



Operating instructions

Sack Gripper PSSG

Note

The Operating instructions were originally written in German. Store in a safe place for future reference. Subject to technical changes without notice. No responsibility is taken for printing or other types of errors.

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1 Important Information

1.1 Note on Using this Document

J. Schmalz GmbH is generally referred to as Schmalz in this document.

The document contains important notes and information about the different operating phases of the product:

- Transport, storage, start of operations and decommissioning
- Safe operation, required maintenance, rectification of any faults

The document describes the product at the time of delivery by Schmalz and is intended for:

- Installers who are trained in handling the product and can operate and install it
- Technically trained service personnel performing the maintenance work
- Technically trained persons who work on electrical equipment

The displayed figures are only examples. Depending on the particular design, they can differ from the product.

1.2 The technical documentation is part of the product

1. For problem-free and safe operation, follow the instructions in the documents.
2. We recommend downloading and printing the Operating instructions from the following website: www.schmalz.com. The documentation must be accessible to personnel at all times.
3. Keep the technical documentation in close proximity to the product.
4. Pass on the technical documentation to subsequent users.
 - ⇒ Failure to follow the instructions in these Operating instructions may result in injuries!
 - ⇒ Schmalz is not liable for damage or malfunctions that result from failure to heed these instructions.

If you still have questions after reading the technical documentation, contact Schmalz Service at: www.schmalz.com/services

1.3 Type Plate

The type plate is permanently attached to the product and must always be clearly legible. It contains product identification data and important technical information.

The QR code enables access to the digital technical documentation for the product.

- ▶ For spare parts orders, warranty claims or other inquiries, have the information on the type plate to hand.

1.4 Symbols



This symbol indicates useful and important information.

- ✓ This symbol represents a prerequisite that must be met before an action is performed.
- ▶ This symbol represents an action to be performed.
- ⇒ This symbol represents the result of an action.

Actions that consist of more than one step are numbered:

1. First action to be performed.
2. Second action to be performed.

2 Fundamental Safety Instructions

2.1 Intended Use

The sack gripper variant PSSG is used to lift and transport sacks by means of a vacuum and has been developed especially for use on manual or automated handling devices (e.g. vacuum lifters).

The goods to be lifted should ideally be dry, airtight, rigid and have a smooth surface. Non-airtight or unstable objects must be tested for suitability before they are handled with a vacuum. Contamination of the products to be handled may impair functionality.

Neutral gases in accordance with EN 983 are approved as evacuation media. Neutral gases include air, nitrogen and inert gases (e.g. argon, xenon and neon).

The product is built in accordance with the latest standards of technology and is delivered in a safe operating condition; however, hazards may arise during use.

The product is intended for industrial and commercial applications.

Intended use includes observing the technical data and the installation and operating instructions in this manual.

2.2 Non-Intended Use

Schmalz accepts no liability for damage caused by the use of the gripper for purposes other than those described under Intended Use. Use of the gripper for loads that are not specified in the order confirmation or that have different physical properties than those specified in the order confirmation shall be considered non-intended use.

In particular, the following are considered non-intended use:

- Handling of damaged loads
- Handling hazardous goods or liquids.
- Transport and through-suction of potentially explosive materials
- Using as a climbing aid
- Use as a vacuum cleaner
- Lifting people or animals
- Storing loads while picked up
- Supporting the lifting force by applying external forces
- Applying suction to building components, equipment or supporting surfaces
- Lifting loads at an angle or breaking loads free
- Applying suction to liquids.
- Applying suction to bulk materials (e.g. granulates)
- Evacuation of objects that are in danger of imploding
- Removing building components or fixtures.

2.3 Personnel Qualification

Unqualified personnel cannot recognize dangers and are therefore exposed to higher risks!

1. Only instruct qualified personnel to perform the tasks described in these operating instructions.
2. The product may only be operated by persons who have undergone appropriate training.
3. Electrical work and installations may only be carried out by qualified electrical specialists.
4. Assembly and maintenance work must only be carried out by qualified personnel.

2.4 Warnings in This Document

Warnings warn against hazards that may occur when handling the product. The signal word indicates the level of danger.

Signal word	Meaning
 WARNING	Indicates a medium-risk hazard that could result in death or serious injury if not avoided.
 CAUTION	Indicates a low-risk hazard that could result in minor or moderate injury if not avoided.
NOTE	Indicates a danger that leads to property damage.

