

CONVUM

NCV3
series

Small multi stage ejector



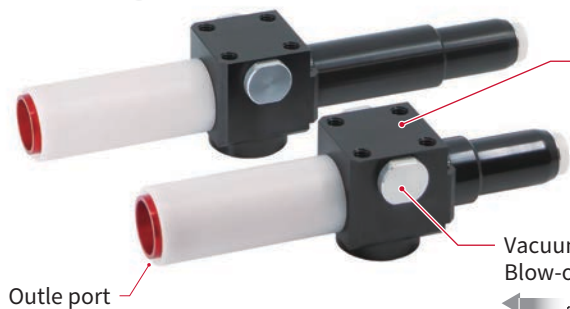
Small multi stage ejector

NCV3
series

An ejector that is compact, lightweight, and has high suction power.

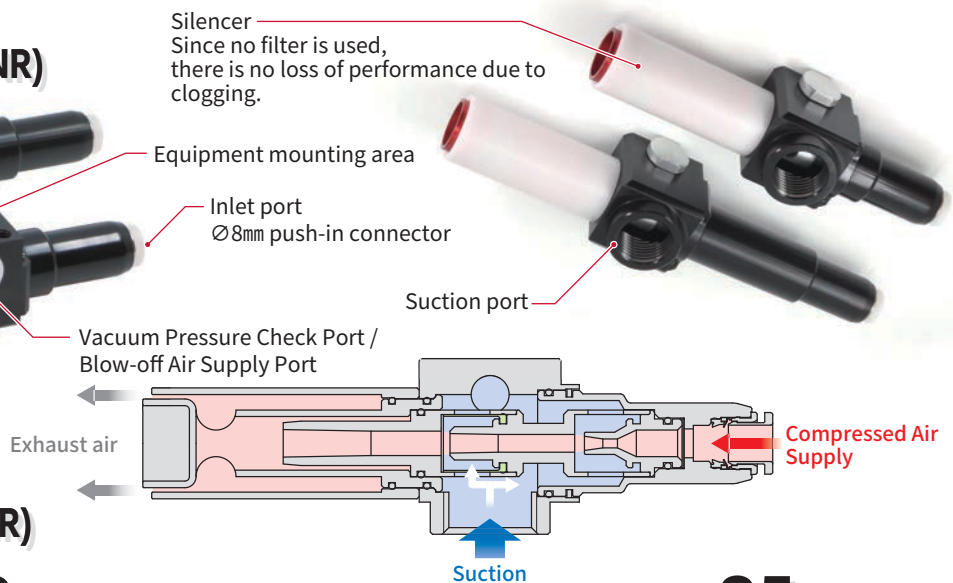
NCV3-18HR-3M

149g 135L/min(ANR)



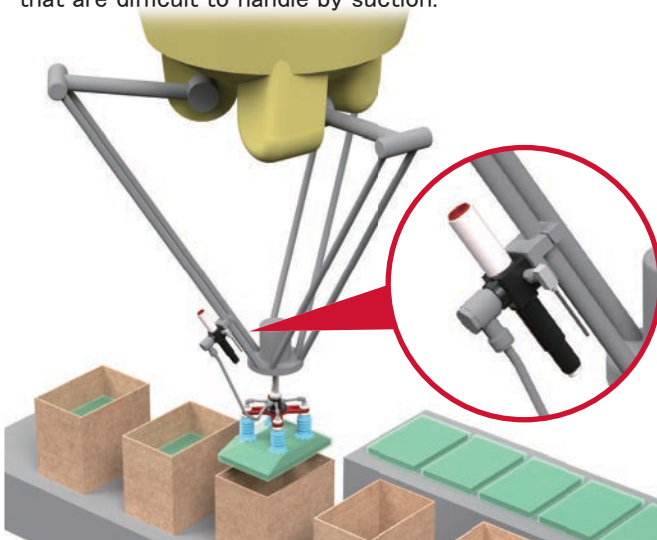
NCV3-18HR-2M

131g 115L/min(ANR)

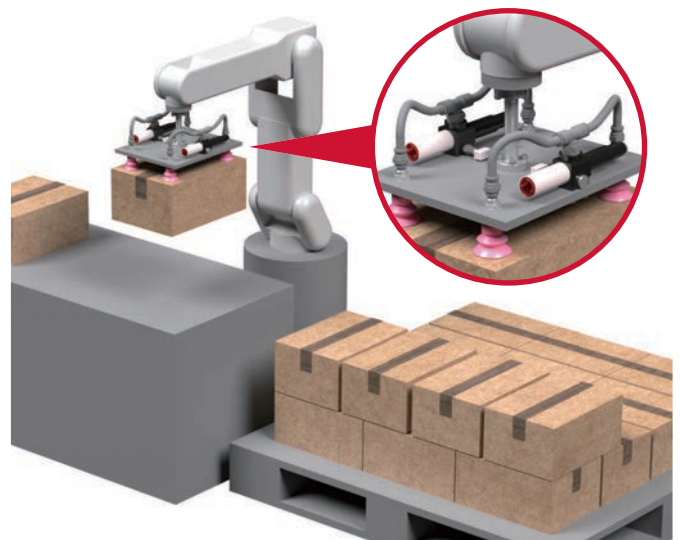


Rated pressure 0.3MPa, Maximum vacuum pressure -85kPa

Due to its compact and lightweight design, it can be installed close to the suction cup. By shortening the vacuum piping length, loss of suction flow rate is reduced, making it suitable for applications such as bags and permeable cardboard that are difficult to handle by suction.

