (3)



Product advantages

- *The surface has been plated and will not interpret copper ions
- *Can be directly connected to the vacuum port of the generator
- *Small size and light weight

Rotation force distance/rotation speed

Outer diameter of hose(mm)	Φ4	Φ6	Φ8	Φ10	Φ12
Rotating force distance(N_m)	0.006	0.012	0.014	0.020	0.022
Maximum speed (rpm)	500	500	400	300	250

Vacuum valve (Joint) HKSH

Maximum operating pressure: 1.0Mpa

HANVAC


Utility



HKSH Ordering NO

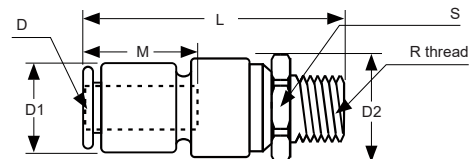
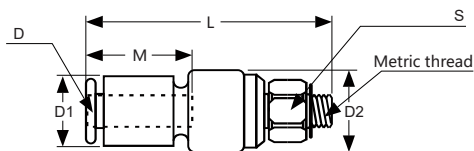
HKS 1	H 2	—	04 3	—	02 4	—	S 5
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1-Series		2-Connector		3-Caliber	
HKS	High speed rotation Joint series	H	Direct Head	04	Φ4
		L	Bend joint	06	Φ6
				08	Φ8
				10	Φ10
				12	Φ12

4-Screw thread		5-Sealant	
M3	M3X0.5	S	Sealant coated (metric) Thread not coated with sealant Add sealing gasket when needed)
M5	M5X0.8		
M6	M6X1.0		
01	1/8"		
02	1/4"		
03	3/8"		
04	1/2"		



HKSH Specification



HKSH

Vacuum valve (Joint) HKSH

Maximum operating pressure: 1.0 Mpa

HANVAC



Utility

Size[mm]							
Models	D	R	S	D1	D2	L	N
HKSH-04-M5	Φ4	M5X0.8	8	10.4	12	36.5	16
HKSH-04-M6	Φ4	M6X1.0	8	10.4	12	37	16
HKSH-04-01S	Φ4	1/8"	12	10.4	12	38	16
HKSH-06-M5	Φ6	M5X0.8	8	12.8	14	37.5	17
HKSH-06-M6	Φ6	M6X1.0	8	12.8	14	38	17
HKSH-06-01S	Φ6	1/8"	14	12.8	14	39.5	17
HKSH-06-02S	Φ6	1/4"	14	12.8	14	42.5	17
HKSH-08-01S	Φ8	1/8"	17	15.2	17	44	18.5
HKSH-08-02S	Φ8	1/4"	17	15.2	17	47	18.5
HKSH-08-03S	Φ8	3/8"	17	15.2	17	48	18.5
HKSH-10-02S	Φ10	1/4"	22	18.5	22	54	21
HKSH-10-03S	Φ10	3/8"	22	18.5	22	55	21
HKSH-10-04S	Φ10	1/2"	22	18.5	22	57.5	21
HKSH-12-03S	Φ12	3/8"	24	20.9	24	57	22
HKSH-12-04S	Φ12	1/2"	24	20.9	24	60	22

Vacuum valve (Joint) HKSL

Maximum operating pressure: 1.0Mpa

HANVAC



Utility

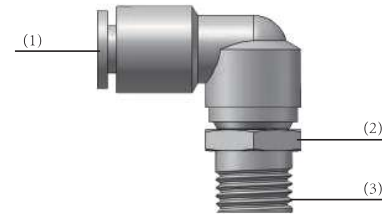
Product characteristics

- *Built in bearings for 360 ° high-speed rotation around the central axis
- *Basic material: copper
- *Maximum operating pressure: 1.0Mpa, can be used for vacuum systems (vacuum degree below 100kPa)
- *Suitable hose materials: nylon and PU
- *Standard type with sealant, M thread with sealing gasket



Product structure

- *As an accessory for vacuum sensors
- *Applicable pipe diameter (1)
- *Hexagonal opposite side (2)
- *Connection thread (3)



Product advantages

- *Can be directly connected to the vacuum port of the generator
- *Small size and light weight

Rotation force distance/rotation speed

Outer diameter of hose(mm)	Φ4	Φ6	Φ8	Φ10	Φ12
Rotating force distance(N_m)	0.006	0.012	0.014	0.020	0.022
Maximum speed (rpm)	500	500	400	300	250

The surface has been plated and will not interpret copper ions

Vacuum valve (Joint) HKSL

Maximum operating pressure: 1.0Mpa

HANVAC


Utility



HKSL Ordering NO

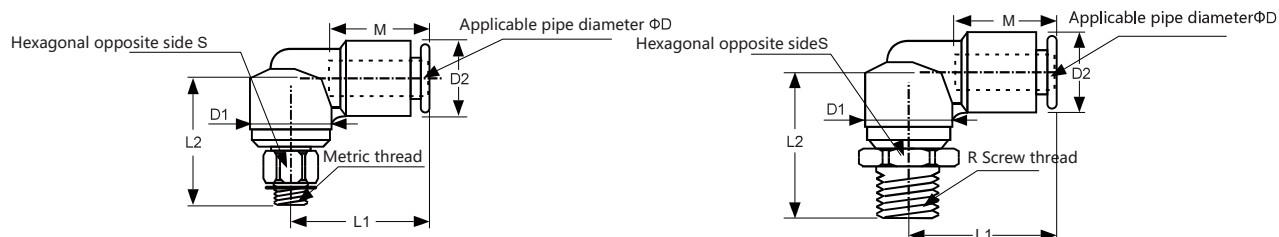
HKS	L	04	02	S
1	2	3	4	5

1-Series	2-Connector	3-Caliber
HKS	H	04
High speed rotation	Direct Head	Φ4
Joint series	L	06
		08
		10
		12
		Φ12

4-Screw thread	5-Sealant
M3	M3X0.5
M5	M5X0.8
M6	M6X1.0
01	1/8"
02	1/4"
03	3/8"
04	1/2"
	S
	Sealant coated (metric)
	Thread not coated with sealant
	Add sealing gasket when needed)



HKSL Specification



HKSL


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Vacuum valve (Joint) HKSL

Maximum operating pressure: 1.0 Mpa

HANVAC


Utility

Size[mm]								
Models	D	R	S	D1	D2	L	L	N
HKSL-04-M5	Φ4	M5X0.8	8	10.4	12	21	20.5	16
HKSL-04-M6	Φ4	M6X1.0	8	10.4	12	21	21	16
HKSL-04-01S	Φ4	1/8"	12	10.4	12	21	22	16
HKSL-06-M5	Φ6	M5X0.8	8	12.8	14	23	21	17
HKSL-06-M6	Φ6	M6X1.0	8	12.8	14	23	21.5	17
HKSL-06-01S	Φ6	1/8"	14	12.8	14	23	23	17
HKSL-06-02S	Φ6	1/4"	14	12.8	14	23	26	17
HKSL-08-01S	Φ8	1/8"	17	15.2	17	26	26.5	18.5
HKSL-08-02S	Φ8	1/4"	17	15.2	17	26	29.5	18.5
HKSL-08-03S	Φ8	3/8"	17	15.2	17	26	31	18.5
HKSL-10-02S	Φ10	1/4"	22	18.5	22	31.5	34	21
HKSL-10-03S	Φ10	3/8"	22	18.5	22	31.5	35	21
HKSL-10-04S	Φ10	1/2"	22	18.5	22	31.5	38	21
HKSL-12-03S	Φ12	3/8"	24	20.9	24	34	36.5	22
HKSL-12-04S	Φ12	1/2"	24	20.9	24	34	39.5	22

Vacuum valve HPV

Diameter of hose connection valve: 75mm

HANVAC



Utility

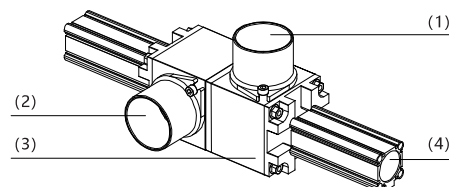
Product characteristics

- *Built in bearings for 360 ° high-speed rotation around the central axis
- *Basic material: copper
- *Maximum operating pressure: 1.0Mpa, can be used for vacuum systems (vacuum degree below 100kPa)
- *Suitable hose materials: nylon and PU
- *Standard type with sealant, M thread with sealing gasket



Product structure

- *Fan interface (1)
- *Fan interface (2)
- *Aluminum alloy ventilation body (3)
- *Cylinder



Product advantages

- *Short opening and closing time
- *Control the opening and release of vacuum



HPV case

Vacuum valve HPV

HANVAC


Utility

Diameter of hose connection valve: 75mm



HPV Ordering NO

HPV 1	25 2	1 3	B 4	S 5
----------	---------	--------	--------	--------

1-Series	2-Valve diameter	3-Quantity
HPV	25	1
Active control valve	32	2
	60	one cylinder
	75	Two cylinders

4- Version code	5-Electromagnetic valve
B	S
B model	SMC
	G
	Made in China

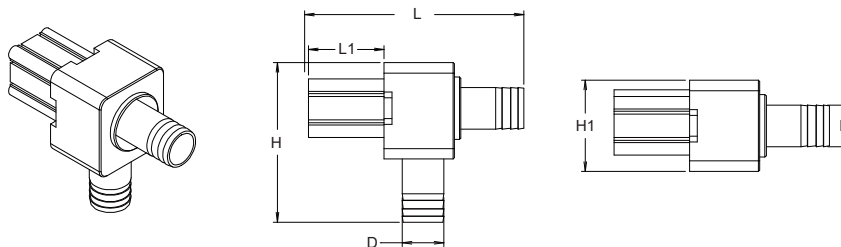


HPV Technical Data

Models	Flexible hose diameter [mm]	Action mode	Action fluid	Vacuum degree [KPa]	Temperature [°C]	Interface	Optional items
HPV32-1B	32	Horizontal bar double action	vacuum	-100	-10~80	RC1/8	Magnetic switch
HPV60-1B	60	Horizontal bar double action	vacuum	-100	-10~80	RC1/8	Magnetic switch
HPV60-2B	60	Horizontal bar double action	vacuum	-100	-10~80	RC1/8	Magnetic switch
HPV75-1B	75	Horizontal bar double action	vacuum	-100	-10~80	RC1/8	Magnetic switch
HPV75-2B	75	Horizontal bar double action	vacuum	-100	-10~80	RC1/8	Magnetic switch



HPV Specification



HPV32-1B

Size[mm]

Models	L	L1	H	H1	D
HPV32-1B	168.5	58	122.5	70	φ32


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Vacuum valve

HPV

Diameter of hose connection valve: 75mm

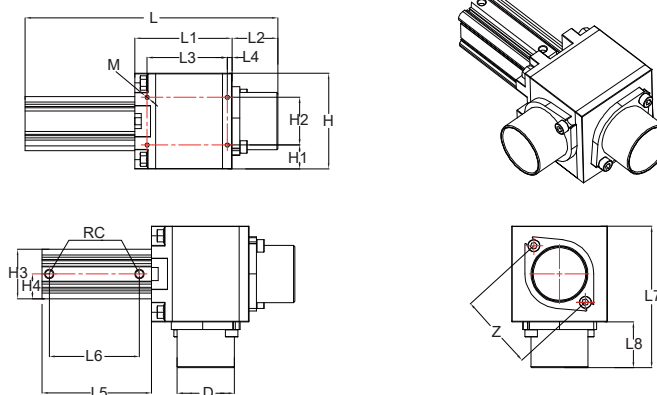
HANVAC



Utility



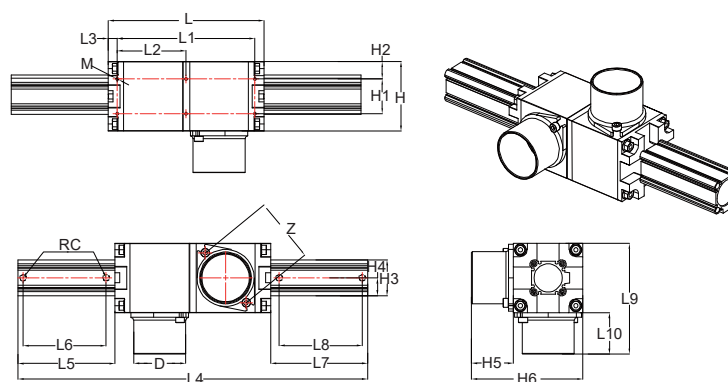
HPV Specification



HPV60/75-1B

Size[mm]

Models	L	L1	L2	L3	L4	L5	L6	L7	L8	H	H1	H2	H3	H4	M	RC	D	Z
HPV60-1B	265	102	48	84	5	115	95	148	48	100	25	50	52	26	4-M6	2-RC1/8"	2-φ60	80
HPV75-1B	317	112	65	99	5	140	120	160	60	100	25	50	52	26	4-M6	2-RC1/8"	2-φ75	93



HPV60/75-2B

Size[mm]

Models	L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	H	H1	H2	H3	H4	H5	H6	M	RC	D	Z
HPV60-2B	194	168	84	13	423	115	95	115	95	148	48	100	50	25	52	26	48	160	6-M6	4-RC1/8"	2-φ60	80
HPV75-2B	224	198	99	13	503	140	120	140	120	160	60	100	50	25	52	26	60	60	6-M6	4-RC1/8"	2-φ75	93



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Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility

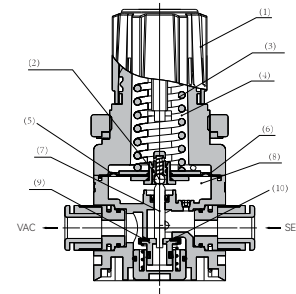
Product characteristics

- *Used for adjustable vacuum line pressure
- * One side piping specification series
- *Lightweight
- *Built in quick change connector



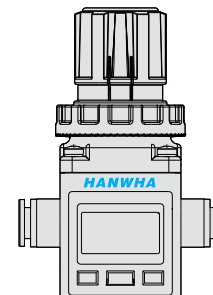
Product structure

- | | |
|------------------------------------|--------------------------|
| *1. Handwheel | *6. Diaphragm |
| *2. Atmospheric suction valve core | *7. Valve stem |
| *3. Set springs | *8. Atmospheric chamber |
| *4. Vacuum chamber | *9. Main valve core |
| *5. Diaphragm components | *10. Valve core assembly |



Product advantages

- *The attachment clip makes it easy to install/remove pressure gauges or digital pressure switches
- *The installation direction of the pressure gauge or digital pressure switch can be changed (limited to standard piping specifications)
- *Change in installation angle of pressure gauge or digital pressure switch (with one installation position every 60°) easily



Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility



HRV Ordering NO

HRV	10	A	N	C06	N
1	2	3	4	5	6
-					
N					
7					

1-Series	
HRV	Valve

2-Body size	
10	Maximum vacuum flow 140L/min
20	Maximum vacuum flow 240L/min

4-Pipe joint	
N	Straight
L	Bend

3-Unilateral tube	
N	
A	Single side piping specifications

5-Outer diameter of connecting pipe	
C06	ø6(Metric)
C08	ø8(Metric)
C10	ø10(Metric)
N07	ø1/4(Imperial)
N09	ø5/16(Imperial)
N11	ø3/8(Imperial)

6-Attachment ^①	
N	
B	With bracket
L	With bottom bracket

7-Attachment ^②	
N	
GN	Pressure gauge nut assembly
G	Pressure gauge
47	Pressure sensor type A