2.5 Residual Risks



CAUTION

Shearing off of the load due to collision with surrounding objects

Risk of injury!

- ▶ Ensure that no obstacles or interference contours are present within the working zone during handling.



CAUTION

Risk of injury due to exposed suction points and compressed air lines

- ▶ Do not place eyes, ears or hands into suction points and compressed air lines.
- ▶ Do not bring exposed suction points and compressed air lines close to eyes or body orifices.
- ▶ Do not place suction plates/suction cups on the human body.



WARNING

Suspended load

Risk of injury!

- ▶ Do not walk, stand or work under suspended loads.



CAUTION

Falling objects due to a sudden drop in vacuum (e.g. a power failure)

Risk of injury from falling parts!

- ▶ Wear protective work shoes (S1).

**⚠ CAUTION****Vacuum close to the eye**

Severe eye injury!

- ▶ Wear eye protection.
- ▶ Do not look into vacuum openings such as suction lines and hoses.

**⚠ CAUTION****High noise level due to leaks between load and suction cup**

Hearing damage!

- ▶ Measure the noise level with typical loads.
- ▶ Depending on the load surface, noise levels may occur that require hearing protection.

2.6 Technical Condition / Manufacturer's Liability

If the product is operated while in a defective state, safety and function will be impaired.

- If the operating behavior changes, check the product for faults. Rectify faults immediately!
If the fault cannot be rectified immediately, shut down the product and mark it as faulty.

Schmalz assumes no liability for consequences if the following points have not been complied with:

- The product must only be operated when in perfect technical working order – i.e., in its original condition.
- Follow the maintenance plan (> See ch. Maintenance).
- Only use original Schmalz spare parts and accessories.
- Unauthorized conversion or modification of the product is prohibited.
- Safety features must not be disabled under any circumstances.

3 Variants

The variants differ based on:

- The size of the suction area
- The type of vacuum supply
- The material of the sealing ring

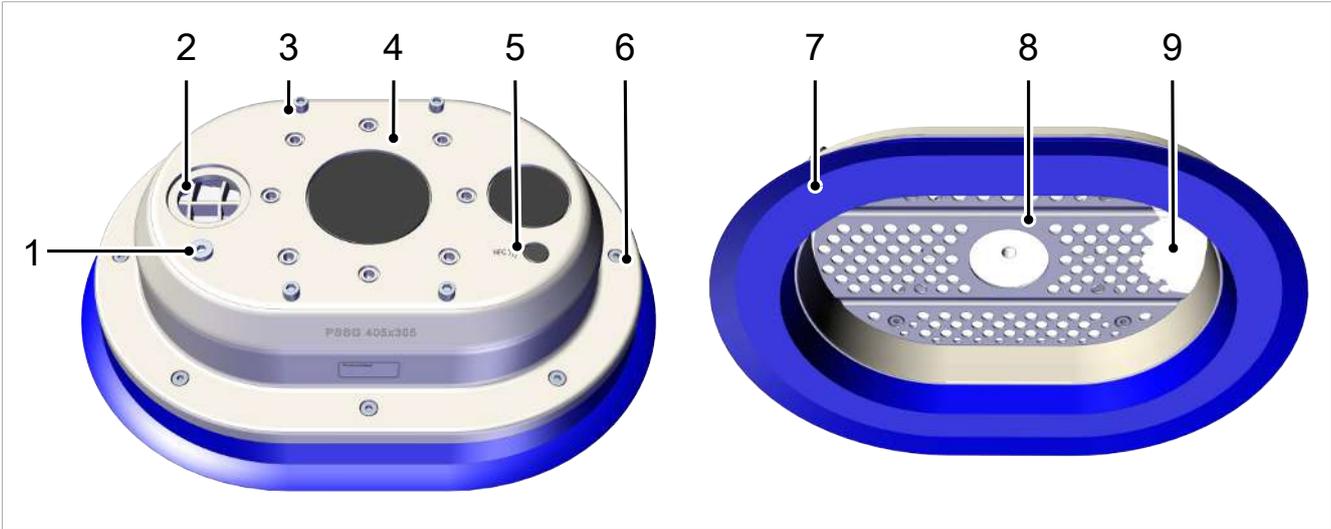
Product key

Example: PSSG M 290x215 NBR-60 M6-IG

Property	Value
Abbreviated designation	PSSG
Vacuum generation	M = external X = internal
Size	290 x 215 mm 350 x 250 mm 405 x 305 mm
Sealing ring material	NBR-60 SI-55
Connection thread	M6 int. thread