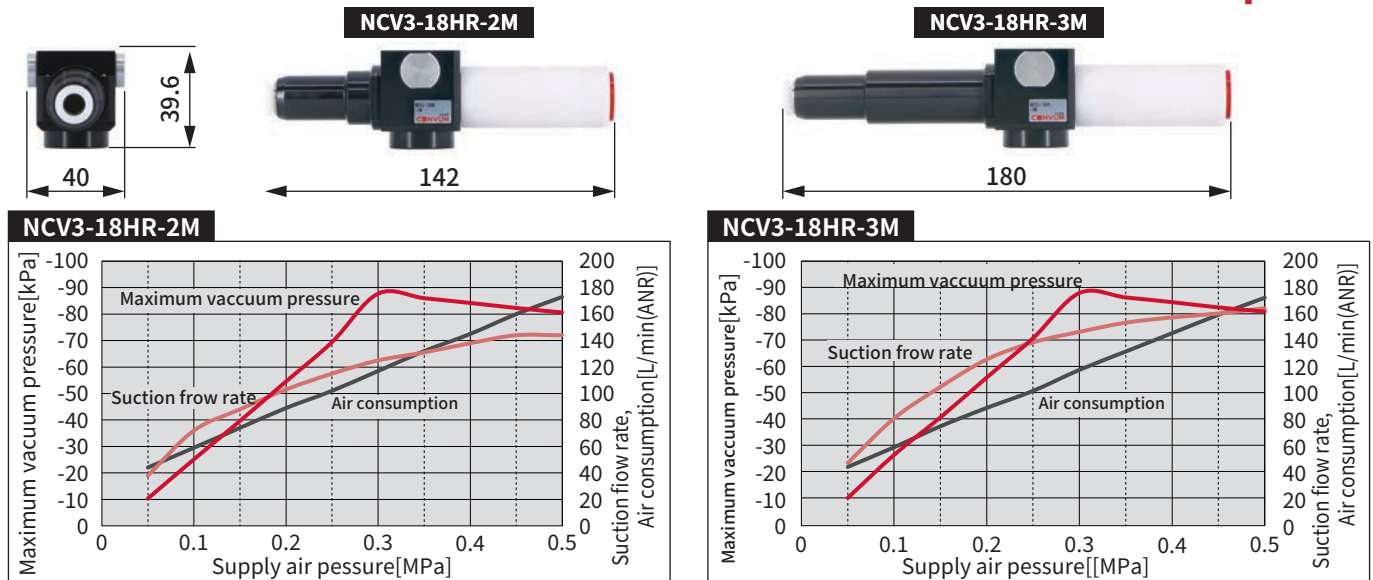


○ Suction for bag workpieces



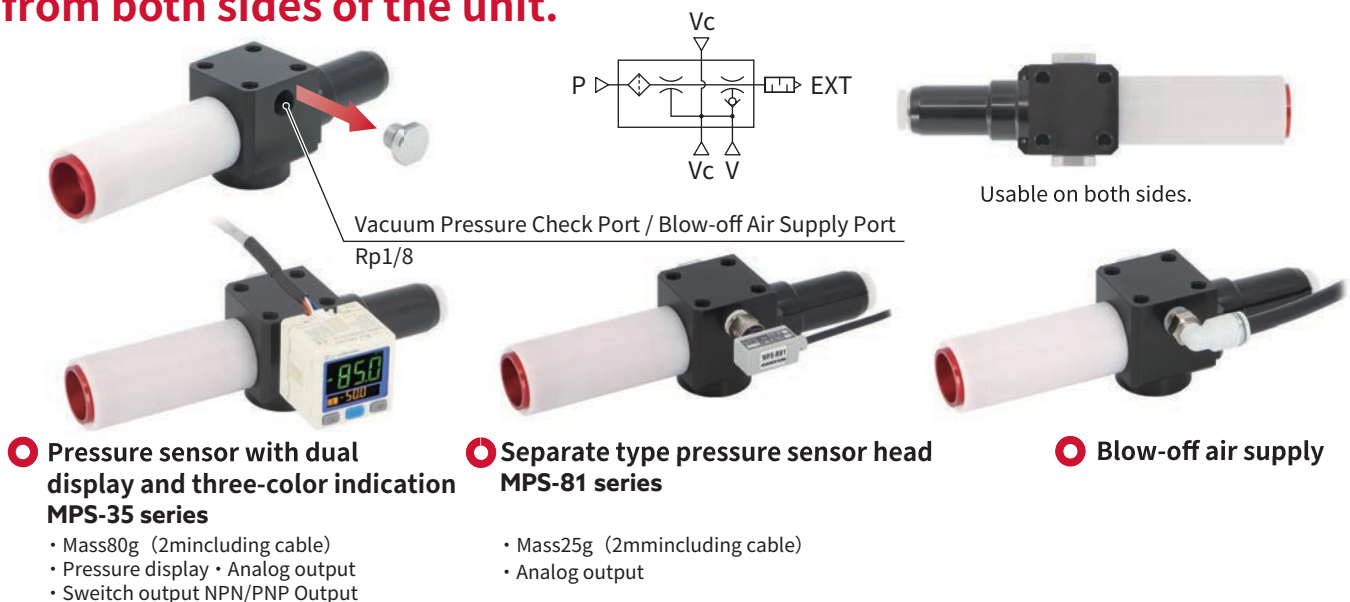
○ Suction for Corrugated Cardboard

Selectable nozzle stages to suit suction flow rate and installation space.