Outer Diameter Of HRV Connecting Pipe

Mark	Tube outer diameter	HRV10	HRV20
C06	ø6(Metric)	⊙	⊙
C08	ø8(Metric)	⊙	⊙
C10	ø10(Metric)		⊙
N07	ø1/4(Imperial)	⊙	⊙
N09	ø5/16(Imperial)	⊙	⊙
N11	ø3/8(Imperial)		⊙



Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility



HRV Technical Data

Models	Using fluids	Pressure range [kPa]	Pressure resistance [kPa]	Gas consumption [L/min]
HRV10	air	-100~-1.3	100(Except for pressure gauges)	Below 0.6
HRV20	air	-100~-1.3	100(Except for pressure gauges)	Below 0.6

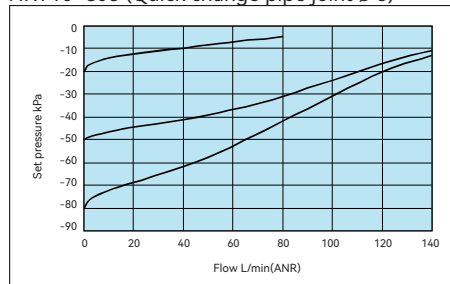
Models	Temperature of environment and fluid used [°C]	Outer diameter of VAC side pipe [mm]	Outer diameter of SET side pipe [mm]
HRV10	5~60	ø6 ø8 ø1/4 ø5/16	ø6 ø8 ø10 ø1/4 ø5/16 ø3/8
HRV20	5~60	ø6 ø8 ø1/4 ø5/16	ø6 ø8 ø10 ø1/4 ø5/16 ø3/8

Flow characteristics (representative values)

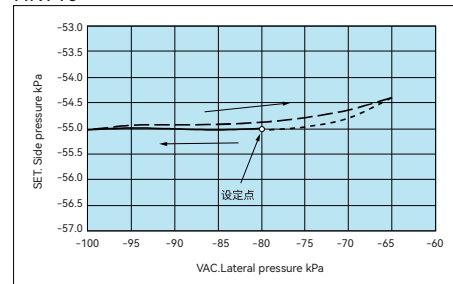
Condition: Vacuum pump exhaust speed 2500L/min
VAC. Side pressure -101kPa (at initial setting)

Pressure characteristics (representative values)

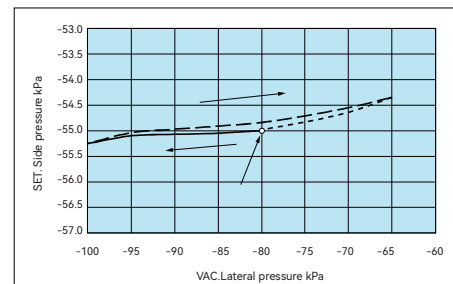
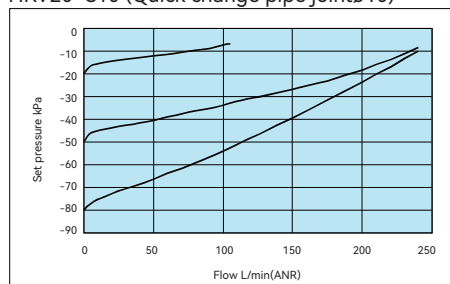
HRV10-C08 (Quick change pipe joint ø 8)



HRV10



HRV20-C10 (Quick change pipe joint ø10)



Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility

HRV-10-****G Standard piping specifications

Joint size (mm)				
Joint size	VAC/SET			
	Straight	Bend	Bend	Bend
	R	S	T	U
ø6,ø1/4	10	19	26	3
ø8,ø5/16	12	20	28	6

HRV-20-****G Standard piping specifications

Joint size (mm)				
Joint size	VAC/SET			
	Straight	Bend	Bend	Bend
	R	S	T	U
ø6	10.5	21	27.5	21
ø1/4	10.5	21	27.5	21.5
ø8,ø5/16	10.5	21	28.5	24
ø10,ø3/8	11	21	30.5	27

HRV-10-****47 Standard piping specifications

Joint size (mm)				
Joint size	VAC/SET			
	Straight	Bend	Bend	Bend
	R	S	T	U
ø6,ø1/4	10	19	26	3
ø8,ø5/16	12	20	28	6

HRV-20-****47 Standard piping specifications

Joint size (mm)				
Joint size	VAC/SET			
	Straight	Bend	Bend	Bend
	R	S	T	U
ø6	10.5	21	27.5	21
ø1/4	10.5	21	27.5	21.5
ø8,ø5/16	10.5	21	28.5	24
ø10,ø3/8	11	21	30.5	27

Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

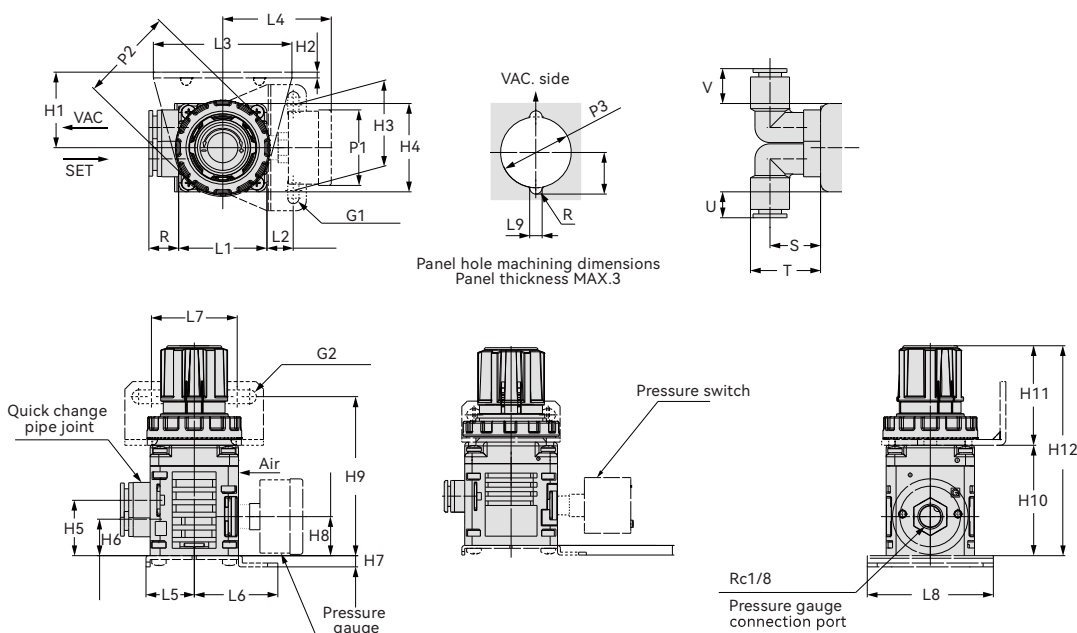
HANVAC



Utility



HRV Specification



HRV-10A-****G/HRV-20A-****G /HRV-10A-****47/HRV-20A-****47Single side piping specifications

Size[mm]

Models	P1	P2	P3	G1	G2	L1	L2	L3	L4	L5	L6	L7	L8
HRV-10A-****G	ø30	ø37.5	ø28	10.5X4.5	15.4X5.4	35	10.5	55	43	19.1	33.1	34	50
HRV-20A-****G	ø43	ø52	ø38	10.5X4.5	8X6.5	50	10.5	53	60	26.6	40.5	40	65
HRV-10A-****47	ø30	ø37.5	ø28	10.5X4.5	15.4X5.4	35	10.5	55	43	19.1	33.1	34	50
HRV-20A-****47	ø43	ø52	ø38	10.5X4.5	8X6.5	50	10.5	53	60	26.6	40.5	40	65

Size[mm]

Models	L9	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13
HRV-10A-****G	5	30	2.3	34	35	22	14.5	4.5	15.5	63	43.8	39.5	83	16.5
HRV-20A-****G	6	41	2.3	46	50	26.5	/	5.2	21.6	70.4	55.7	51.3	107	22
HRV-10A-****47	5	30	2.3	34	35	22	14.5	4.5	15.5	63	43.8	39.5	83	16.5
HRV-20A-****47	6	41	2.3	46	50	26.5	/	5.2	21.6	70.4	55.7	51.3	107	22

Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility

HRV-10A-****G Single side piping specifications

Joint size	(mm)				
Joint size	VAC/SET				
	Straight	Bend	Bend	Bend	Bend
	R	S	T	U	V
ø6,ø1/4	10	19	26	7.5	11
ø8,ø5/16	12	20	28	10.5	14

HRV-20A-****G Single side piping specifications

Joint size	(mm)				
Joint size	VAC/SET				
	Straight	Bend	Bend	Bend	Bend
	R	S	T	U	V
ø6	10.5	21	27.5	1	8
ø1/4	10.5	21	27.5	1.5	8.5
ø8, ø5/16	10.5	21	28.5	4	11
ø10, ø3/8	11	21	30.5	7	14

HRV-10A-****47 Single side piping specifications

Joint size		(mm)				
Joint size	VAC/SET					
	Straight	Bend	Bend	Bend	Bend	
	R	S	T	U	V	
ø6,ø1/4	10	19	26	7.5	11	
ø8,ø5/16	12	20	28	10.5	14	

HRV-20A-****47 Single side piping specifications

Joint size	(mm)				
Joint size	VAC/SET				
	Straight	Bend	Bend	Bend	Bend
	R	S	T	U	V
ø6	10.5	21	27.5	1	8
ø1/4	10.5	21	27.5	1.5	8.5
ø8, ø5/16	10.5	21	28.5	4	11
ø10, ø3/8	11	21	30.5	7	14

Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility



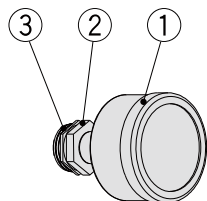
Vacuum Pressure Gauge Technical Data

Component model	GP30-001	GP40-001
Suitable for series	HRV10	HRV20
Pressure indication range	-100~0kPa	
Unit identification	kPa	
Scale angle	180°	270°



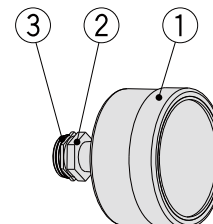
Pressure gauge GP30-001 assembly

- * (1) Pressure gauge
- * (2) Pressure gauge nut
- * (3) O-ring



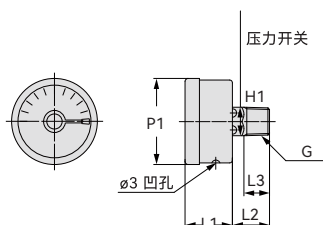
Pressure gauge GP40-001 assembly

- * (1) Pressure gauge
- * (2) Pressure gauge nut
- * (3) O-ring

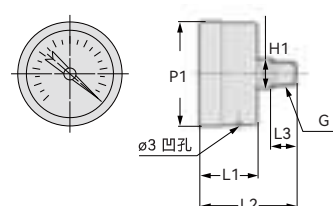


Vacuum Pressure Gauge Specification

GP30-001 Vacuum pressure gauge



GP40-001 Vacuum pressure gauge



Size[mm]							
Models	P1	G	L1	L2	L3	H1	
GP30-001	ø30	R1/8	17	13	9	10	
GP40-001	ø43	R1/8	23.5	39.5	9	12	



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Vacuum valve

Vacuum air valve HRV

HRV10/HRV20

HANVAC



Utility



47 Series Pressure Sensor Technical Data

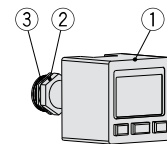
Models	Suitable for series
47C-01(NPN collector output)	HRV10
47C-03(NPN collector output)	HRV20

Models	47 series pressure sensor
Rated pressure range	0.0~101.0kPa
Set pressure range	10.0~105.0kPa
Pressure resistance	500kPa
Set minimum unit	0.1kPa
Suitable for fluids	Air, non corrosive gases, non combustible gases
supply voltage	DC12~24V $\pm$ 10%, pulsation (p-p) below 10% (with reverse connection protection)
Consumption current	40mA
Switch output	NPN or PNP collector output
Maximum load current	80mA
Maximum applied voltage	28V (at NPN output)
Residual voltage	Below 1V (when the load current is 80mA)
response time	Below 2.5ms (optional for preventing oscillation function: 2010050010002000ms)
Short circuit protection	Equipped

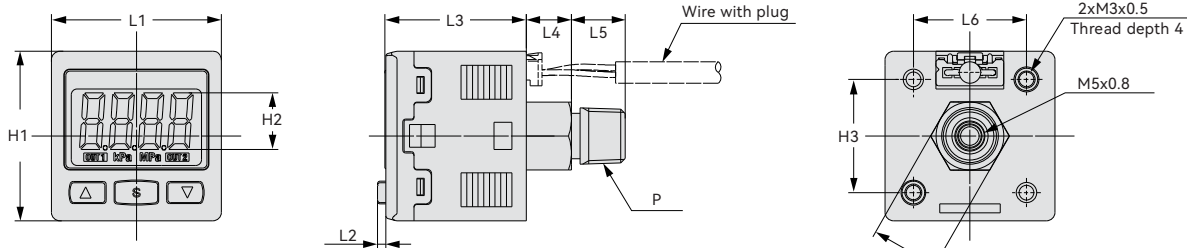


47 Series Pressure Sensor Assembly

- * (1) Digital pressure switch
- * (2) Pressure gauge nut
- * (3) O-ring



47 Series Pressure Sensor Specification



Size[mm]

Models	P	L1	L2	L3	L4	L5	L6	L7	H1	H2	H3
47C-01	R1/8	30	1.5	25	8	9.5	20	12	30	10	20
47C-03	R1/8	30	1.5	25	8	9.5	20	12	30	10	20



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Vacuum valve

Valve (manual) HVHK

P: Quick change connector A: Quick change connector

HANVAC


Utility

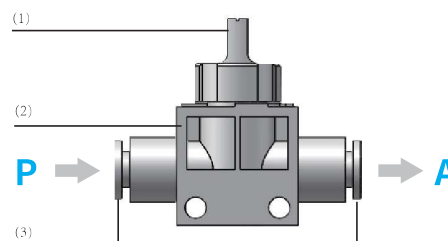
Product characteristics

- *Maximum effective cross-sectional area 2.0-17.5mm²
- *The minimum operating torque distance is 0.004~0.1N. m
- *Full range piping outer diameter Φ 4 incidents
- *When the rotary knob of the 3-way valve is closed, residual gas from side A is discharged (there is no exhaust port in the valve body, and it is discharged along the knob structure)



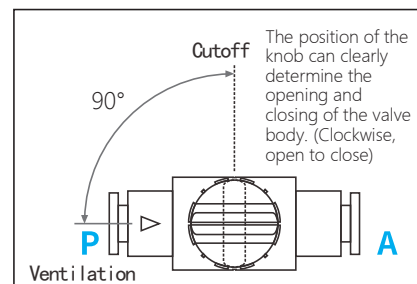
Product structure

- *As an accessory for vacuum sensors
- *Knob (1) Material POM
- *Main body (2) material PBT
- *Release sleeve (3)



Product advantages

- *Suitable for many automation fields in industry, installed on the gas circuit to act as a switch
- *Using high-quality PBT material, with good pressure resistance and sealing, durable and long-lasting



Vacuum valve

Valve (manual) HVHK

P: Quick change connector A: Quick change connector

HANVAC


Utility



HVHK Ordering NO

HVHK	2	P	A
1	2	04F	04F
		3	3

1-Series	2-Way
HVHK	Valve
	2
	3
	2-way
	3-way

3-Interface diameter	
04F	Φ4Quick change connector
06F	Φ6Quick change connector
08F	Φ8Quick change connector
10F	Φ10Quick change connector
12F	Φ12Quick change connector