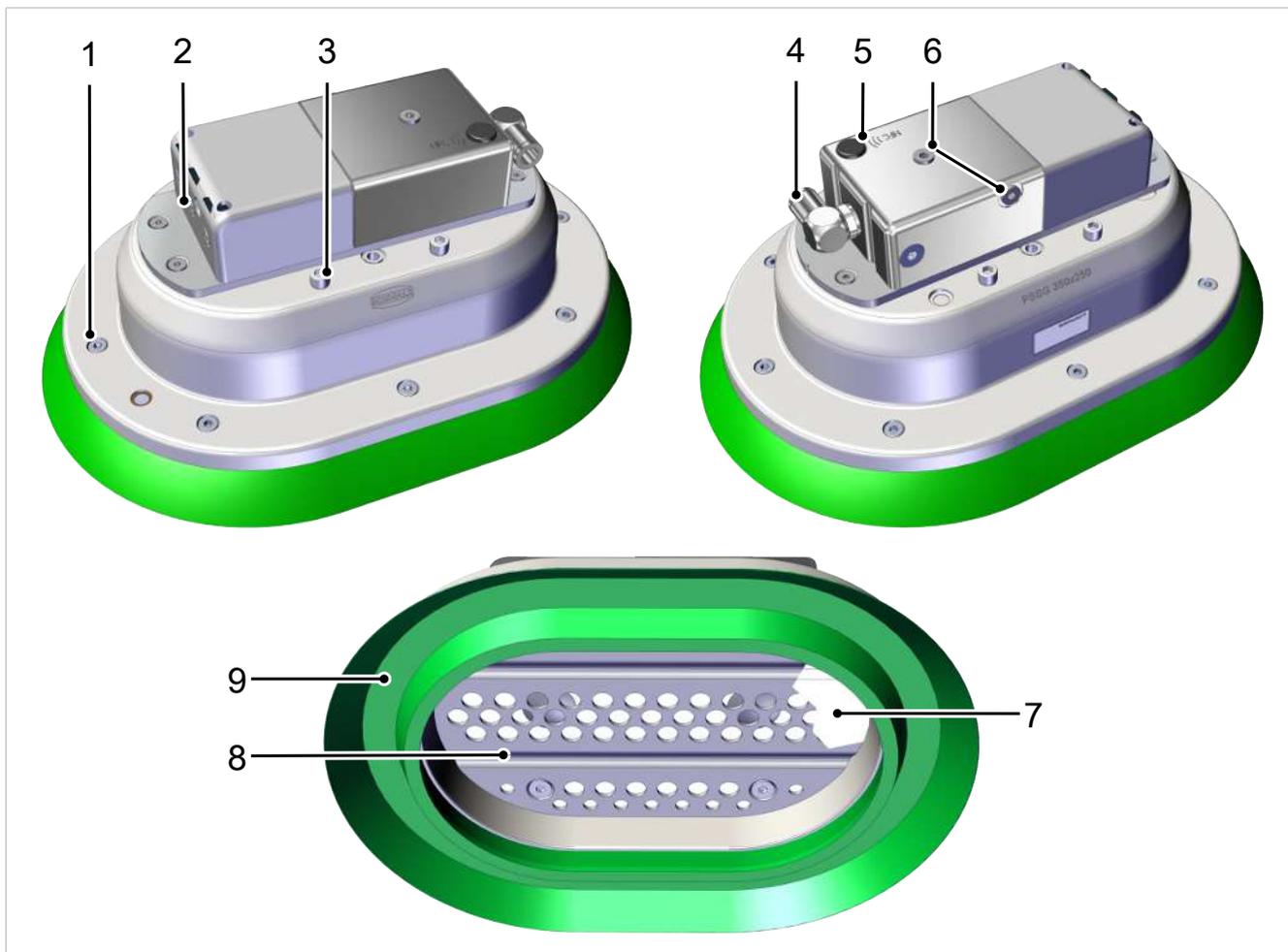
4 Product Design

Variant M with external vacuum generation



1	Sealing screw (opening for vacuum measurement)	6	Sealing ring fastening screws
2	Vacuum connection	7	Sealing ring
3	M6 fastening screw with sealing ring, 4x, for connecting a flange module	8	Support grid
4	Housing	9	Filter plate
5	NFC symbol		