Note) The performance data shown are measured values obtained under our specific test conditions and are not guaranteed specifications. Please use them as a reference when selecting and using the product.

Pressure sensors can be mounted and blow-off air can be supplied from both sides of the unit.



Both pressure sensor installation and burst air supply can be performed. In such cases, ensure that the maximum allowable pressure of the pressure sensor is not exceeded. For pressure sensor specifications, refer to the pressure sensor catalog or instruction manual.

A suction cup can be directly mounted for use as a suction hand.

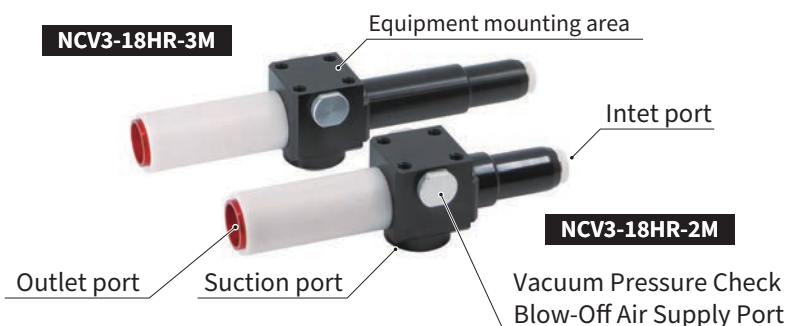


With no loss in the vacuum flow path from the ejector to the suction cup, the high suction flow rate can be fully utilized, making it ideal for breathable workpieces and workpieces such as bags prone to leakage due to wrinkles.

How to Order

NCV3-18HR-2M

① ② ③ ④



Model Number List • With cable

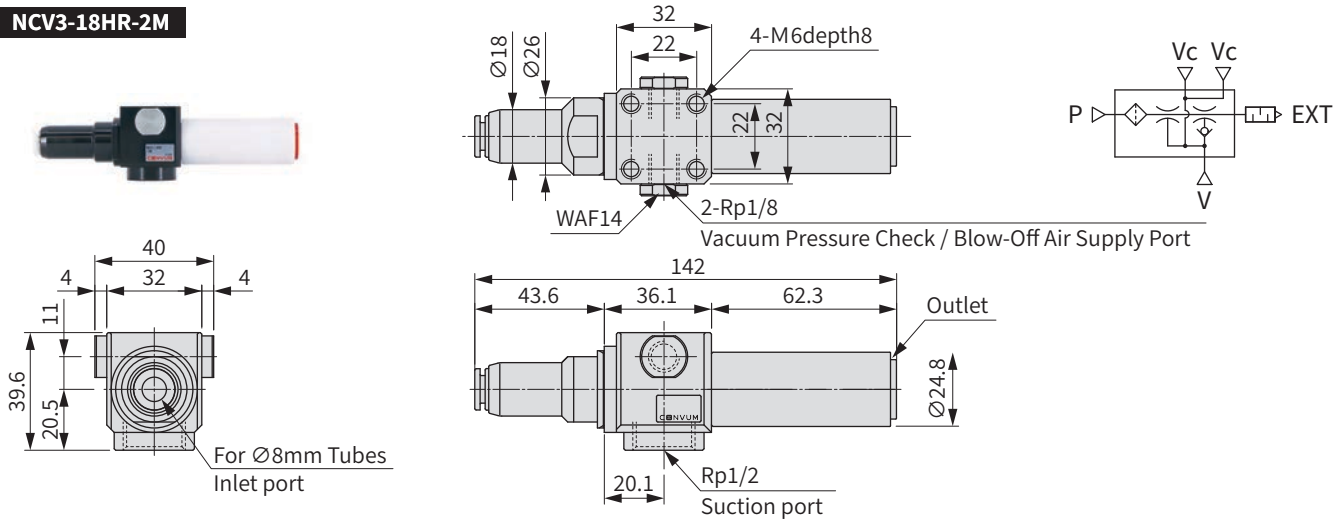
CODE	Model Number	Weight
205000001	NCV3-18HR-2M	131g
205000002	NCV3-18HR-3M	149g