HVHK Technical Data

Models	Valve type	Using fluids	Maximum operating pressure	Vacuum usage pressure	Temperature of environment and fluid used	Suitable hose material
HVHK□-04F-04F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-06F-04F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-06F-06F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-08F-06F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-08F-08F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-10F-08F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-10F-10F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-12F-10F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane
HVHK□-12F-12F	2-way, 3-way	air	1.0MPa	-100kpa{10Torr}	0~60°C	Nylon, soft nylon, polyurethane


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Vacuum valve

Valve (manual) HVHK

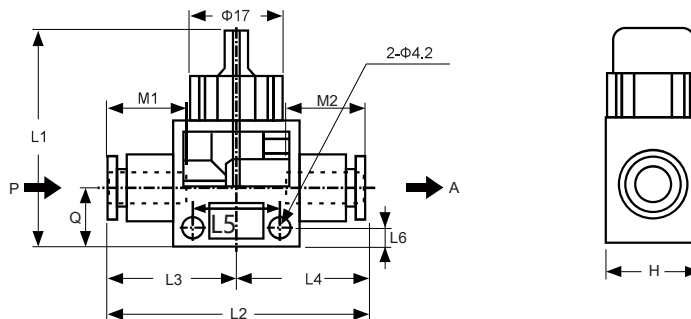
P: Quick change connector A: Quick change connector

HANVAC


Utility



HVHK Specification



HVHK

Size[mm]

Models	P□	A□	H	L1	L2	L3	L4	L5	L6	M1	M2	Q	P→A	A→R
HVHK□-04F-04F	Φ4	Φ4	18	41	47.6	23.8	23.8	16.5	3.5	15.8	15.8	11	3.4	1.2
HVHK□-06F-04F	Φ6	Φ4	18	41	48	24.3	23.7	16.5	3.5	16.8	15.8	11	5.1	1.2
HVHK□-06F-06F	Φ6	Φ6	18	41	48.6	24.3	24.3	16.5	3.5	16.8	16.8	11	7.2	1.2
HVHK□-08F-06F	Φ8	Φ6	18	41	50.5	26.2	24.3	16.5	3.5	18.7	16.8	11	9	1.2
HVHK□-08F-08F	Φ8	Φ8	18	41	52.4	26.2	26.2	16.5	3.5	18.7	18.7	11	9.7	1.2
HVHK□-10F-08F	Φ10	Φ8	22	46	58.5	30.5	28	21.5	4	20.8	18.7	14	13.7	3.2
HVHK□-10F-10F	Φ10	Φ10	22	46	61	30.5	30.5	21.5	4	20.8	20.8	14	16.1	3.2
HVHK□-12F-10F	Φ12	Φ10	22	46	62	31.5	30.5	21.5	4	21.8	20.8	14	17	3.2
HVHK□-12F-12F	Φ12	Φ12	22	46	63	31.5	31.5	21.5	4	21.8	21.8	14	17.5	3.2


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Vacuum valve

Check valve SVK/SVKG

Link nut: M5 to G1/2 "

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Utility

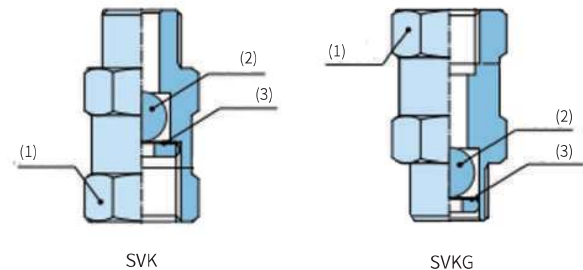
Product characteristics

- *Used in applications with multiple suction cups in vacuum systems, it can prevent non-contact with the workpiece or sudden detachmentThe suction cup from the workpiece has an impact on the system
- *Isolate the suction cups of the unabsorbed workpiece from the vacuum system and maintain the vacuum degree of the system
- *The same gripping system can handle workpieces of different shapes and sizes, enabling the gripping system toRepetitive application in different situations
- *Multiple nominal sizes
- *Provide top (SVK) or bottom (SVKG) external thread versions



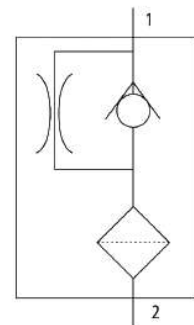
Product structure

- *1. Opposite side F
- *2. Ball valve
- *3. Filter screen



Product advantages

- *Close the unused suction cup vacuum circuit to maintain system vacuum
- *Low leakage, can be compensated through bypass
- *Can also be used in high nominal flow applications
- *Can be connected to all commonly used suction cups and plates



SVK/SVKG circuit diagram (1=vacuum generation device; 2=vacuum suction cup;)

Vacuum valve

Check valve SVK/SVKG

Link nut: M5 to G1/2 "

HANVAC


Utility



SVK/SVKG Ordering NO

SVK	—	M5-IG
1		2

1-Series	
SVK	Top external thread
SVKG	Bottom external thread

2-Contact	
M5-AG	M5-AG (AG=male(M))
M5-IG	M5-IG (IG=female(F))
G1/8-AG	G1/8-AG
G1/8-IG	G1/8-IG
G1/4-AG	G1/4-AG
G1/4-IG	G1/4-IG
G3/8-AG	G3/8-AG
G3/8-IG	G3/8-IG
G1/2-AG	G1/2-AG
G1/2-IG	G1/2-IG



SVK/SVKG Technical Data

Models	Required suction rate at PU=-0.3 bar [m³/h]	Required suction rate at PU=-0.3 bar [l/min]	Required suction rate at PU=-0.6 bar [m³/h]	Required suction rate at PU=-0.6 bar [l/min]	Maximum blowing flow [m³/h]*	Required suction rate at PU=-0.3 bar [m³/h]	Weight [g]
SVK M5-IG	0.07	1.2	0.08	1.3	4.8	80	2.2
SVK G1/8-IG	0.14	2.3	0.15	2.5	18.6	310	11.2
SVK G1/4-IG	0.17	2.9	0.20	3.4	20.4	340	17.5
SVK G3/8-IG	0.44	7.3	0.48	8.0	35.4	590	30.3
SVK G1/2-IG	0.49	8.1	0.54	9.0	47.4	790	47.4
SVK M5-AG	0.07	1.2	0.08	1.3	4.8	80	2.2
SVKG G1/8-AG	0.14	2.3	0.15	2.5	18.6	310	11.2
SVKG G1/4-AG	0.17	2.9	0.20	3.4	20.4	340	17.5
SVKG G3/8-AG	0.44	7.3	0.48	8.0	35.4	590	30.3
SVKG G1/2-AG	0.49	8.1	0.54	9.0	47.4	790	47.4


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Vacuum valve

Check valve SVK/SVKG

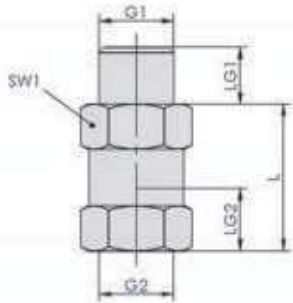
Link nut: M5 to G1/2 "

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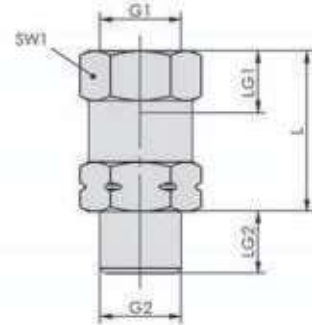

Utility



SVK/SVKG Specification



SVK



SVKG

Size[mm]

Models	G1	G2	H	LG1	LG2	SW1
SVK M5-IG	M5-M	M5-F	15.5	4.5	4.5	8
SVK G1/8-IG	G1/8"-M	G1/8"-F	26.0	8.0	8.5	14
SVK G1/4-IG	G1/4"-M	G1/4"-F	26.0	10.0	11.0	17
SVK G3/8-IG	G3/8"-M	G3/8"-F	29.0	10.0	12.0	22
SVK G1/2-IG	G1/2"-M	G1/2"-F	29.0	12.0	14.0	27
SVK M5-AG	M5-F	M5-M	20.0	4.5	4.5	8
SVKG G1/8-AG	G1/8"-F	G1/8"-M	26.0	8.5	8.0	14
SVKG G1/4-AG	G1/4"-F	G1/4"-M	26.0	11.0	10.0	17
SVKG G3/8-AG	G3/8"-F	G3/8"-M	29.0	12.0	10.0	22
SVKG G1/2-AG	G1/2"-F	G1/2"-M	29.0	14.0	12.0	27


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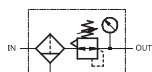
Vacuum valve

Filter pressure reducing valve OFR

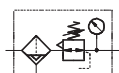
Pressure resistance 1.5MPa (15kgf/cm²)

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Utility



Condensate drain
Turned manually



Condensate drain
Semi-or fully automatic

The filter and pressure reducing valve form a separate device that can filter liquid oil, condensate, and impurities in the air. For special applications, 5 μ The filter element is easy to replace μ The standard filter element of m. Even if there are system fluctuations in input pressure and compressed air consumption, the pressure reducing valve can ensure that its set working pressure is very stable.



OFR Ordering NO

OFR	G01	B
1	2	3

1-Series	2-Caliber	3- Drainage method
OFR	Filter pressure reducing valve	
	G01	G1/8
	G02	G1/4
	G03	G3/8
	G04	G1/2
	G05	G3/4
		B
		G
		D
		S
		A
		Bracket
		Pressure gauge
		Manual
		Semi-automatic
		Automatic

Vacuum valve

HANVAC

Utility

Filter pressure reducing valve OFR

Pressure resistance 1.5MPa (15kgf/cm²)

OFR Technical Data

Size		MINI		MIDI				MAXI	
Medium		Compressed air							
Features of structure		Sintered filter with water separator ; MINI/MIDI : Diaphragm type regulator; MAXI : Piston regulator							
Mounting type		Pipe mounting or foot mounting							
Assembly position		Vertical±5°							
Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
Standard nominal flow rate	OFR(-A)	750	1400	1600	3100	3400	3400	9700	10000
	OFR-7-(-A)	900	1500	1700	3400	3900	4000	10000	11000
	OFR-5M-(-A)	650	1200	1350	2400	2500	2600	7600	8000
Primary pressure	Manual condensate drain	1~16bar							
	Automatic condensate drain	1.5~12bar							
Working pressure		0.5~12bar/0.5~7bar							
Grade of filtration		40µm/5µm							
Max.condensate capacity		22ml			43ml			80ml	
Temperature range		0~60°C							
Materials information		Housing : Zinc die-casting ; Filter bowl : PC Metal bowl guard : Aluminium alloy ; Sealing : NBR ; Adjusting knob : POM							



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Vacuum valve

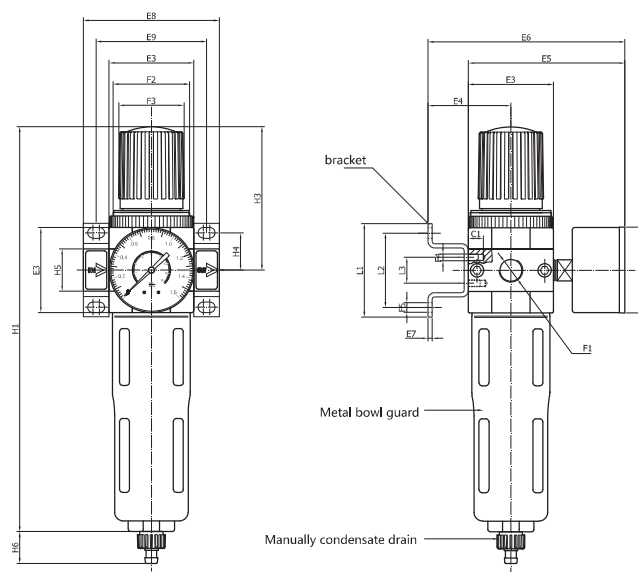
Filter pressure reducing valve OFR

Pressure resistance 1.5MPa (15kgf/cm²)**HANVAC**

Utility

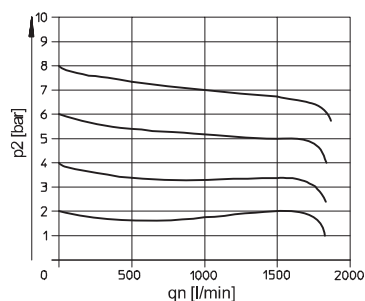


OFR Design Data

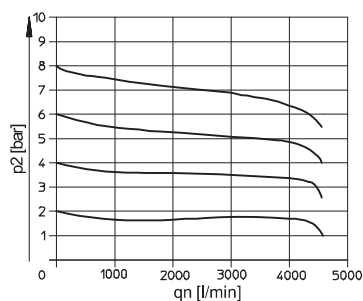


OFR

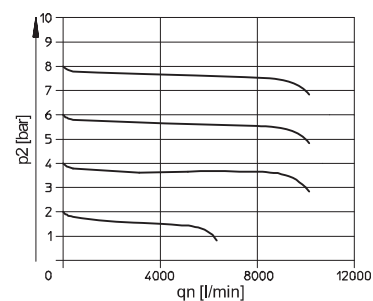
Models	E3	E4	E5	E6	E8	E9	F1	F2	F3Ø	F4	F5Ø	F6Ø	L1	L2	L3	H1	H3	H4	H5	H6
OFR-...-MINI	40	39	76	95	64	52	G1/8,G1/4,G3/8	M36*1.5	31	M4	4.5	40	44	35	11	194	69	17.5	20	15
OFR-...-MIDI	55	47	93	112	85	70	G1/8,G1/2,G3/4	M52*1.5	50	M5	5.5	52	71	60	22	250	98	24.5	32	15
OFR-...-MAXI	66	53	104	124	96,116	80,91	G3/4,G1	M36*1.5	31	M5	5.5	63	71	60	22	252	80	24.5	32,40	15



OFR-1/4-MINI



OFR-1/2-MIDI



OFR-1-MAXI

* 输入压力 Primary pressure: p1=10 bar

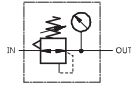
Vacuum valve

Pressure regulating valve OR

Adjusting pressure range Adjusting pressure range 0.05 ~ 0.85MPa

HANVAC


Utility



The OR maintain inputting constant operating pressure despite fluctuation in line pressure and the amount of air consumed.