Variant X with internal vacuum generation



1	Sealing ring fastening screws	6	Connection options for vacuum measurement
2	Exhaust air outlets	7	Filter plate
3	M6 fastening screw with sealing ring, 4x, for connecting a flange module	8	Support grid
4	Compressed air connection 10/6	9	Sealing ring
5	NFC symbol		

5 Interface NFC

NFC (Near Field Communication) refers to a standard for wireless data transfer between different devices over short distances.

The device functions as a passive NFC tag that can be read or written to by a reading device such as a smartphone or tablet with NFC activated. Read access to the device parameters via NFC is also possible when the supply voltage is not connected.

Read-only access is available through a website viewed in a browser.

This does not require an additional app.

The reading device requires only that NFC and the Internet connection are enabled.

Process control via NFC is not possible.

- ▶ For the best data connection, position the reading device at the attached NFC symbol.



The reading distance is very short for NFC applications. If necessary, find the position of the NFC antenna in the reading device used.

6 Technical Data

6.1 General Parameters

Parameter	Symbol	Limit value		Comment
		min.	max.	
Working temperature	T _{amb}	0° C	55° C	—
Storage temperature	T _{sto}	00° C	25° C	—
Workpiece temperature	T	—	70° C	—
Humidity	H _{rel}	10% r.h.	90% r.h.	Free from condensation

6.2 Variant-specific Technical Data

Type	Recommended max. lift capacity ¹⁾	Volume	Mass Variant M	Mass Variant X
PSSG 290x215	15 kg	1794 cm ³	1.13 kg	2.12 kg
PSSG 350x250	30 kg	3127 cm ³	1.66 kg	2.3 kg
PSSG 405x305	50 kg	5315 cm ³	2.30 kg	—

¹⁾The recommended lift capacity information is based on a theoretical design using the effective suction area of the sack gripper. Depending on the workpiece surface, filling level, properties and environmental conditions, there may be deviations from the recommendation.



Tests using the workpiece always need to be carried out in the relevant application!

Technical data for the integrated vacuum generation (for X variant)

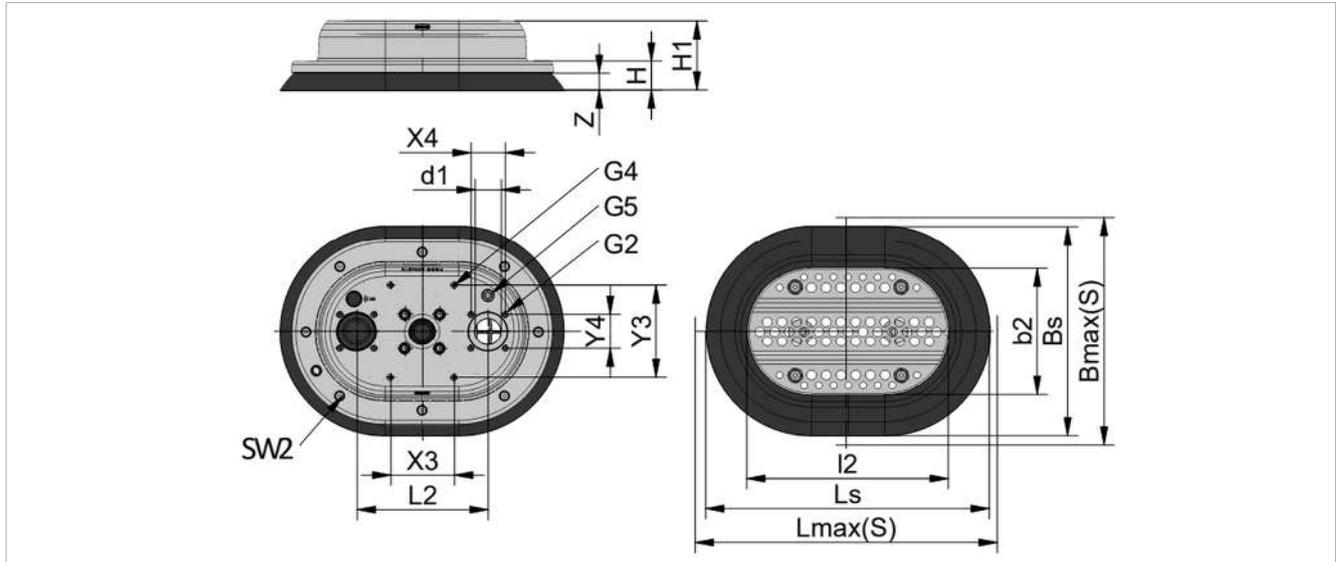
Rec. internal hose diameter on compressed air side	6 mm
Pressure range (operating pressure)	3.0 to 6.0 bar
Opt. operating pressure	4.5 bar
vacuum at an operating pressure of 4.5 bar ¹⁾	610 mbar
Sound level unobstructed ¹⁾	71 dB (A)
Sound level with suctioned workpiece ¹⁾	60 dB (A)
Suction rate (max.)	21 m ³ /h
	350 l/min
Suction air consumption	13.2 m ³ /h
	222 l/min
Number of stages	2
Number of ejector modules	3
Nozzle size	1.3 mm
Design of ejector modules	High Flow
Operating medium on compressed air side	Class 7-4-4 compressed air quality in accordance with ISO 8573-1
Operating medium on the vacuum side	Neutral gases in accordance with EN 983 are approved as evacuation media