Specifications

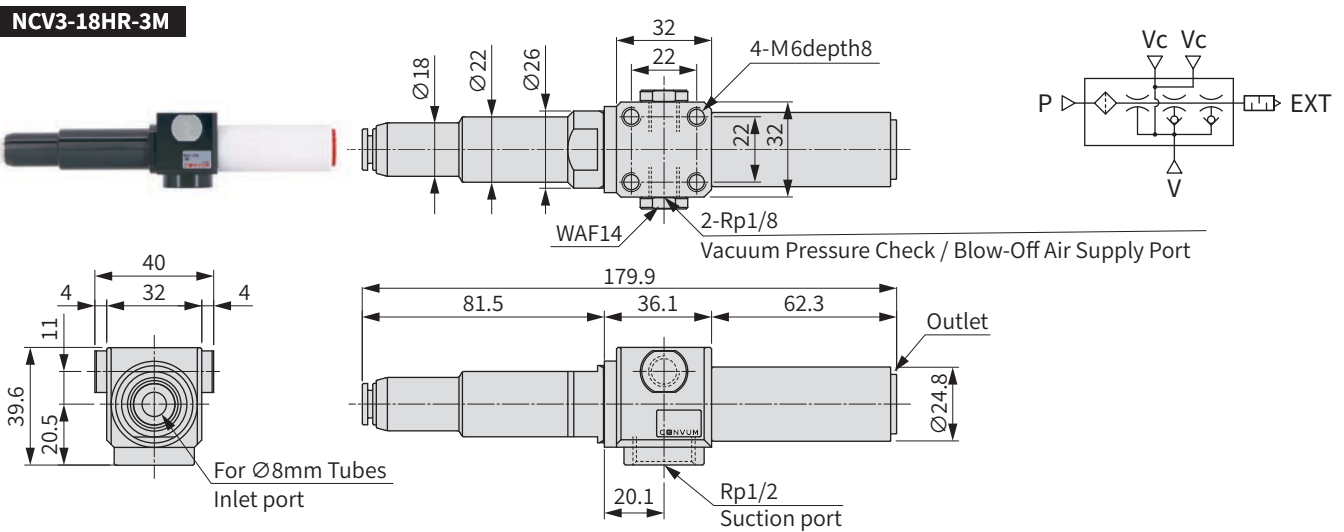
	Unit	NCV3-18HR-2M	NCV3-18HR-3M
Nozzle Type		High-Flow Multi-Stage nozzle (2-Stage)	High-Flow Multi-Stage nozzle (3-Stage)
Fluid		Non-lubricated compressed air	
Operating temperature	°C	0 ~ 50 (No Freezing)	
Operating pressure range	MPa	0.1 ~ 0.6	
Rated pressure	MPa	0.3	
Maximum vacuum pressure	kPa	-85	
Suction flow	L/min(ANR)	115	135
Air consumption	L/min(ANR)	120	
Inlet port		Push-in Connector for Ø8 mm Tubes	
Suction port		Rp1/2	

Dimensions

NCV3-18HR-2M

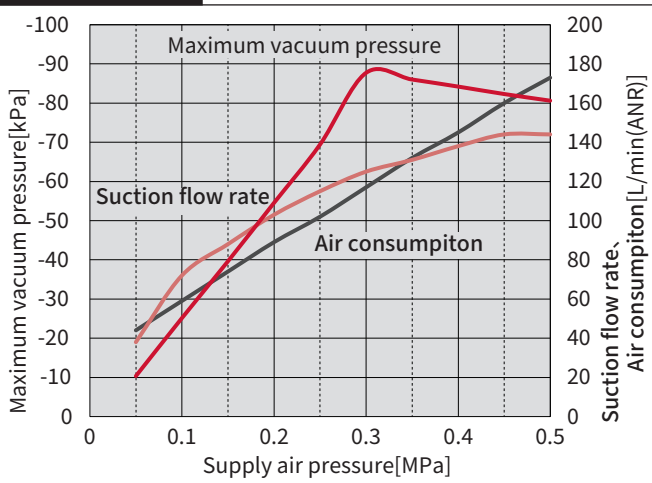


NCV3-18HR-3M

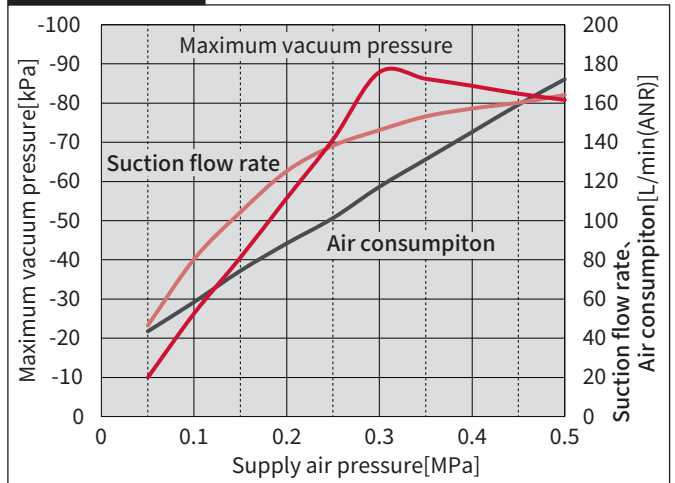


Ejector Performance

NCV3-18HR-2M



NCV3-18HR-3M



Note) The performance data shown are measured values obtained under our specific test conditions and are not guaranteed specifications. Please use them as a reference when selecting and using the product.

Suction cup attachment (Compatible with PLG and PMG mounting)