OR Ordering NO

OR	—	G01	—	B
1		2		3

1-Series	
OR	Pressure reducing valve

2-Caliber	
G01	G1/8
G02	G1/4
G03	G3/8
G04	G1/2
G05	G3/4

3- Drainage method	
B	Bracket
G	Pressure gauge

Vacuum valve

Pressure regulating valve OR

Adjusting pressure range Adjusting pressure range 0.05 ~ 0.85MPa

HANVAC

Utility



调压阀OR 技术参数/Technical Data

规格Size		MINI			MIDI			MAXI	
工作介质 Medium		过滤压缩空气(润滑或未润滑)Filtered,compressed air (lubricated or unlubricated)							
结构特点 Features of structure		MINI/MIDI: 膜片式减压阀 Diaphragm type regulator; MAXI:活塞式减压阀 Piston regulator							
安装方式 Mounting type		管式安装、支架安装或面板式安装 Pipe/Foot/Plate mounting							
安装位置 Assembly position		任意 Any							
连接尺寸 Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
标准额定流量 Standard nominal flow rate	OR-...	800	1500	1700	3200	3500	3500	11000	11500
	OR-...-7-	1000	1600	1800	3300	4000	4500	12000	12500
输入压力 Primary pressure		1~16bar							
工作压力 Working pressure		0.5~12bar/0.5~7bar							
温度范围 Temperature range		0~60℃							
材料 Materials information		壳体:压铸锌;密封:丁腈橡胶;调压手轮:POM Housing : Zinc die-casting ; Sealing : NBR ; Adjusting knob : POM							



Vacuum valve

Pressure regulating valve OR

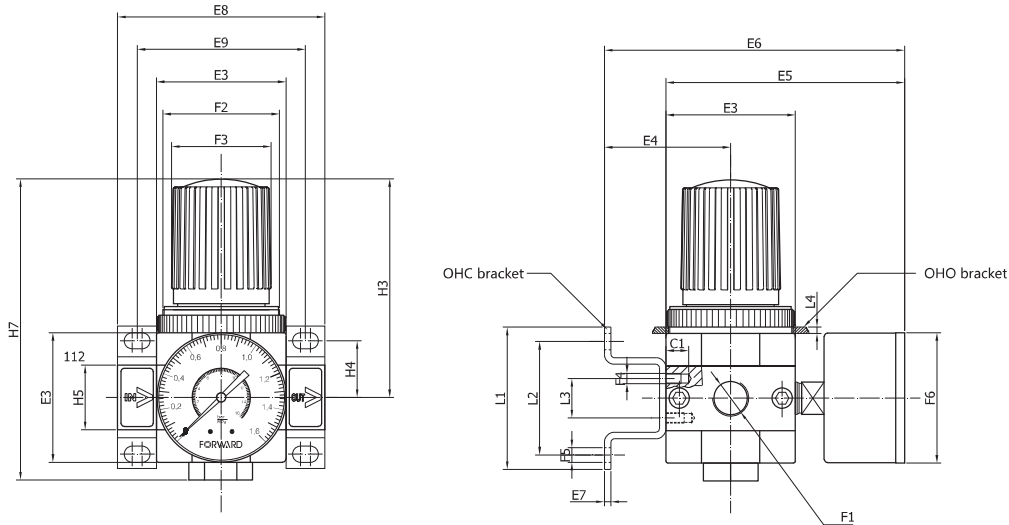
Adjusting pressure range Adjusting pressure range 0.05 ~ 0.85MPa

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Utility

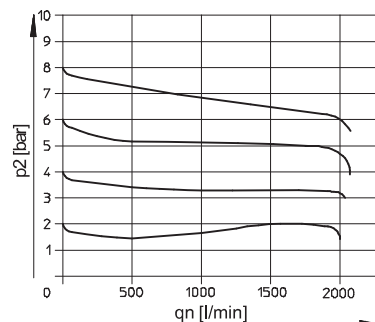


OR Design Data

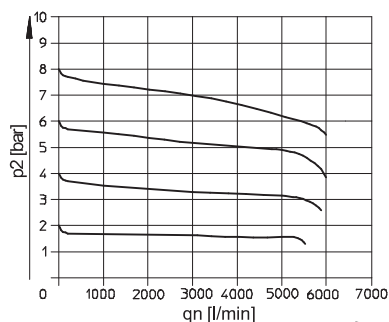


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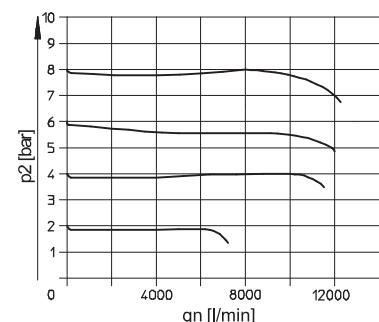
Models	E3	E4	E5	E6	E8	E9	F1	F2	F3Ø	F4	F5Ø	F6Ø	L1	L2	L3	L4	H3	H4	H7
OR-...-MINI	40	39	76	95	64	52	G1/8,G1/4,G3/8	M36*1.5	31	M4	4.5	40	44	35	11	Max.3	69	17.5	96
OR-...-MIDI	55	47	93	112	85	70	G1/8,G1/2,G3/4	M52*1.5	50	M5	5.5	52	71	60	22	Max.5	98	24.5	96
OR-...-MAXI	66	53	104	124	96,116	80,91	G3/4,G1	M36*1.5	31	M5	5.5	63	71	60	22	Max.4	80	24.5	96



OR -1/4-MINI



OR -1/2-MIDI



OR -1-MAXI

* 输入压力 Primary pressure: $p_1=10$ bar

Vacuum valve

Oil mist eliminator OL

Pressure resistance of 1.5MPa (15kgf/cm²)

HANVAC


Utility



Condensate drain
Turned manually



Condensate drain
Semi-or fully automatic

The water separation filter can filter out liquid oil, condensate, and impurities in the air. For special applications, 5 μm The filter element is easy to replace μm The standard filter element of m.



OL Ordering NO

OL	G01	D
1	2	3

1-Series	
OL	Filter

2-Caliber	
G01	G1/8
G02	G1/4
G03	G3/8
G04	G1/2
G05	G3/4

3- Drainage method	
D	Manual
S	Semi-automatic
A	Automatic


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Vacuum valve

Oil mist eliminator OL

Pressure resistance of 1.5MPa (15kgf/cm²)**HANVAC**

Utility



OL Technical Data

Size		MINI			MIDI			MAXI	
Medium		Compressed air							
Features of structure		Sintered filter with water separator							
Mounting type		Pipe mounting or foot mounting							
Assembly position		Vertical±5°							
Connection		G1/8	G1/4	G3/8	G3/8	G1/2	G3/4	G3/4	G1
Standard nominal flow rate	OL-...(-A)	1000	1200	1400	2700	3000	3000	5000	5300
	OL-...-5M-(-A)	600	950	1100	1800	2000	2000	3600	3800
Primary pressure	Manual condensate drain	Max:16bar							
	Automatic condensate drain	1.5~12bar							
Grade of filtration		40μm/5μm							
Max.condensate capacity		22ml			43ml			80ml	
Temperature range		4~60℃							
Materials information		Housing : Zinc die-casting ; Filter bowl : PC Metal bowl guard : Aluminium alloy ; Sealing : NBR							



Vacuum valve

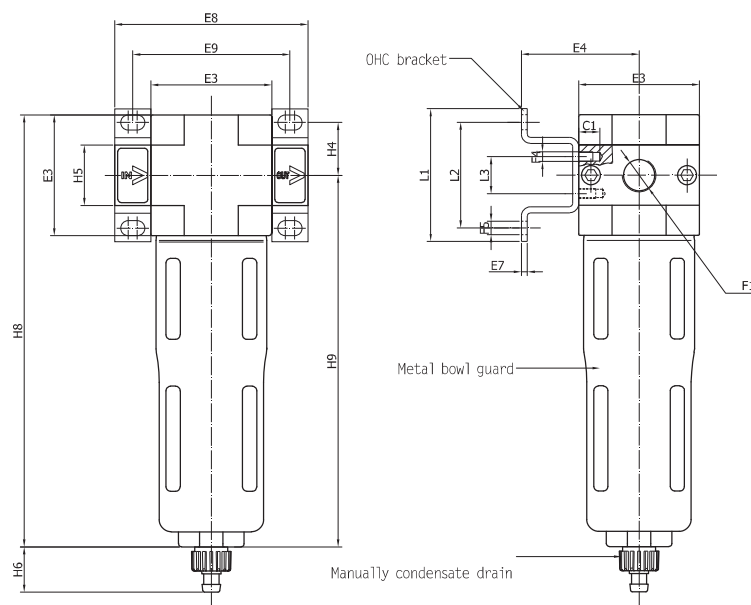
Oil mist eliminator OL

Pressure resistance of 1.5MPa (15kgf/cm²)**HANVAC**

Utility

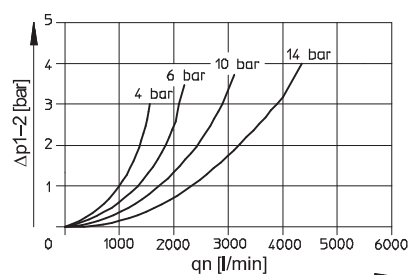


OL Design Data

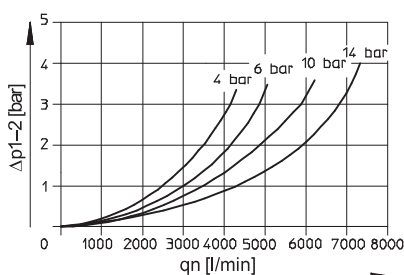


OL

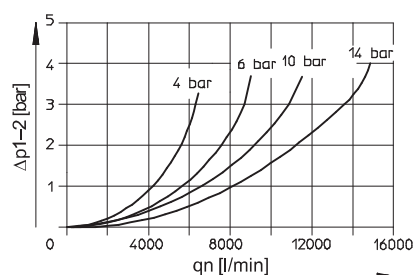
Models	E3	E4	E7	E8	E9	F1	F4	F5Ø	L1	L2	L3	H4	H5	H6	H8	H9
OL-...-MINI	40	39	2	64	52	G1/8,G1/4,G3/8	M4	4.5	44	35	11	17.5	20	15	144	129
OL-...-MIDI	55	47	3	85	70	G1/8,G1/2,G3/4	M5	5.5	71	60	22	24.5	32	15	179	156
OL-...-MAXI	66	53	3	96,116	80,91	G3/4,G1	M5	5.5	71	60	22	24.5	32,40	15	203	175



OL -1/4-MINI



OL -1/2-MIDI

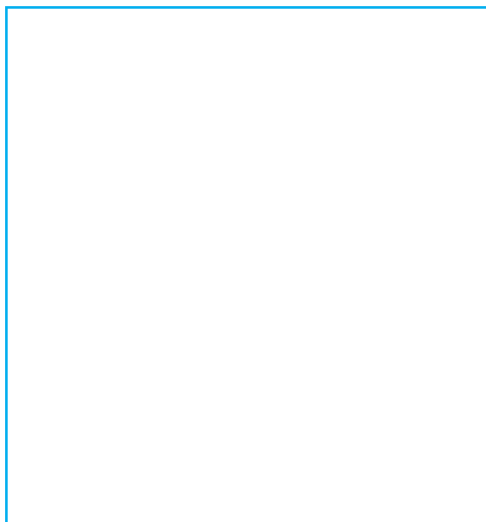
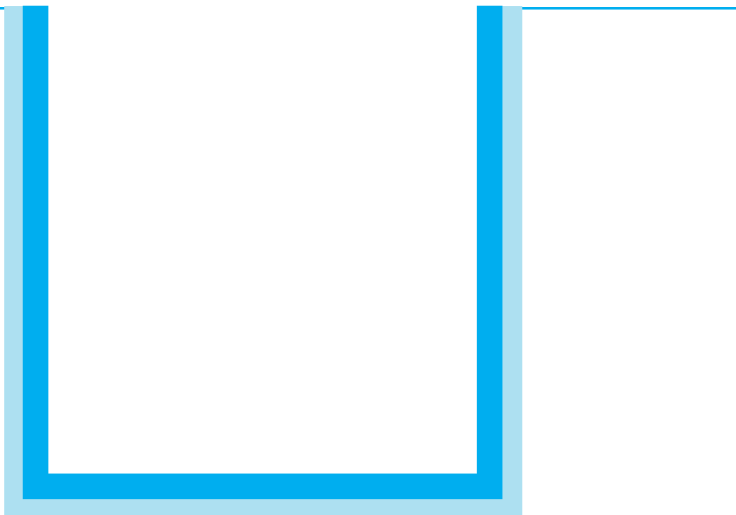


OL -1-MAXI

Primary pressure: p₁=10 bar

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Auxiliary Components



HHTR

Ball joint fixing clip

HKA

Flexible joint

HKB

Flexible ball joint

HSH

Suspension type spring buffer rod

HSPA

Buffer spring rod

HSPB

Buffer spring rod

HSPE

Buffer spring rod

HSPL

Buffer spring rod

Link components

Spring rod attachment

HSGE

Threading joint

HVB

High pressure fan

HCF

Universal vacuum filter

HJF

Vacuum filtration bucket

Vacuum hose PU

Anti static polyurethane hose

47Pressure sensor

Electronic vacuum switch

Auxiliary components

Ball joint fixing clip HHTR

Universal fixing clip

HANVAC


Utility

Product characteristics

*Used for installing vacuum elements on existing square or circular tube crossbeams

Universal fixing clip for devices, compatible with various adapter accessories

Used in combination.

*Adjustable height and angle, flexible adaptation to workpieces, quick replacement and short setting time

*The vacuum suction cup with a universal fixing clip is flexible and suitable for handling workpieces such as curved metal sheets.



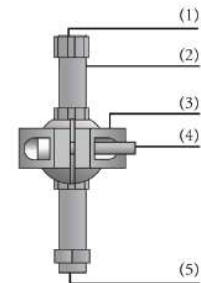
Product structure

*High strength anodized aluminum oxide fixing clip, including fixing clip tube Piece (2), spherical clamp (3), and compatible installation on multiple On square and round tubes.

*The G1/4 "thread at the bottom of the screw (5) is used to connect the suction

The G1/4 "thread on the upper part (1) of the disc is used to connect the true Empty pipeline or linear vacuum generator.