PL-30-G4-K-F

①

②

① Compatible cups

30	PLG-30/PMG-40
40	PLG-40/PMG-56
50	PLG-50

② Mesh Filter

Blank	N/A
-F	With



PL-30-G4-K



PL-40-G4-K



PL-50-G4-K

PL-30-G4-K

PL-30-G4-K-F



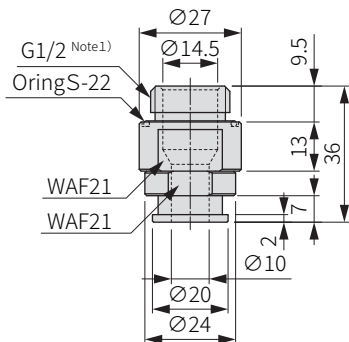
② Mesh Filter

Model Number • Weight

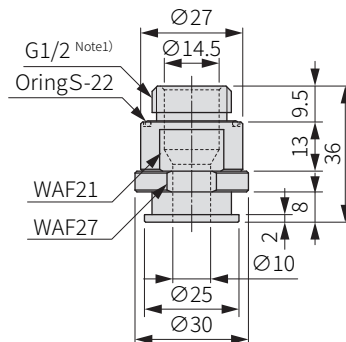
CODE	Model Number	Weight
318500087	PL-30-G4-K	26g
318500088	PL-30-G4-K-F	26g
318500089	PL-40-G4-K	32g
318500090	PL-40-G4-K-F	32g
318500091	PL-50-G4-K	39g
318500092	PL-50-G4-K-F	39g

Dimensions

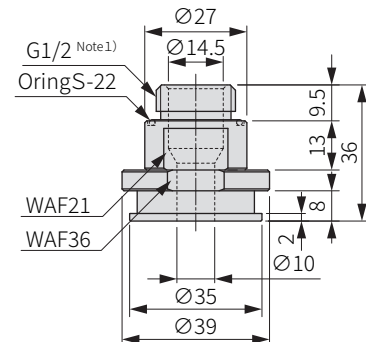
PL-30-G4-K



PL-40-G4-K



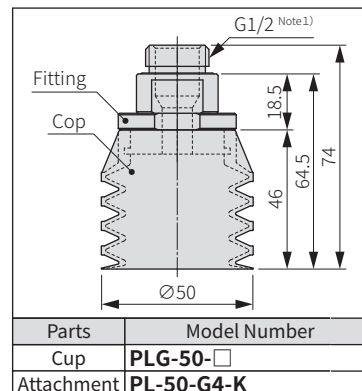
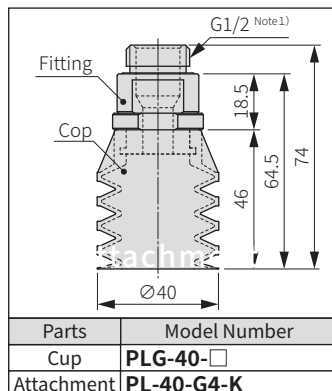
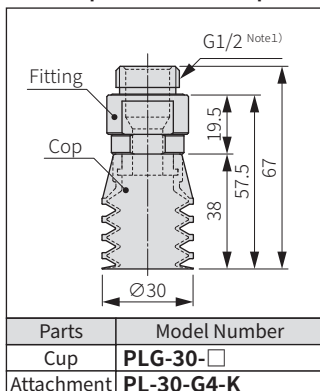
PL-50-G4-K



Note 1) Compatible with the NCV3 (Rp 1/2).

Dimensions – Suction Cup Attachment Assembly

● Multiple Bellows Cup (PLG series)



Note 1) Compatible with the NCV3 (Rp 1/2).

Note 2) -□ indicates the suction cup rubber material (S4, S5, or SM).

	Rubber Material	Hardness	Color	Ambient temperature ^{Note 3}
S4	Sillcome rubber	A 40	Light blue	-60~250°C
S5	Sillcome rubber	A 55	Milky White	-60~250°C
SM	Metal-Detectable Silicone Rub	A 55	Gray ^{Note 4}	-60~250°C

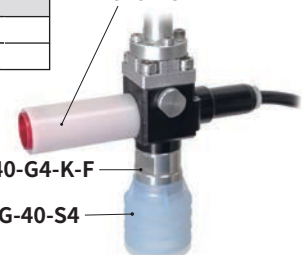
Note 3) Rubber properties may deteriorate significantly near the maximum and minimum operating temperatures. Be sure to conduct sufficient evaluation and verification before use. The operating temperature range of NCV3 is 0 to 50°C.

Note 4) Color unevenness may occur due to material characteristics. However, it has no influence upon the performance.

NCV3-18HR-2M

PL-40-G4-K-F

PLG-40-S4



Dimensions – Suction Cup Attachment Assembly

●Star-Shaped Cup (PMG series)

PMG-40(6-Lobed) Suction Surface		PMG-56(6-Lobed) Suction Surface		PMG-40N(10-Lobed) Suction Surface		PMG-56N(10-Lobed) Suction Surface	
Parts	Model Number	Parts	Model Number	Parts	Model Number	Parts	Model Number
Cup	PMG-40S-□	Cup	PMG-56S-□	Cup	PMG-40SN-□	Cup	PMG-56SN-□
Attachment	PL-30-G4-K	Attachment	PL-40-G4-K	Attachment	PL-30-G4-K	Attachment	PL-40-G4-K
Parts	Model Number	Parts	Model Number	Parts	Model Number	Parts	Model Number
Cup	PMG-40M-□	Cup	PMG-56M-□	Cup	PMG-40MN-□	Cup	PMG-56MN-□
Attachment	PL-30-G4-K	Attachment	PL-40-G4-K	Attachment	PL-30-G4-K	Attachment	PL-40-G4-K
Parts	Model Number	Parts	Model Number	Parts	Model Number	Parts	Model Number
Cup	PMG-40L-□	Cup	PMG-56L-□	Cup	PMG-40LN-□	Cup	PMG-56LN-□
Attachment	PL-30-G4-K	Attachment	PL-40-G4-K	Attachment	PL-30-G4-K	Attachment	PL-40-G4-K

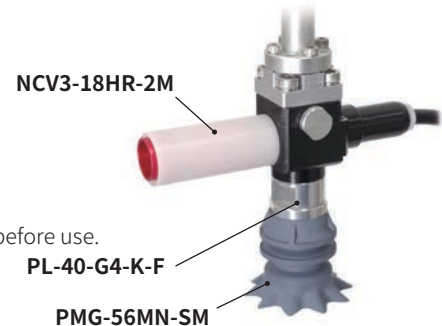
Note 1) Compatible with the NCV3 (Rp 1/2).

Note 2) -□ indicates the suction cup rubber material (S4, S5, or SM).

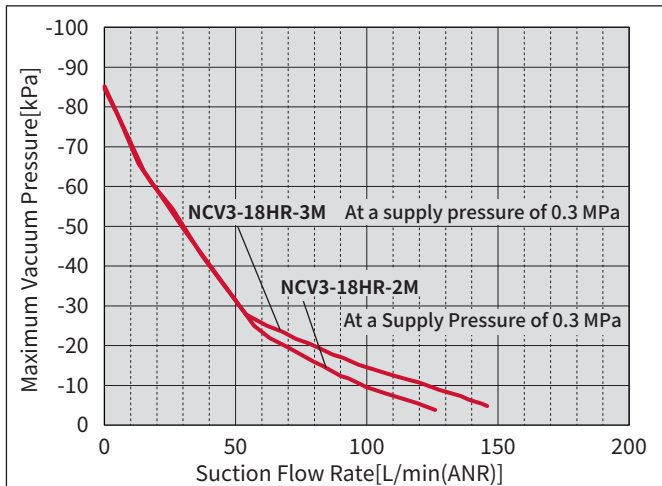
	Rubber Material	Hardness	Coior	Ambient temperature ^{Note 3)}
S4	Sillcome rubber	A 40	Light blue	-60~250°C
S5	Sillcome rubber	A 55	Milky White	-60~250°C
SM	Metal-Detectable Silicone Rubber	A 55	Gray ^{Note 4)}	-60~250°C

Note 3) Rubber properties may deteriorate significantly near the maximum and minimum operating temperatures. Be sure to conduct sufficient evaluation and verification before use. The operating temperature range of NCV3 is 0 to 50°C.

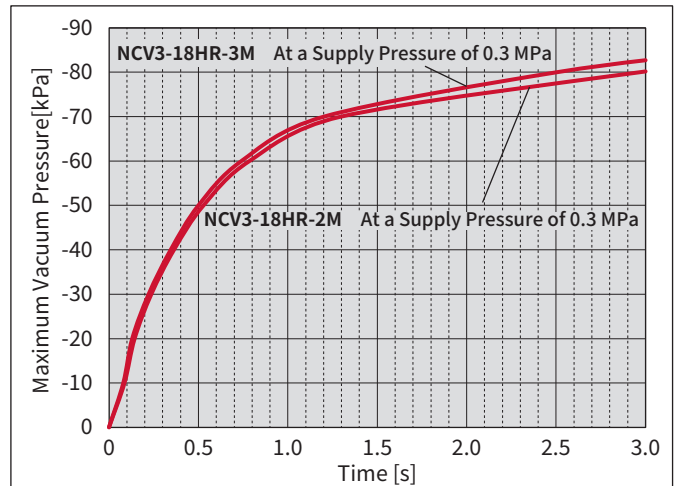
Note 4) Subject to color unevenness due to material characteristics. However, it has no influence upon the performances.



Suction Flow Rate - Ultimate Vacuum Pressure Characteristics



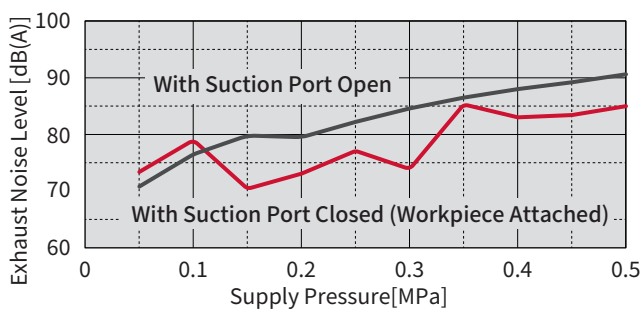
Response Time (Evacuation Time for a 1 L Tank)



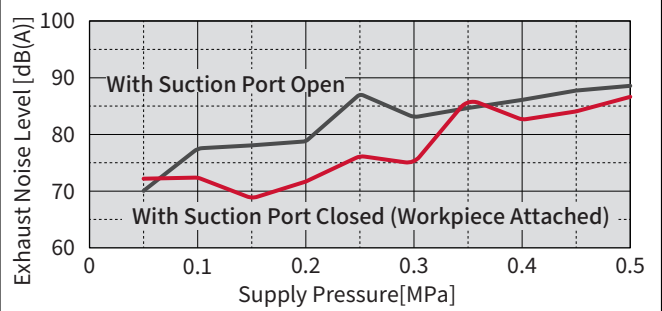
Note) The performance data shown are measured values obtained under our specific test conditions and are not guaranteed specifications. Please use them for reference when selecting and using the product.