*Including fixing screws (4)



Product advantages

*Spherical clamp structure, quick and easy adjustment and fixation

*Adjustable height and tilt

*Applicable for the installation of square and round pipes

*The vacuum suction cup can be directly installed on the connecting thread



* HHTR-G02 case

Auxiliary components

Ball joint fixing clip HHTR

Universal fixing clip

HANVAC


Utility



HHTR Ordering NO

HHTR	—	G02	—	80
1		2		3

1-Series		2-Threaded		3-Length	
HHTR	Attachment	G02	G1/4	80	80mm
				110	110mm
				140	140mm

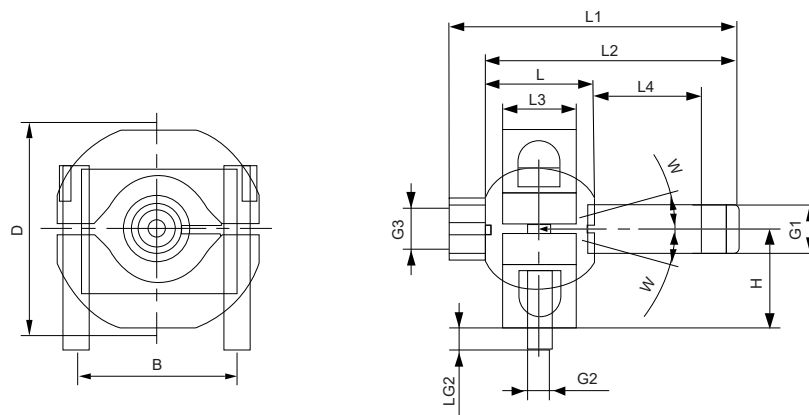


HHTR Technical Data

Models	Bridge connection	Connecting threads	Fixed size(mm)
HHTR-G02-80	2 sliders	G1/4	80
HHTR-G02-140	2 sliders	G1/4	140
HHTR-G02-200	2 sliders	G1/4	200



HHTR Design Data



HHTR-G02

model

Size[mm]	B	D	G1	G2	G3	H	L	L1	L2	L3	LG2	W[°]
HHTR-G02-80	44	59.0	G1/4-M	M6-M	G1/4-F	27.5	30	80	70	20	6	15
HHTR-G02-140	44	59.0	G1/4-M	M6-M	G1/4-F	27.5	30	140	130	20	6	15
HHTR-G02-200	44	59.0	G1/4-M	M6-M	G1/4-F	27.5	30	200	190	20	6	15


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Auxiliary components

Flexible joint HKA

Connecting threads from M10x1.25 to G1/2 "

HANVAC


Utility

Product characteristics

- *Flexible joint used in conjunction with large-sized suction cups for handling workpieces with inclined surfaces
- *Large size sheets that may experience sagging during handling and lifting (flexible joints prevent sheets from falling off due to unilateral force)
- (For example, wooden or metal plates can be used in conjunction with spring buffer rods to compensate for differences in workpiece height and uneven surfaces)
- *Automatic reset



Product structure

- *Flexible connectors are made of high-quality steel and equipped with rubber cushioning (vulcanized and bonded in place) connectors (2)
- *Thread fixed stopper limits maximum deflection angle
- *Force is transmitted through the metal connecting components inside the joint
- *Both the upper and lower parts have installation planes for non-destructive installation (4)
- *Connecting threads are used to connect ends (1) and (3), providing various sizes



Product advantages

- *Flexible connection of vacuum suction cups
- *The joints are composed of metal and rubber
- *Combination of vulcanization of metal and rubber parts



* HKA case

Auxiliary components

Flexible joint HKA

Connecting threads from M10x1.25 to G1/2 "

HANVAC


Utility



HKA Ordering NO

HKA	M	G04	F	G04
1	2	2	3	3

1-Series		2-Threaded		3-Threaded	
HKA	Attachment	F internal thread	G04-G1/2	F internal thread	G04-G1/2
		M external thread	G04-G1/2	M external thread	G04-G1/2

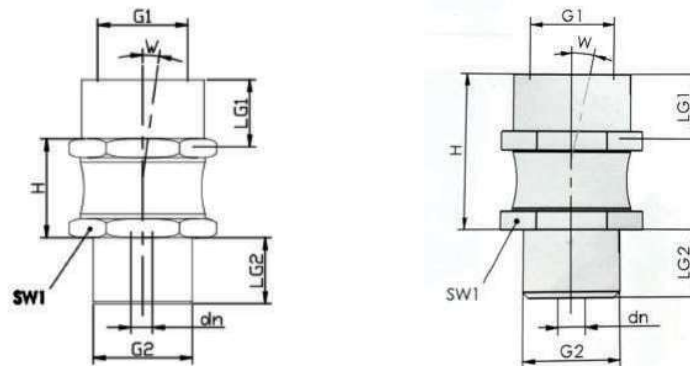


HKA Technical Data

Models	Vertical load[N]	Torque[Nm]	weight[g]
HKA- MG04-MG04	3000	65	100
HKA- MG04-FG04	3000	50	100



HKA Design Data



HKA

model

Size[mm]	dn	G1	G2	H	LG1	LG2	SW1	W[°]
HKA- MG04-MG04	5.5	G1/2" -M	G1/2" -M	21.0	14.0	14	27	12
HKA- MG04-FG04	6.0	G1/2" -F	G1/2" -M	33.5	14.0	14	27	12


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Auxiliary components

Flexible ball joint HKB

Connecting threads from G1/8 "to G1/2"

HANVAC


Utility

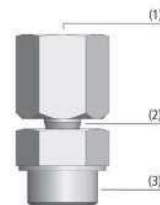
Product characteristics

- *Flexible joint used in conjunction with large-sized suction cups for handling workpieces with inclined surfaces
- *Large size sheets that may experience sagging during handling and lifting (flexible joints prevent sheets from falling off due to unilateral force)
- (For example, wooden or metal plates can be used in conjunction with spring buffer rods to compensate for differences in workpiece height and uneven surfaces)
- *Automatic reset



Product structure

- *The sphere and socket are made of galvanized steel (HKB...) or stainless steel (HKB... A2)
- *Ball and socket (2) with O-ring to prevent vacuum leakage
- *Provide multiple sizes of upper (1) lower (3) connection threads
- *Maximum rotation: 15 °



Product advantages

- *Flexible connection of vacuum suction cups
- *Ball and socket with O-ring seals
- *The fulcrum of the curved part is low



* HKB case

Auxiliary components

Flexible ball joint HKB

Connecting threads from G1/8 "to G1/2"

HANVAC


Utility



HKB Ordering NO

HKB	—	M	—	G04	—	F	—	G04
1		2		2		3		3

1-Series		2-Threaded		3-Threaded	
HKB	Attachment	F internal thread	G04-G1/2	F internal thread	G04-G1/2
		M external thread	G04-G1/2	M external thread	G04-G1/2

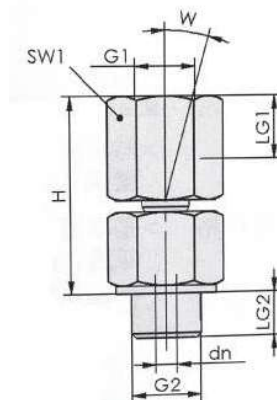


HKB Technical Data

Model	Vertical load[N]	weight[g]
HKB- MG04-FG04	2500	116



HKB Design Data



HKB

model

Size[mm]	dn	G1	G2	H	LG1	LG2	SW1	W[°]
HKB- MG04-FG04	4.0	G1/2" -F	G1/2" -M	40.0	14.0	12	24	15


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Auxiliary components

Suspension type HSH

External spring buffer stroke 25mm to 75mm

HANVAC


Utility

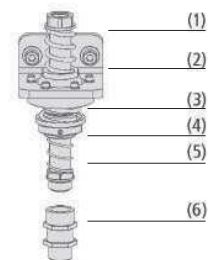
Product characteristics

- *No additional control is required to handle extremely sensitive components (such as glass panels), ensuring that the workpiece is placed gently in place
- *No additional technical control is required to handle very curved or naturally growing materials (such as dry wood)
- *Can be used in harsh environments



Product structure

- *Spring buffer support rod equipped with stainless steel plunger rod, both the lower (5) and upper (1) buffer springs are equipped with brass guide shaft sleeves integrated with sliding sleeves
- *The bent flange (2) serves as a connecting accessory and holds an automatic centering device consisting of a centering spring (3) and a spring seat nut (4); The center spring pre tension (3) is set by the locking screw on the spring seat nut (4).
- *Flexible connectors (6) are made of high-quality steel and equipped with vulcanized adhesive rubber buffer connectors (optional)



Product advantages

- *Used for short shot high dynamic handling tasks
- *Spherical suspension type spring buffer support rod, equipped with two buffer springs, centering springs, and universal ball joints, used for handling workpieces with different heights



* HSH case

Auxiliary components

Suspension type HSH

External spring buffer stroke 25mm to 75mm

HANVAC


Utility



HSH Ordering NO

HSH	25	M	MG04	FG04
1	2	3	4	5

1-Series		2-Buffer stroke		3-Flange	
HSH	Attachment	25	25mm	F	With flange
		50	50mm	M	No flange
		75	75mm		
4-Top thread		5-Bottom thread			
F internal thread	G04-G1/2	F internal thread	G04-G1/2		
	G03-G3/8		G03-G3/8		
	G02-G1/4		G02-G1/4		
M external thread	G04-G1/2	M external thread	G04-G1/2		
	G03-G3/8		G03-G3/8		
	G02-G1/4		G02-G1/4		



HSH Technical Data

Models	Spring stroke
HSH-25-F-MG04-FG03	25mm
HSH-50-F-MG04-FG03	50mm
HSH-75-F-MG04-FG03	75mm

Auxiliary components

Suspension type HSH

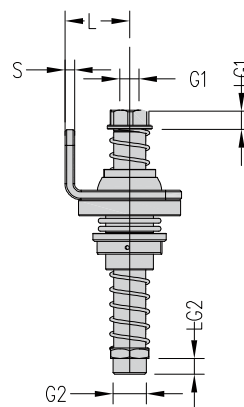
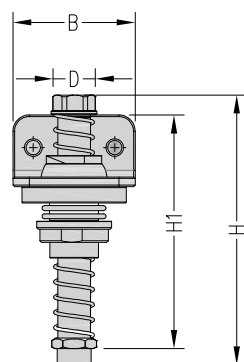
External spring buffer stroke 25mm to 75mm

HANVAC


Utility



HSH Design Data



HSH

model

Size[mm]	B	D	H	H1	L	G1	LG1	G2	LG2	S
HSH-25-F-MG04-FG03	75	15.25	165.6	143.30	40.5	G3/8	12	G1/2	10	6
HSH-50-F-MG04-FG03	75	15.25	190.6	168.39	40.5	G3/8	12	G1/2	10	6
HSH-75-F-MG04-FG03	75	15.25	215.6	193.39	40.5	G3/8	12	G1/2	10	6

Auxiliary components

Spring buffer rod HSPA

Buffer stroke 25mm/50mm/75mm

HANVAC


Utility

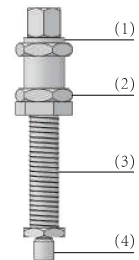
Product characteristics

- *Bottom with buffer spring rod
- *The spring buffer rod is composed of high-strength stainless steel rods and high-quality sliding bearings
- *Handling workpieces with height differences in the suction plane, or side suction workpieces
- *Handling pressure sensitive workpieces (such as glass) to ensure flexible contact



Product structure

- *The spring buffer support rod is composed of high-strength stainless steel rod, bearing sleeve (1), and lower buffer spring (3)
- *The thread (4) connecting the suction cup usually has different specifications for external threaded fittings
- *Two locking nuts (2) are used for reinforcement



Product advantages

- *Flexible contact with vulnerable workpieces, compensating for height differences in adjustable workpieces
- *Basically suitable for all sizes of suction cups, with a wide range of applications
- *Optional anti rotation function



* HSPA case

Auxiliary components

Spring buffer rod HSPA

Buffer stroke 25mm/50mm/75mm

HANVAC


Utility



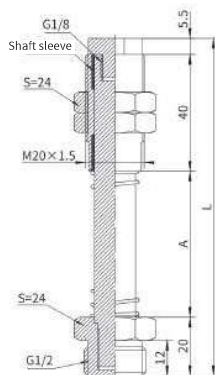
HSPA Ordering NO

HSPA	25	M18	MG01
1	2	3	4

1-Series	2-Spring rod travel	3-Guide sleeve external thread
HSPA	Solid external spring buffer rod	
	25	25mm
	50	50mm
	75	75mm
		M20
		M18
		M20X1.5
		M18X1
4-Connection bottom thread		
M external thread	G02-G1/4	
	G04-G1/2	



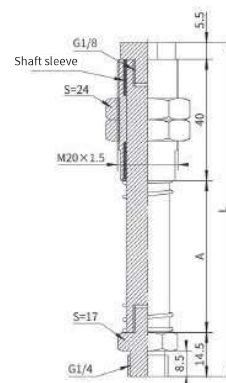
HSPA Design Data



HSPA-25-M20-MG04

① ②

① Buffer stroke	A	L	② External thread
25	50	115.5	M20/M18
50	70	135.5	M20/M18
75	94	159.5	M20/M18



HSPA-25-M20-MG02

① ②

① Buffer stroke	A	L	② External thread
25	50	110	M20/M18
50	70	130	M20/M18
75	94	154	M20/M18


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Auxiliary components

Suspension type HSPB

Buffer stroke 10mm/20mm/30mm/40mm/50mm/70mm

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Utility

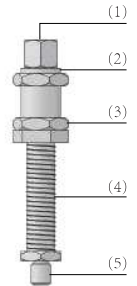
Product characteristics

- *Bottom with buffer spring rod
- *The spring buffer rod is composed of high-strength stainless steel rods and high-quality sliding bearings
- *Handling workpieces with height differences in the suction plane, or side suction workpieces
- *Handling pressure sensitive workpieces (such as glass) to ensure flexible contact



Product structure

- *The spring buffer support rod is composed of high-strength stainless steel rod, bearing sleeve (2), and lower buffer spring (4)
- *The vacuum channel at the upper end of the support rod has an internal threaded connection (1)
- *The thread (5) connecting the suction cup usually has a maximum specification of M5 for internal threaded joints, while there are different specifications for external threaded fittings
- *Two locking nuts (3) are used for reinforcement



Product advantages

- *Flexible contact with vulnerable workpieces, compensating for height differences in adjustable workpieces
- *Basically suitable for all sizes of suction cups, with a wide range of applications



* HSB case

Auxiliary components

Suspension type HSPB

Buffer stroke 10mm/20mm/30mm/40mm/50mm/70mm

HANVAC


Utility



HSPB Ordering NO

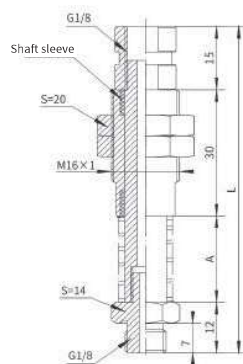
HSPB	20	M18	MG02	FG01
1	2	3	4	5

1-Series	2-Spring rod travel	3-Guide sleeve external thread
HSPB	10	M20
External spring buffer rod with through-hole	20	M18
	30	
	50	
	70	
		M20X1.5
		M18X1

4-Connection bottom thread	5-Connection top thread
F internal thread	F internal thread
G01-G1/8	G01-G1/8
G02-G1/4	G02-G1/4
G03-G3/8	
G04-G1/2	
M external thread	
G01-G1/8	
G02-G1/4	
G03-G3/8	
G04-G1/2	



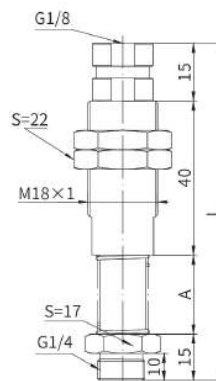
HSPB Design Data



HSPB-10-M18-MG01-FG01

①

① Buffer stroke	A	L
10	20.5	77.5
20	35.5	92.5
30	50.5	107.5
50	70.5	127.5



HSPB-10-M18-MG02-FG01

①

① Buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5



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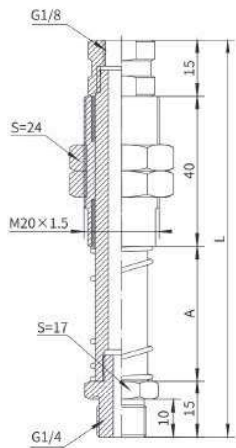
Auxiliary components

Suspension type HSPB

Buffer stroke 10mm/20mm/30mm/40mm/50mm/70mm

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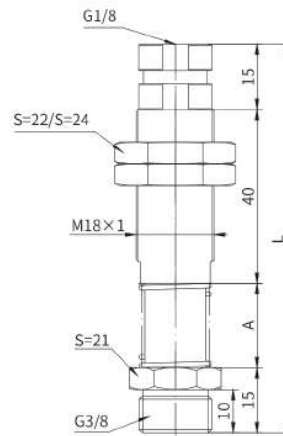

Utility



HSPB-10-M20-MG02-FG01

①

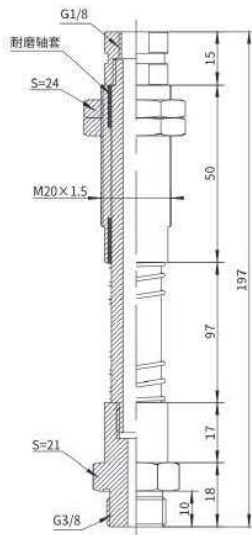
① Buffer stroke	A	L
10	20.5	90.5
20	35.5	105.5
30	50.5	120.5
50	70.5	140.5
70	90.5	160.5



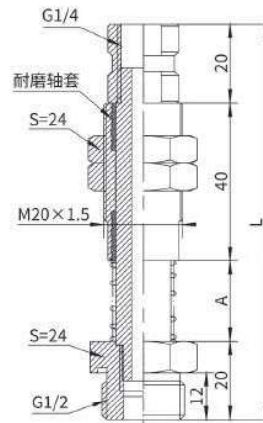
HSPB-10-M18-MG03-FG01

① ②

① Buffer stroke	A	L	② Screw thread
10	20.5	95.5	M18/M20
20	35.5	110.5	M18/M20
30	50.5	125.5	M18/M20
50	70.5	145.5	M18/M20
70	90.5	150.5	M20



HSPB-70-M20-MG03-FG01



HSPB-10-M20-MG04-FG02

①

① Buffer stroke	A	L
10	20.5	100.5
20	35.5	115.5
30	50.5	130.5
50	70.5	150.5

Auxiliary components

Suspension type HSPE

Buffer stroke 5mm/10mm/15mm/20mm/25mm/50mm/75mm

HANVAC


Utility

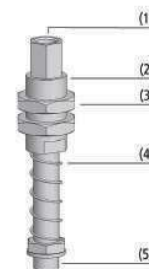
Product characteristics

- *Spring buffer support rod with lower buffer spring
- *Multiple connection threads and stroke lengths
- *Provide anti rotation protection



Product structure

- *(1) Integrated vacuum supply pipeline plunger rod, all connected with internal threads
- *(2) Spring buffer support rod, galvanized steel high-strength rod component, guide shaft sleeve
- *(3) Two self-locking nuts
- *(4) Lower buffer spring
- *(5) M5 internal thread, connecting suction cups



Product advantages

- *Adjust the height difference, suitable for applications such as lifting devices equipped with multiple suction cups.
- *The vacuum handling device does not require precise positioning.
- *Has a certain ability to absorb vibrations and impacts.
- *Convenient suction cups for soft positioning on sensitive or ultra-thin objects.