Noise Level

NCV3-18HR-2M

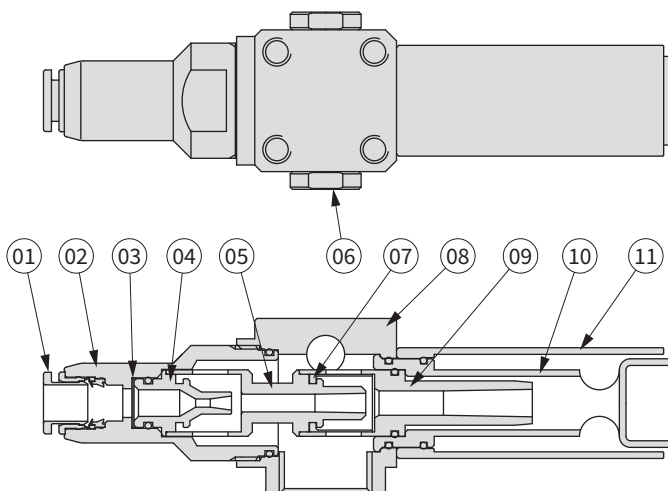


NCV3-18HR-3M



Note) The performance data shown are measured values obtained under our specific test conditions and are not guaranteed specifications. Please use them as a reference when selecting and using the product.

Construction Drawing



No.	Parts neme	Material
01	Push-in connector	Brass / PBT / Stainless Steel
02	Supply Port	Aluminum Alloy
03	Wire Mesh	Stainless Steel
04	Nozzle	Aluminum Alloy
05	Diffuser1	Aluminum Alloy
06	Plug	Aluminum Alloy
07	Check Valve	Hydrogenated NBR
08	Body	Aluminum Alloy
09	Diffuser2	Aluminum Alloy
10	Silencer Shaft	Aluminum Alloy
11	Silencer	POM
	O-ring	Nitrile rubber



Official website

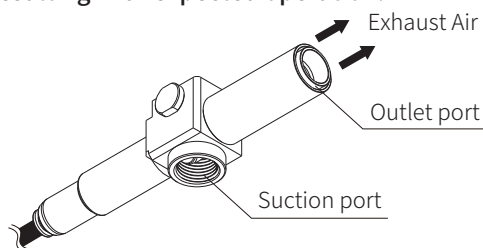
Before use, be sure to read the "For Safe Use" section in this catalog, the "General Precautions" and "Common Precautions for CONVUM Products" in the General Catalog, as well as the Instruction Manual for this product.

<https://www.convum.co.jp/english/index.html>

Handling and Use Precautions

⚠ Caution

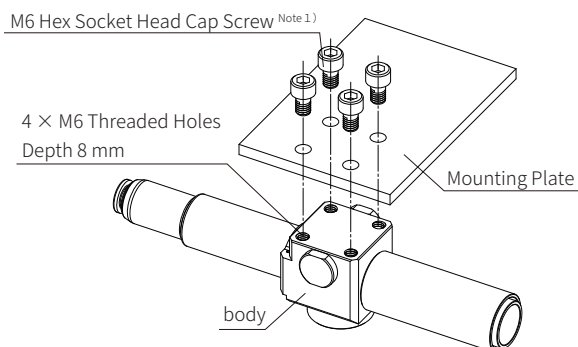
- Do not touch or place your hands near the suction port while the ejector is operating.
As this product has a large suction port and a high suction flow rate, there is a risk of injury due to suction. Always stop the product before performing any work on or around the product.
- Do not cover or block the exhaust port.
Doing so will create exhaust resistance and reduce vacuum performance.
It may also cause exhaust air to flow back into the suction port, resulting in unexpected operation.



- As this product incorporates a check valve, its service life is limited by the moving parts.
Operating conditions that place excessive load on the check valve, such as suction of foreign matter, exposure to chemicals or high concentrations of ozone, use in combination with other vacuum generators, or continuous suction over extended periods, may shorten the service life of the product.
If there is a risk of drawing in foreign matter, use a vacuum separator.

Mounting Method

- Use the threaded mounting holes on the top of the unit to secure it to the equipment.
For M6 bolts, the recommended tightening torque is 2.6 N · m.

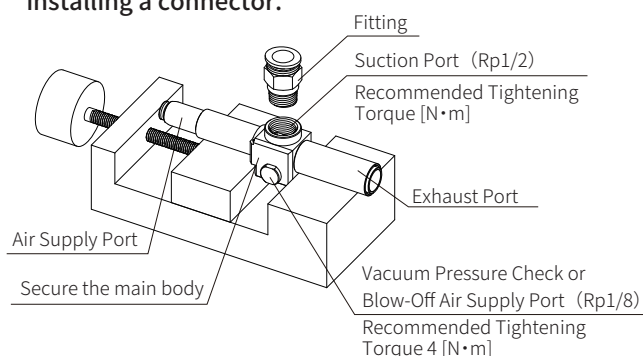


Note 1) M6 hex socket head cap screws are not included.
Please prepare them separately.

Tube and Connector Connection

⚠ Caution

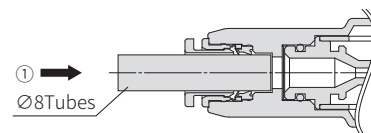
- When connecting a connector, secure the unit to the equipment or hold the main body securely with a vise or wrench.
Applying excessive torque while holding the air supply port or exhaust port may cause deformation or damage to the product. Always secure the main body before installing a connector.



- Connect an Ø8 mm tube to the push-in connector on the inlet port. To remove the tube, press the release ring of the push-in connector and pull the tube out.

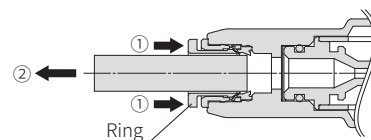
● Tube Connection

- Insert the Ø8 mm tube into the connector as far as it will go.



● Tube Removal

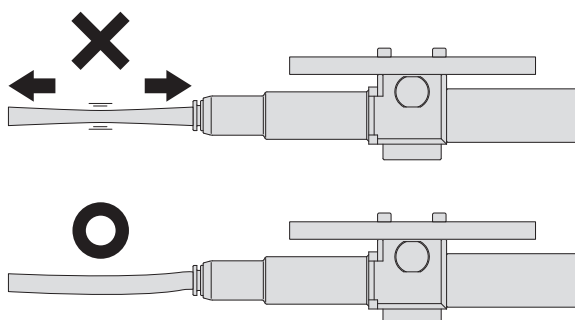
- Pull out the tube while pressing the ring.



Piping

⚠ Caution

- Do not use piping that applies excessive tension to the tube. Excessive force applied to the push-in connector may cause the tube to disconnect during operation or damage the push-in connector.



Safety Instructions

Be sure to read these precautions before use.

Also read and understand the safety instructions provided for each product series.

These safety instructions are intended to prevent personal injury and damage to equipment. Potential hazards are classified using the labels[DANGER],[WARNING], and[CAUTION]. All of these notices are important and must be observed.

 **DANGER** DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION** CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury, or property damage.

Please also refer to JIS B 8370*¹ and ISO 4414*². Please comply with the Industrial Safety and Health Law, the High Pressure Gas Safety Act, and other applicable safety regulations.

* 1 JIS B 8370 : Pneumatic fluid power — General rules relating to systems.

* 2 ISO 4414 : Pneumatic fluid power — Recommendations for the application of equipment to transmission and control systems.

Even the matters described under [CAUTION] may result in serious consequences depending on the circumstances.

All of these notices are important and must be observed.

WARNING

● Vacuum and pneumatic equipment shall be selected properly.

The compatibility of the vacuum and pneumatic equipment is the responsibility of the person who designs the equipment or decides its specifications.

Since the products specified here are used under various operating conditions, its compatibility with specific equipment must be decided by the person who designs the equipment or decides its specifications based on necessary analysis and test results.

The expected performance and safety assurance of the equipment will be the responsibility of the person who has determined its compatibility with the product.

This person should also continuously review all specifications of the product referring to its latest catalog information, with a view to giving due consideration to any possibility of equipment failure when configuring the equipment.

● Only personnel with appropriate training should operate machinery and equipment.

Inappropriate usage or handling may cause injury, equipment damage or indirect damage.

Vacuum and pneumatic equipment is intended for industrial use. The assembly, operation and maintenance of machinery or equipment including our products must be performed by an operator who is appropriately trained and experienced.

● Do not operate or reinstall the equipment or machine without first performing a safety check.

• When inspecting or adjusting the equipment, make sure to take measures against the dropping or uncontrolled movements of the actuators.

• Before reinstallation, make sure to switch off power and compressed air supply.

• Before restart, make sure that no parts can break off.

● Use this pneumatic equipment only in accordance with the specifications.

Contact CONVUM when using it outside the specifications.

• Environments outside the specifications, like using in outdoor applications.

• nuclear energy, railways, airplanes, railway cars, ships, medical equipment, food or beverage processing equipment, pharmaceutical equipment, emergency, cutout and similar devices with security issues.

• All machinery which in case of wrong handling or operating might pose hazardous effects on human life or property.

Warranty and Disclaimer

1、Warranty

① If a failure occurs during the warranty period and is determined to be the responsibility of CONVUM, we will provide a replacement product or the necessary replacement parts free of charge, or repair the product free of charge.

② The warranty period for our products is one year from the start of operation or 18 months from the date of delivery, whichever comes first.

However, some products may have specified durability limits, such as operating cycles or sliding distance. For details, please contact our Customer Support Center.

③ The suction cup is a consumable component. Therefore, the one-year warranty period from the start of operation does not apply, and the warranty period is one year from the date of delivery.

However, deterioration of the rubber material or wear resulting from the use of the suction cup is not covered by the warranty, even during the warranty period.

2、Disclaimer

① The warranty does not apply in the following cases:

• Use outside the specifications stated in this catalog or other specification documents.

• Failures caused by factors other than this product.

• Failures or damage resulting from modifications or any other causes not attributable to CONVUM.

• Failures caused by factors that could not reasonably have been foreseen based on the state of technical knowledge at the time of delivery.

• Failures or damage caused by natural disasters, accidents, actions of third parties, intentional acts or negligence by the customer, or other force majeure events.

② This warranty applies only to the product itself and does not cover any indirect, incidental, or consequential damages resulting from product failure.

Specifications are subject to change without notice.

For operating instructions and precautions, refer to our catalog and instruction manual.

For delivery lead times, please contact our Customer Support Center.

CONVUM Ltd.

6-18 Shimomaruko2-chome, Ohta-ku, Tokyo 146-0092, Japan
TEL +81-3-5741-7201

Contact Information
<https://convum.com/contact>



Official website



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Contact Information
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faq@convum.co.jp

2026.5.1