*Example of HSPE installation for spring buffer rod

Auxiliary components

Suspension type HSPE

Buffer stroke 5mm/10mm/15mm/20mm/25mm/50mm/75mm

HANVAC


Utility



HSPE Ordering NO

HSPE		5		F-M3		F-M3		M-M6	
1		2		3		4		5	
1-Series		HSPE		2-Spring rod travel		3-suction cup interface			
		Spring external buffer rod		5		F internal thread		M3	
				10				M5	
				15		M external thread		G01-G1/8	
				20				G02-G1/4	
				25				G04-G1/2	
				50					
				75					
4-Vacuum interface				5-Guide sleeve external thread					
F internal thread		G01-G1/8		M external thread		G01-G1/8			
		G03-G3/8				M6X0.75			
		M3				M16X1			
		M5				M20X1.5			
						M30X1.5			



HSPE Selection specifications

Models	Suction cup interface	Vacuum interface	Guide sleeve external thread
HSPE-5	F-M3	F-M3	M-M6X0.75
	F-M5	F-M5	M-G01-G1/8
HSPE-10	F-M5	F-M5	M-G01-G1/8
HSPE-15	M-G01-G1/8	F-G01-G1/8	M-M16X1
HSPE-20	F-M5	F-M5	M-G01-G1/8
	M-G01-G1/8	F-G01-G1/8	M-M16X1
HSPE-25	M-G02-G1/4	F-G01-G1/8	M-M20X1.5
	M-G04-G1/2	F-G03-G3/8	M-M30X1.5
HSPE-50	M-G01-G1/8	F-G01-G1/8	M-M16X1
	M-G02-G1/4	F-G01-G1/8	M-M20X1.5
HSPE-75	M-G02-G1/4	F-G01-G1/8	M-M20X1.5
	M-G04-G1/2	F-G03-G3/8	M-M30X1.5


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Auxiliary components

Suspension type HSPE

Buffer stroke 5mm/10mm/15mm/20mm/25mm/50mm/75mm

HANVAC


Utility



HSPE Technical Data

Models	Spring load rate [N/mm]	Spring preload force [N]	Elastic force [N] ⁽¹⁾	Vertical load [N] ⁽²⁾	Horizontal load [N] ⁽³⁾	Weight [g]	working temperature [°C]
HSPE-5-F-M3	0.596	1.49	2.98	550	47	9	0~80
HSPE-5-F-M5	0.508	3.3	4.57	1500	132	16	0~80
HSPE-10-F-M5	0.323	2.75	4.36	1500	97	19	0~80
HSPE-15-M-G01	0.221	3.53	5.19	3700	385	80	0~80
HSPE-20-F-M5	0.209	1.78	3.87	1500	63	25	0~80
HSPE-25-M-G01	0.143	3.57	5.36	3700	283	90	0~80
HSPE-25-M-G02	0.711	6.47	15.36	2400	747	145	0~80
HSPE-25-M-G04	3.829	25.64	73.5	4900	1870	400	0~80
HSPE-50-M-G01	0.097	2.92	5.34	3700	173	110	0~80
HSPE-50-M-G02	0.452	1.4	12.7	2400	466	175	0~80
HSPE-75-M-G02	0.262	5.38	15.2	2400	340	190	0~80
HSPE-75-M-G04	1.072	37.2	77.4	4900	800	530	0~80

(1) Based on 50% of the operating stroke

(2) Maximum static load

(3) When the buffer support rod is in a horizontal position, the workpiece it absorbs is in a vertical state and generates gravity.

When this force exceeds the horizontal load range that the buffer support rod can withstand, the spring will be stuck, affecting contraction.



Auxiliary components

Suspension type HSPE

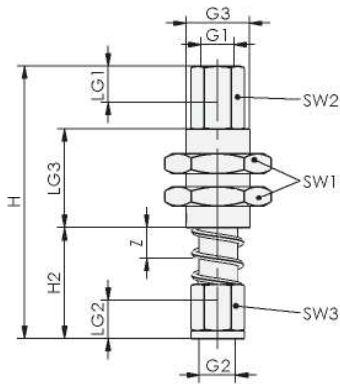
Buffer stroke 5mm/10mm/15mm/20mm/25mm/50mm/75mm

HANVAC

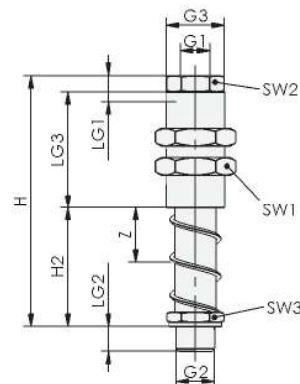

Utility



HSPE Design Data



Internal thread of suction cup connection port



External thread of suction cup connection port

SIZE[mm]

Models	G1	G2	G3	H	H2	LG1	LG2	LG3	SW1	SW2	SW3	Z
HSPE-5-F-M3	F-M3	F-M3	M-M6X0.75	33.5	15	3.8	6.0	10	10	5	7	5
HSPE-5-F-M5	F-M5	F-M5	M-G01-G1/8	41.2	17	5.5	6.2	15	14	7	7	5
HSPE-10-F-M5	F-M5	F-M5	M-G01-G1/8	47.2	23	5.5	6.2	15	14	7	7	10
HSPE-15-M-G01	F-G01-G1/8	M-G01-G1/8	M-M16X1	73.5	29.5	8	6.5	30	22	12	14	15
HSPE-20-F-M5	F-M5	F-M5	M-G01-G1/8	59.2	35	5.5	6.2	15	14	7	7	20
HSPE-25-M-G01	F-G01-G1/8	M-G01-G1/8	M-M16X1	86.5	42.5	8	6.5	30	22	12	14	25
HSPE-25-M-G02	F-G01-G1/8	M-G02-G1/4	M-M20X1.5	86	40.5	13	8.5	40	24	17	17	25
HSPE-25-M-G04	F-G03-G3/8	M-G04-G1/2	M-M30X1.5	105.5	42.5	13	10.5	55	36	24	24	25
HSPE-50-M-G01	F-G01-G1/8	M-G01-G1/8	M-M16X1	117.5	73.5	8	6.5	30	22	12	14	50
HSPE-50-M-G02	F-G01-G1/8	M-G02-G1/4	M-M20X1.5	115.5	70	13	8.5	40	24	17	17	50
HSPE-75-M-G02	F-G01-G1/8	M-G02-G1/4	M-M20X1.5	145	99.5	13	8.5	40	24	17	17	75
HSPE-75-M-G04	F-G03-G3/8	M-G04-G1/4	M-M30X1.5	176.5	113.5	13	10.5	55	36	24	24	75



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Auxiliary components

Light and small buffer rod HSPL

Buffer stroke 5mm/10mm/15mm

HANVAC


3C Electronics

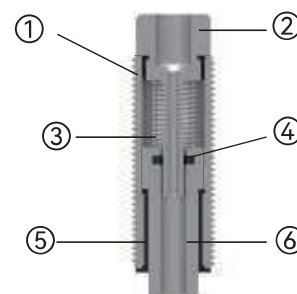
Product characteristics

- *Spring built-in buffer support rod with very low elasticity
- *Small size and light weight
- *The guide rod adopts special surface treatment
- *Guide sleeve with built-in resin lining
- *Internal shrinkage structure design
- *Suitable for the electronics industry



Product structure

- * (1) Installation thread
- * (2) Vacuum interface
- * (3) Buffer spring
- * (4) Sealing ring
- * (5) Bushing
- * (6) Activity pole



Product advantages

- *Adopting a brand new structural design, it can minimize the phenomenon of metal friction and chip shedding to the greatest extent possible
- *Adopting a special anti eccentricity structure design for smoother sliding



* Case study of buffer rod HSPL absorbing PCL circuit board

Auxiliary components

Light and small buffer rod HSPL

Buffer stroke 5mm/10mm/15mm

HANVAC


3C Electronics



HSPL Ordering NO

HSPL 1	–	5 2	–	FM5 3	–	FM5 4	–	MM10 5
1-Series				2-Spring rod travel				3-Suction cup interface
HSPE		Spring external buffer rod		5	5mm			F internal thread
				10	10mm			M5
				15	15mm			
4-Vacuum interface				5-Guide sleeve external thread				
F internal thread		M5		M external thread	M10X1			



HSPL Selection specifications

Models	Suction cup interface	Vacuum interface	Guide sleeve external thread
HSPL-5	F-M5	F-M5	M10X1
HSPE-10	F-M5	F-M5	M10X1
HSPE-15	F-M5	F-M5	M10X1


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Auxiliary components

Light and small buffer rod HSPL

Buffer stroke 5mm/10mm/15mm

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3C Electronics

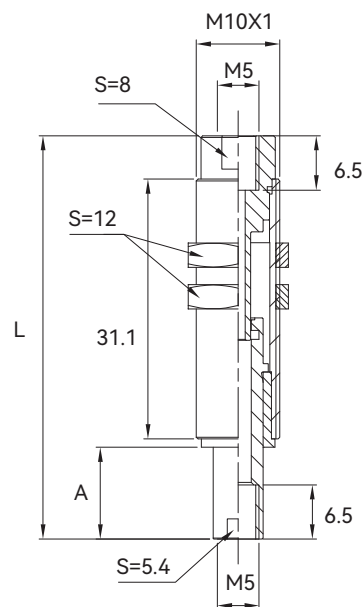


HSPL Technical Data

Models	Spring preload force [N]	Elastic force [N]	Weight [g]	Working temperature [°C]
HSPE-5-F-M5	2.25	2.9	17.2	0~80
HSPE-10-F-M5	2.3	3.4	20.1	0~80
HSPE-15-F-M5NB	2.5	5.35	22.4	0~80



HSPE Design Data



Internal thread of suction cup interface

HSPL-5-FM5-FM5-MM10

①

① Buffer stroke	A	L
5	6	43.3
10	11	48.3
15	16	53.3



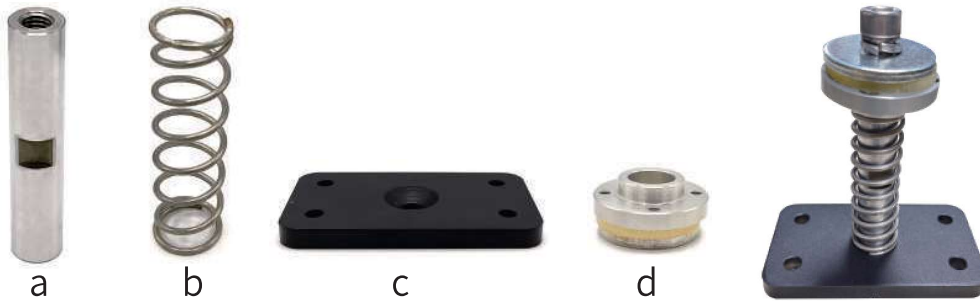
Spring rod

Connecting components

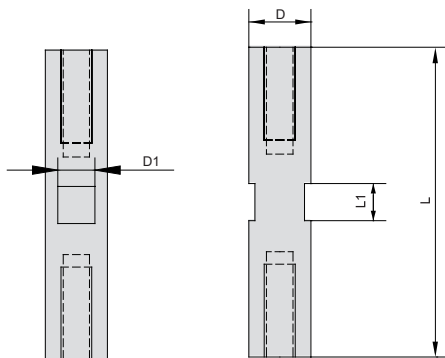
Rod diameter Φ 20/ Φ 25mm

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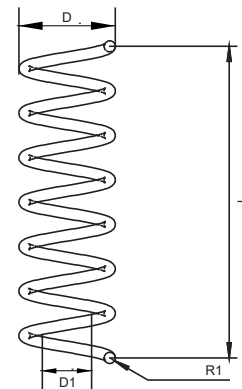

Utility



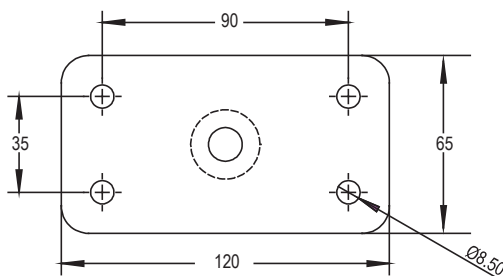
Design Data



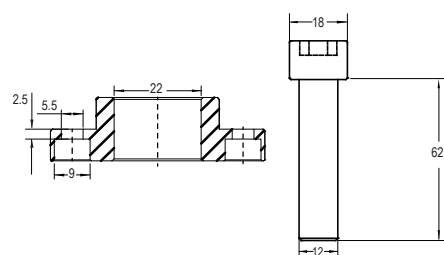
Rod model	D	D1	L	L1
HSPC-a-20	20	12	100	12
HSPC-a-25	25	12	100	12



Rod model	R1	D	D1	L	Circle
HSPC-b-3.0	3.0	32.5	25.5	110	9
HSPC-b-4.0	4.0	33.5	25.5	110	9



Board model: HSPC-c



Nut model: HSPC-d

Auxiliary components

Threading joint HSGE

Applicable interfaces: M5 to G1/2 "

HANVAC


Utility

Product characteristics

*All suction cups and fittings with G1/8 "and G1/4" threads can be threaded for connection

*Can achieve precise adjustment of suction cup position

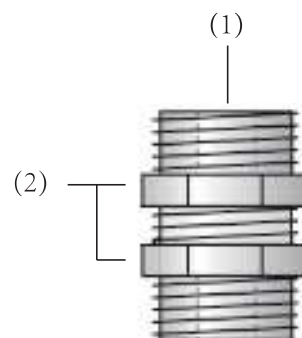
*No tools required to fix and adjust



Product structure

*(1) Vacuum joint

*(2) Two galvanized self-locking nuts



Product advantages

*No additional installation components required

*Non corrosive, high stability

*Easy to adapt to various hose diameters



* HSGE case

Auxiliary components

Threading joint HSGE

Applicable interfaces: M5 to G1/2 “

HANVAC


Utility



HSGE Ordering NO

HSGE	M20X1.5	F01	20
1	2	3	3

1-Series	2- Thread diameter	3-Threaded
HSGE	M	F internal thread
Attachment	20X1.5	G01-G1/8
	16X1	G02-G1/4
	20X1.5	G03-G3/8
	30X1.5	G04-G1/2
	10X1	M external thread
		M5

4-Length	
20	20MM
30	30MM
40	40MM



HSGE Technical Data

Models	Screw thread	Weight
HSGE- M20X1.5-FG02-30	G02-G1/4	63.4G
HSGE- M16X1-FG01-30	G01-G1/8	50.3G
HSGE- M20X1.5-FG03-30	G03-G3/8	63.4G
HSGE- M30X1.5-FG04-40	G04-G1/2	185.1G
HSGE- M10X1-MM5-30	M5	12.3G


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Auxiliary components

Threading joint HSGE

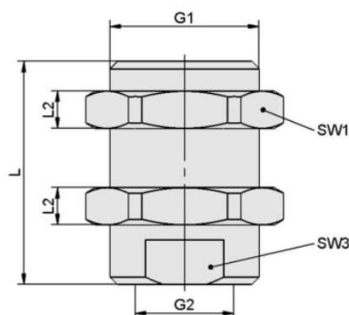
Applicable interfaces: M5 to G1/2 “

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Utility



HSGE Design Data



HKB

model

Size[mm]	G1	G2	L	L2	SW1	SW3
HSGE- M20X1.5-FG02-30	M14X1.5	FG02-G1/4	30mm	5mm	24mm	17mm
HSGE- M16X1-FG01-30	M16X1	FG01-G1/8	30mm	5mm	22mm	13mm
HSGE- M20X1.5-FG03-30	M14X1.5	FG03-G3/8	30mm	5mm	24mm	19mm
HSGE- M30X1.5-FG04-40	M30X1.5	FG04-G1/2	40mm	8mm	36mm	27mm
HSGE- M10X1-MM5-30	M10X1	MM5	20mm	3mm	14mm	9mm


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Auxiliary components

HVB

The maximum rated power of the fan is 19KW

HANVAC


Utility

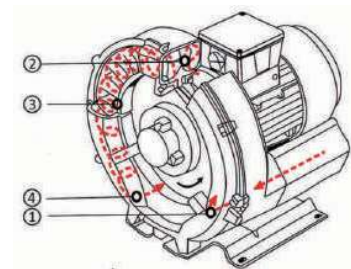
Product characteristics

- *Improving traditional processes by placing bearings in front and increasing working stability
- *Using some imported accessories to extend service life
- *The casing is made of high-quality aluminum alloy through one-time die casting, and the processing of the components is completed during cutting to ensure accuracy. Traditional processes are improved to ensure accuracy
- *The design of the impeller has been accurately calculated and certified, resulting in a 20% improvement in performance compared to similar products at the same power



Product structure

- *The impeller of the air ring pump is installed on the motor rotor and undergoes non-contact compression. The pump shaft is installed outside the compression chamber and operates at the maximum pressure difference to ensure the maximum reliability of the mechanical operation.
- *The gas is sucked in from suction port 1 and enters side channel 2. The impeller 3 rotates to accelerate the gas outward and increase pressure.
- *The kinetic energy of the gas increases, and the gas pressure along the side channel increases. The side channel narrows at the outlet, and the gas is squeezed out of the blades and discharged from the pump body through the outlet muffler 4.



Product advantages

- *Flexible connection of vacuum suction cups
- *Ball and socket with O-ring seals
- *The fulcrum of the curved part is low



Auxiliary components

HVB

The maximum rated power of the fan is 19KW

HANVAC


Utility



HVB Ordering NO

HVB	220	5	2	0	H*6
1	2	3	4	5	6

1-Series		2- Power		3-Number	
HVB	Fan	220	2.2KW	5/4/7/8/9	
		300	3KW		
		400	4KW		
4-Flow rate		430	4.3KW		
1	Single blade wheel	550	5.5KW		
2	Double bladed wheel	750	7.5KW		
3	Single segment high traffic	850	8.5KW		
4	Dual stage high flow rate	1100	11KW		

5-Installation method		6- Voltage	
0	Arbitrary installation	H*6	Three phase Δ 220-240V/Y345-415V
1	Parallel installation	H*7	Three phase Δ 345-415V/Y600-720V
2	Special installation	A*1	Single phase 220-240V
3	Vertical installation		



HVB Technical Data

Models	Frequency [HZ]	Power [KW]	Voltage [V]	Current [A]	Maximum exhaust and suction flow rate [m3/h]	Vacuum pressure [mbar]	Compression pressure [mbar]	Noise dB[A]	Weight [kg]
HVB-220-420-A41	50	2.2	200-240	10	150	-265	265	66	31
HVB-220-420-H46	50	2.2	200-240 Δ 345-415Y	9.7 Δ/5.6Y	150	-330	420	66	27
HVB-220-520-H36	50	2.2	200-240 Δ 345-415Y	9.7 Δ/5.6Y	230	-290	360	72	25
HVB-300-520-H46	50	3	200-240 Δ 345-415Y	12.5 Δ/7.2Y	230	-340	410	72	40
HVB-400-520-H57	50	4	345-415 Δ 600-720Y	10 Δ/5.8Y	230	-390	490	72	44
HVB-430-720-H37	50	4.3	345-415 Δ 600-720Y	10 Δ/5.2Y	320	-360	380	73	54
HVB-550-720-H47	50	5.5	345-415 Δ 600-720Y	13.3 Δ/7.7Y	320	-440	500	73	66
HVB-750-720-H57	50	7.5	345-415 Δ 600-720Y	16.7 Δ/9.6Y	320	-440	570	73	73
HVB-550-810-H17	50	5.5	345-415 Δ 600-720Y	12.9 Δ/7.4Y	530	-300	320	70	63
HVB-750-820-H27	50	7.5	345-415 Δ 600-720Y	16.7 Δ/9.6Y	520	-400	400	74	86
HVB-1100-820-H37	50	11	345-415 Δ 600-720Y	28.0 Δ/16.2Y	520	-430	600	74	104
HVB-1100-840-H37	50	11	345-415 Δ 600-720Y	28.0 Δ/16.2Y	900	-280	370	74	110
HVB-850-910-H07	50	8.5	345-415 Δ 600-720Y	18.2 Δ/10.5Y	1050	-210	210	74	93



Auxiliary components

HVB

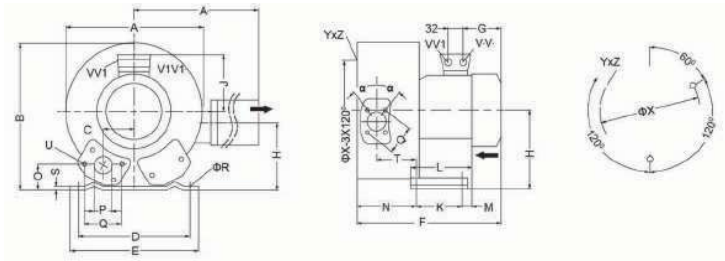
The maximum rated power of the fan is 19KW

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Utility

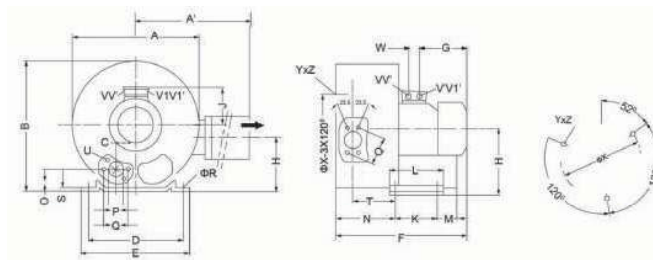


HVB Design Data



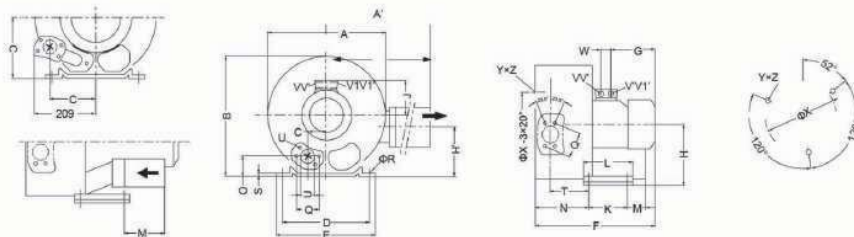
HVB-220-420

Model	Phase	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	φR	S	T	U	V(3~)	V'(3~)	a	φX	YXZ
HVB-220-420-H46	3~	322	324	315	58	225	255	401	191	154	153	128	95	130	73	151	45	G-1/2	72	12	3	104	M6X19	M25×1.5	M16×1.5	28°	174	M6X15



HVB-300/400-520

Model	Phase	A	A'	B	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	φR	S	T	U	V	V'	φX	YXZ	X-Holes	W
HVB-300-520-H46	3~	372	411	371	60	260	295	465	190	175	144	135	115	155	98	171	48	G2	83	14	4	116	M8X17	M25X1.5	M25X1.5	200	M8X20	51.5°/171.5° /291.5°	42
HVB-400-520-H57	3~	372	411	371	60	260	295	499	224	175	144	135	115	155	98	171	48	G2	83	14	4	116	M8X17	M25X1.5	M25X1.5	200	M8X20	51.5°/171.5° /291.5°	42



HVB 430/550/750-720

Model	Phase	A	A'	Bvv	C	D	E	F	G	H	H'	J	K	L	M	N	O	P	Q	φR	S	T	U	V1	V1'	φX	YXZ	X-Holes	W
HVB-430-720-H37	3~	426	426	410	63	290	325	526	209	197	162	148	140	180	84	205	53	G2	83	15	4.5	130	M8X17	M25×1.5	M25×1.5	240	M10X20	51.5°/171.5° /291.5°	42
HVB-550-720-H47	3~	426	426	410	154	290	325	571	226	197	162	167	140	180	200	205	53	G2	83	15	4.5	130	M8X17	M25×1.5	M25×1.5	240	M10X20	51.5°/171.5° /291.5°	42
HVB-750-720-H57	3~	426	426	410	154	290	325	571	226	197	162	167	140	180	200	205	53	G2	83	15	4.5	130	M8X17	M25×1.5	M25×1.5	240	M10X20	51.5°/171.5° /291.5°	42


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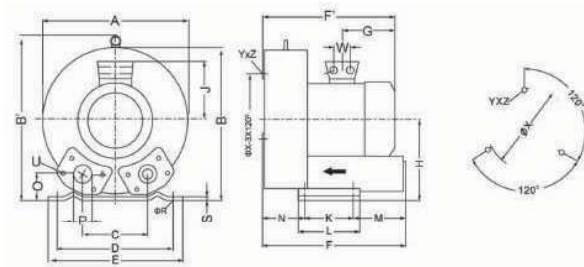
Auxiliary components

HVB

The maximum rated power of the fan is 19KW

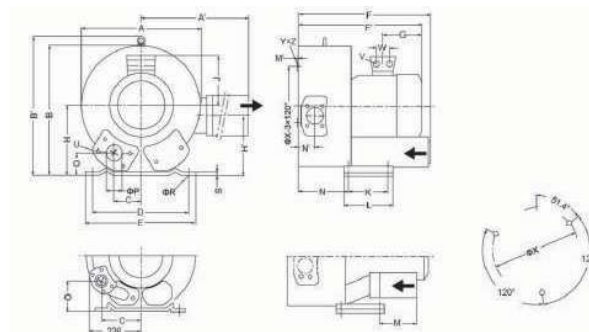
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Utility



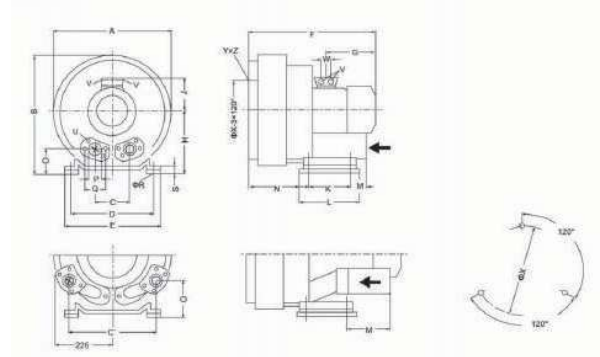
HVB 550-810

Model	Phase	A	B	B'	C	D	E	F	F'	G	H	J	K	L	M	N	O	P	φR	S	V	W	φX	YXZ	X-Holes
HVB-550-810-H17	3~	451	461	509	152	356	394	433	477	226	240	167	170	217	140	124	65	G2-1/2	15	6	2XM25X1.5	42	286	M12X20	0°/120°/240°



HVB-750/1100-820

Model	Phase	A	A'	B	B'	C	D	E	F	F'	G	H	H'	J	K	L	N	N'	O	P	φR	S	V	W	φX	YXZ	X-Holes
HVB-750-820-H27	3~	500	549	490	509	76	356	394	545	589	226	240	199	167	170	217	236	84	65	G2-1/2	15	6	2XM25X1.5	42	286	M12X20	514°/120°/240°
HVB-1100-820-H37	3~	500	549	490	509	76	356	394	545	694	318	240	199	197	170	217	212	84	105	G2-1/2	15	6	2XM32X1.5	54	286	M12X20	514°/120°/240°



HVB-1100-840

Model	Phase	A	B	C'	D	E	F	G	H	J	K	L	M	N	O	P	φR	S	V	W	φX	YXZ	X-Holes
HVB-1100-840-H37	3~	500	550	336	356	394	694	318	300	197	170	217	312	212	165	G2-1/2	15	66	2XM32X1.5	54	286	M12X20	0°/120°/240°

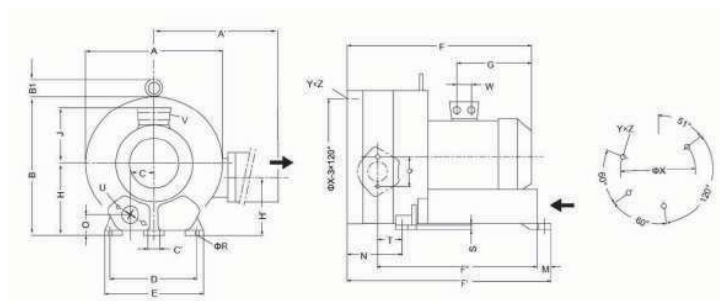
Auxiliary components

HVB

The maximum rated power of the fan is 19KW

HANVAC


Utility



HVB-1650-840

Model	Phase	A	A'	B	B1	C	C'	D	E	F	F'	F''	G	H	H'	J	K	M	N	O	P	Q	φR	S	T	U	V	W	φX	YZ	X-Holes
HVB-1650-840-H37	3~	615	780	607	16	104	15	360	415	752	786	634	345	300	234	197	533	39	230	92	G4	150	15	21	117	M10X30	2XM32X1.5	54	490	M12X30	51.4°/120° /240°



Optional Accessories

Plastic filter bucket



Iron filter bucket



Plastic simple filter bucket



Iron simple filter bucket



Aluminum pressure relief valve



Plastic pressure relief valve



Stainless steel external muffler



Auxiliary components

Universal vacuum filter HCF

Filter area 790mm²/1280mm²

HANVAC


Utility

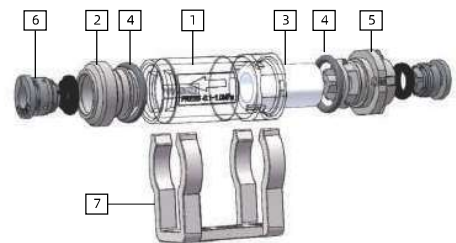
Product characteristics

- *Small size, light weight, with mounting bracket
- *Quick connector, convenient and fast configuration
- *Adopting a fast assembly and disassembly structure, the filter can be replaced without the need for tools
- *Direct type, import and export on the same line, easy to install



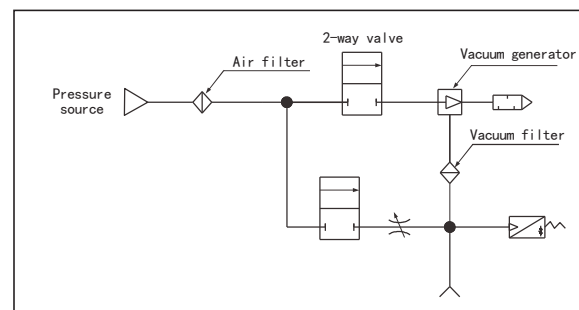
Product structure

- *(1) Shell material (PC)
- *(2) Back cover material (PBT)
- *(3) Filter element material (PE)
- *(4) O-ring material (NBR)
- *(5) Front cover material (PBT)
- *(6) Quick connector assembly
- *(7) Support material (PBT)



Product advantages

- *Suitable for positive pressure and vacuum systems with moderate to mild pollution levels
- *Transparent shell with arrows indicating the direction of airflow, Can visually assess the degree of contamination of the filter



*Working principle of air filters

Auxiliary components

Universal vacuum filter HCF

Filter area 790mm²/1280mm²

HANVAC


Utility



HCF Ordering NO

HCF	100	04	B
1	2	3	4

1-Series	2-Filter area	3-Flexible hose diameter
HCF	100	04
Filter	Filter area 790mm ²	Φ4mm hose
	200	06
	Filter area 1280mm ²	Φ6mm hose
		08
		Φ8mm hose
		10
		Φ10mm hose
		12
		Φ12mm hose
4-Parts		
Installation bracket	Default specification with mounting bracket	



HCF Technical Data

Models	Flexible hose diameter [mm]	Using fluids	Rated working pressure [Mpa]	Maximum withstand voltage [Mpa]	Positive pressure flow rate [NL/min]	Vacuum flow rate [NL/min]	Filtering accuracy [μm]	Temperature [°C]	Weight [g]
HCF-100-04-B	4	Air/Nitrogen	-0.1~0.8	1.0	40	10	5	0~60(No freeze)	14
HCF-100-06-B	6	Air/Nitrogen	-0.1~0.8	1.0	130	75	5	0~60(No freeze)	13
HCF-200-06-B	6	Air/Nitrogen	-0.1~0.8	1.0	140	80	5	0~60(No freeze)	24
HCF-200-08-B	8	Air/Nitrogen	-0.1~0.8	1.0	280	110	5	0~60(No freeze)	24
HCF-200-10-B	10	Air/Nitrogen	-0.1~0.8	1.0	320	120	5	0~60(No freeze)	30
HCF-200-12-B	12	Air/Nitrogen	-0.1~0.8	1.0	370	140	5	0~60(No freeze)	31

◇ Note: The positive pressure flow rate data is obtained under the condition of gas supply pressure of 0.1Mpa


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Auxiliary components

Universal vacuum filter HCF

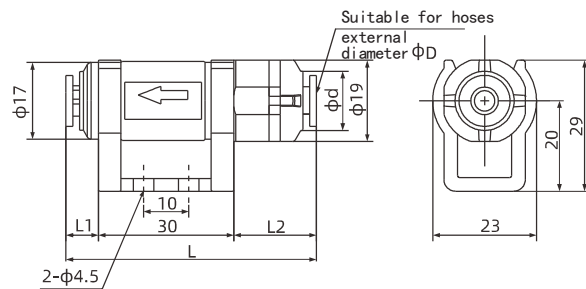
Filter area 790mm²/1280mm²

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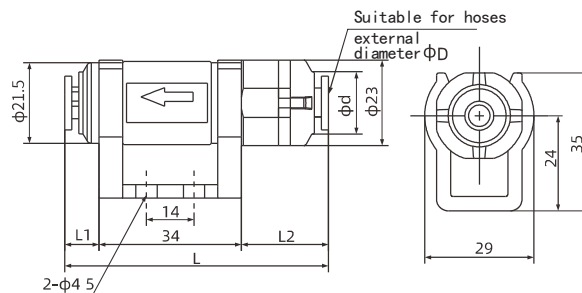

Utility



HCF Design Data



HCF-100□-B



HCF-200□-B

Models	L	L1	D	d
HCF-100-04-B	55.5	8	4	13
HCF-100-06-B	55.5	8	6	13
HCF-200-06-B	67	10.5	6	15.5
HCF-200-08-B	69.5	12	8	16
HCF-200-10-B	78.5	17	10	19.5
HCF-200-12-B	78.5	17	12	21



Auxiliary components

Filter bucket HJF

Caliber 1.5"/2"/2.5"/3"/4"

HANVAC


Utility

Product characteristics

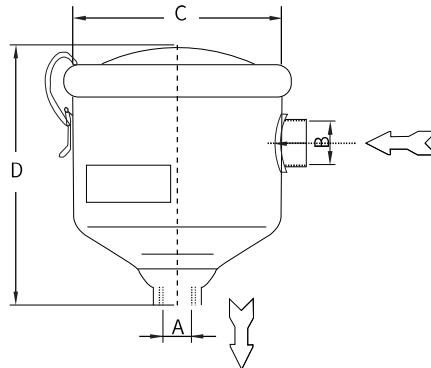
*Vacuum filters can effectively filter the air entering the vacuum system, preventing solid particles or dust from being sucked into the vacuum system, Reduce the wear of vacuum pumps, thereby improving their service life and effectively protecting vacuum system devices

*Used in harsh dust environments, providing excellent filtering effects

*Adopting a steel shell and a buckle type cover, it is sturdy and durable, suitable for industrial heavy load requirements, and has fast inlet and outlet threaded connections, Easy to replace



HJF Design Data



HJF

Size[mm]				
Models	A [Air outlet diameter]	B [Air inlet diameter]	C [External diameter]	D [Height]
HJF15	1.5"	1.5"	190	162
HJF20	2"	2"	220	265
HJF25	2.5"	2.5"	220	265
HJF30	3"	3"	220	265
HJF40	4"	4"	335	410

Auxiliary components

Vacuum hose PU

Anti static polyurethane hose, heavy-duty, resistant to microorganisms and flame retardant

HANVAC


Universal

Product characteristics

Flexible hoses are used for conveying abrasive powders, bulk materials, particles, and gases through flexible hoses

Printed Circuit Board Drilling Machine (PCB)

- Raw material conveying hoses, such as powders, particles, sand, quartz, gravel, fragments, and shavings

Compressor, side slot blower, vacuum pump, pressure pump, pump

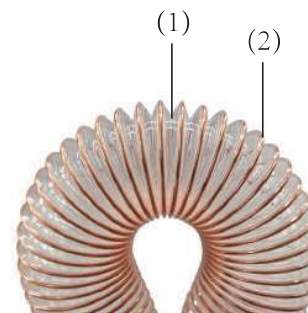
Vacuum lifting device and vacuum treatment system



Product structure

*(1) Pipe wall: Permanent anti-static polyester polyurethane

*(2) Elastic steel wire embedded in the pipe wall



Product advantages

*The thickness of the pipe wall is approximately 1.4-1.5 millimeters

*Temperature range: -40 ° C to 90 ° C

*High wear resistance, strong vacuum resistance, good low-temperature flexibility, flame retardant in accordance with UL94-V2 regulations, permanent anti-static



*Case of hose installation

Auxiliary components

Vacuum hose PU

Anti static polyurethane hose, heavy-duty, resistant to microorganisms and flame retardant

HANVAC


Universal



PU Ordering NO

PU	20	5	D
1	2	3	4

1-Series	2- Tube inner diameter	3-Length
PU	20	10
Vacuum hose	20mm	10m
	25	15
	25mm	15m
	32	20
	32mm	20m
	40	
	40mm	
4- Attachment	50	
D	50mm	
	60	
	60mm	
	75	
	75mm	
	80	
	80mm	
	100	
	100mm	



PU Technical Data

Models	internal diameter [mm]	external diameter [mm]	negative pressure [bar]	Bending radius [mm]	Size length [m]	Weight [Kg/m]
PU-20	20	27	1.0	17	10/15/20	0.23
PU-25	25	32	1.0	20	10/15/20	0.28
PU-32	32	42	1.0	26	10/15/20	0.44
PU-40	40	50	1.0	30	10/15/20	0.54
PU-50	50-51	60	0.825	35	10/15/20	0.66
PU-60	60	70	0.685	40	10/15/20	0.78
PU-75	75-76	86	0.505	66	10/15	1.05
PU-80	80	91	0.475	69	10/15	1.11
PU-100	100-102	111	0.39	83	10/15	1.49

*Positive and negative pressure values are recommended for operation, and the product can withstand higher loads according to requirements. The bending radius is measured through the interior of the hose arch. All specified values are approximate values obtained at room temperature of 20 °C.


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Auxiliary components

Vacuum hose PU

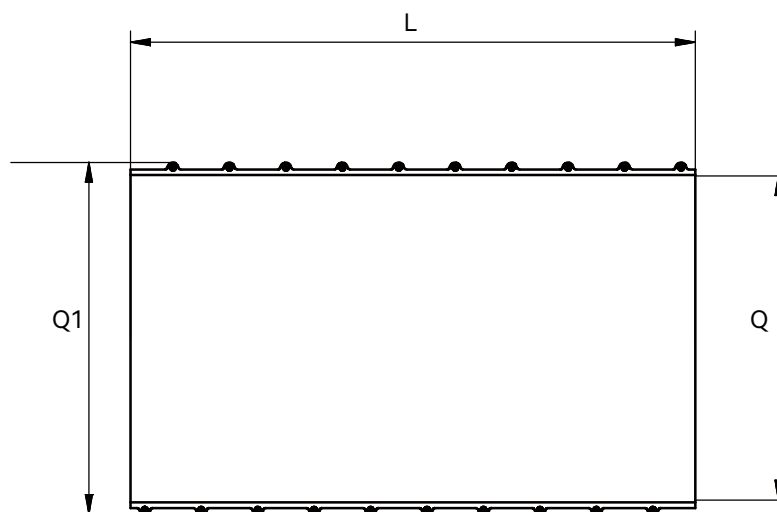
Anti static polyurethane hose, heavy-duty, resistant to microorganisms and flame retardant

HANVAC


Universal



PU Design Data



Size [mm] (L size m)

model	Q	Q1	L
PU-20	20	27	10/15/20
PU-25	25	32	10/15/20
PU-32	32	42	10/15/20
PU-40	40	50	10/15/20
PU-50	50	60	10/15/20
PU-60	60	70	10/15/20
PU-75	75	86	10/15
PU-80	80	91	10/15
PU-100	100	111	10/15



Auxiliary components

47 Pressure sensor type A

Protection level: IP40

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Utility

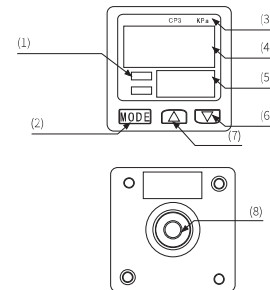
Product characteristics

- *Electronic vacuum switch with LED display
- *Output with NPN or PNP
- *The vacuum connection diameter is R1/8 or M5
- *Small size, light weight, and wide range of use
- *Vacuum degree detection for vacuum systems, optimizing work cycles, and improving economic benefits



Product structure

- * (1) Output 1/working status light comparison, it lights up when output 1 is ON
- * (2) Analog conversion button MODE
- * (3) Unit display (Note 1)
- * (4) Main display screen
- * (5) Secondary display screen
- * (6) Set value Down button
- * (7) Set value UP button
- * (8) Pressure hole



(Note 1): When setting the pressure unit to units other than "MPa" or "kPa", please attach the unit corresponding to the set pressure unit attached

Product advantages

- *Digital display electronic pressure switch
- *Switching points and hysteresis can be adjusted through buttons
- *Switching point and hysteresis independent programming, digital output
- *Special functions programmable



Auxiliary components

47 Pressure sensor type A

Protection level: IP40

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Utility



47 Pressure Sensor Type A Ordering NO

47	—	C	—	01
1		2		3

1-Series	2- Pressure type
47 47 Pressure sensor	C Continuous pressure (-100~100KPA)
	P Positive pressure (-0.1~1Mpa)
	V Negative pressure (-100~0KPA)

3- Output type
01 NPN
03 PNP



47 Pressure Sensor Type A Technical Data

Model	Rated pressure range	Set pressure range	Pressure resistance	Supply voltage	Current	Repetitive accuracy	Temperature range	Temperature characteristic	Protect grade	Weight
47C-01	-100kPa ~100kPa	-100kPa ~100kPa	500kPa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.5% FS	Working :0~50°C Storage :-10~60°C	±1% FS (25°C)	IP40	80g
47C-03	-100kPa ~100kPa	-100kPa ~100kPa	500kPa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.5% FS	Working :0~50°C Storage:-10~60°C	±1% FS (25°C)	IP40	80g
47P-01	-0.1Mpa ~1.0Mpa	-0.1Mpa ~1.0Mpa	1.5Mpa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.2% FS	Working:0~50°C Storage:-10~60°C	±1% FS (25°C)	IP40	80g
47P-03	-0.1Mpa ~1.0Mpa	-0.1Mpa ~1.0Mpa	1.5Mpa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.2% FS	Working:0~50°C Storage:-10~60°C	±1% FS (25°C)	IP40	80g
47V-01	-100kPa ~0kPa	-100kPa ~0kPa	500kPa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.2% FS	Working:0~50°C Storage:-10~60°C	±1% FS (25°C)	IP40	80g
47V-03	-100kPa ~0kPa	-100kPa ~0kPa	500kPa	12~24V DC±5%	24V 30mA 12v 60mA MAX	±0.2% FS	Working:0~50°C Storage:-10~60°C	±1% FS (25°C)	IP40	80g



Auxiliary components

47 Pressure sensor type A

Protection level: IP40

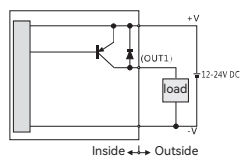
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Utility



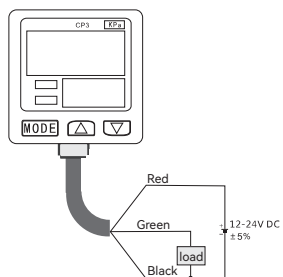
47 Pressure Sensor Type A Design Data

■ I/O circuit diagram

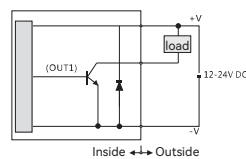


PNP

■ Circuit diagram



■ I/O circuit diagram



NPN

■ Circuit diagram