¹⁾ The actual value may vary depending on the workpiece.

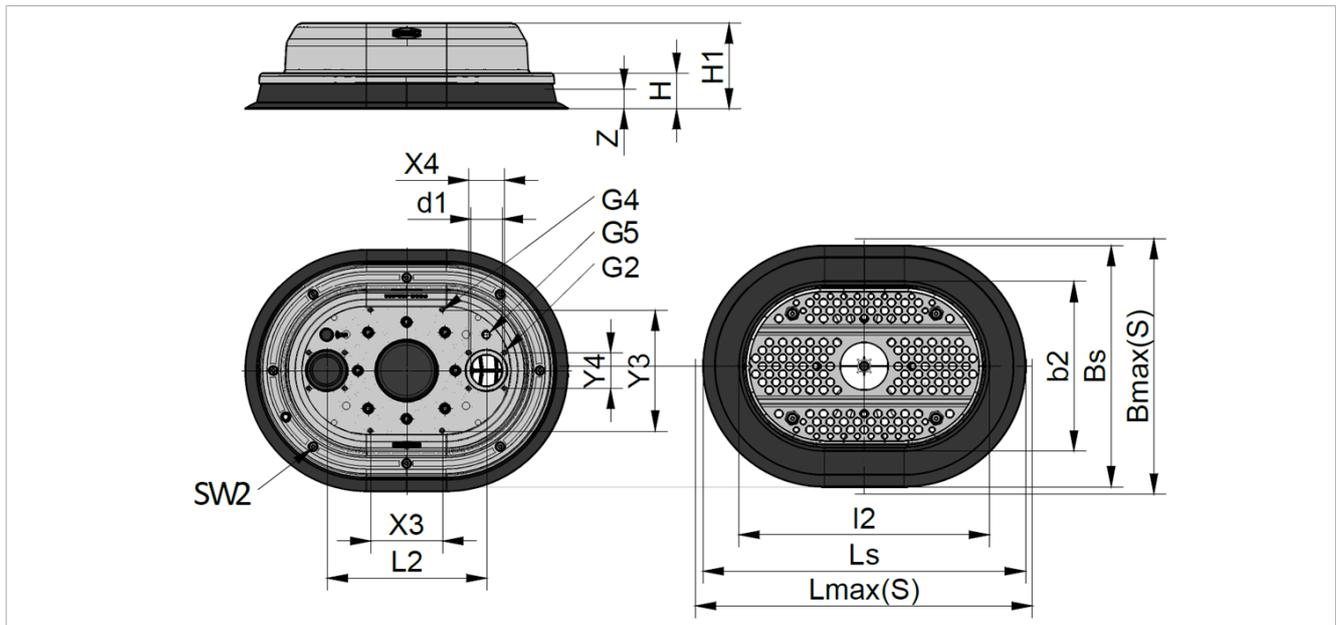
6.3 Dimensions

Variant M with external vacuum generation

PSSG 290x215



PSSG 350x250 and 405x305

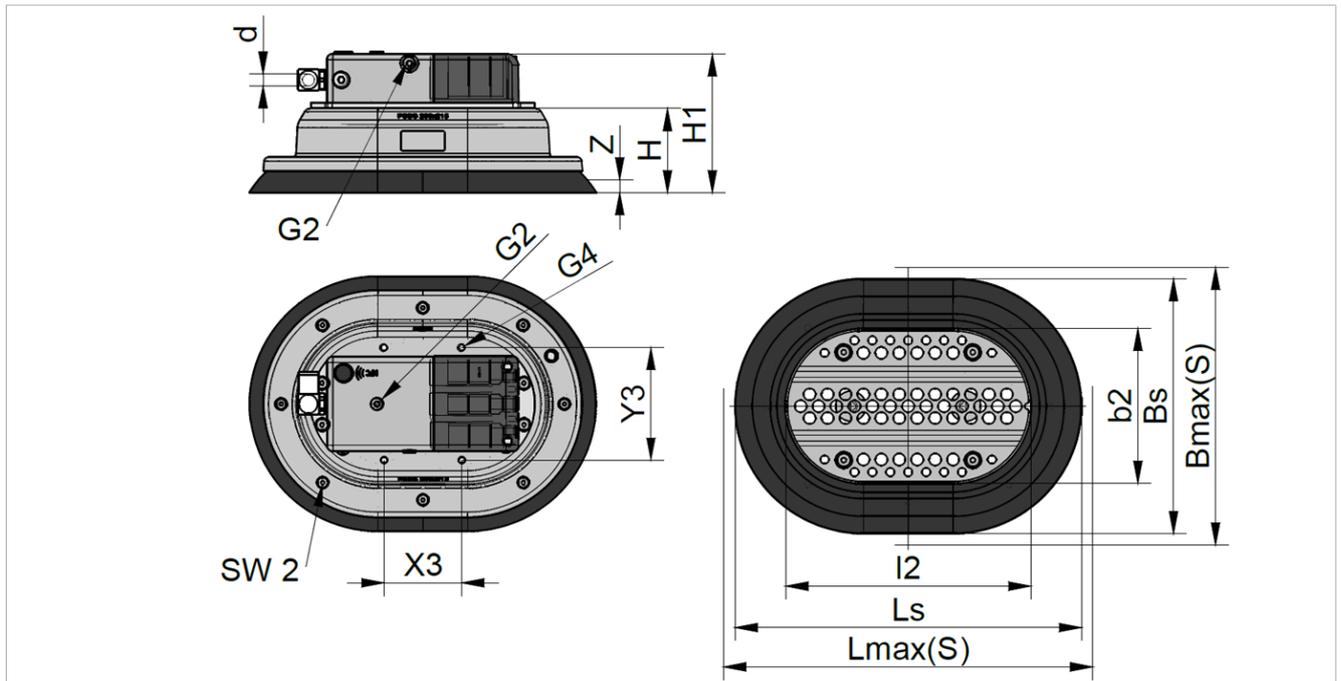


Size	B	H	H1	Ls	Bs	I2	b2	Lmax(S)	Bmax(S)	SW2
290x215	11	30	72	290	215	206	131	295	220	3
350x250	17	38	91	350	250	243	143	357	257	4
405x305	25	45	108	405	305	313	213	415	315	4

Size	G2	G4	G5	L2	X3	X4	Y3	Y4	d1
290x215	M5 int. thread	M6 int. thread	M5 int. thread	134	65	35	95	35	26.5
350x250			M5 int. thread	155	65	35	105	35	26.5

Size	G2	G4	G5	L2	X3	X4	Y3	Y4	d1
405x305			1/8" internal thread	200	90	45	152.5	45	39.5

Variant X with internal vacuum generation



Size	B	H	H1	Ls	Bs	I2	b2	Lmax(S)	Bmax(S)
290x215	11	71	118	290	215	205	131	295	220
350x250	17	91	137	350	250	243	143	357	257

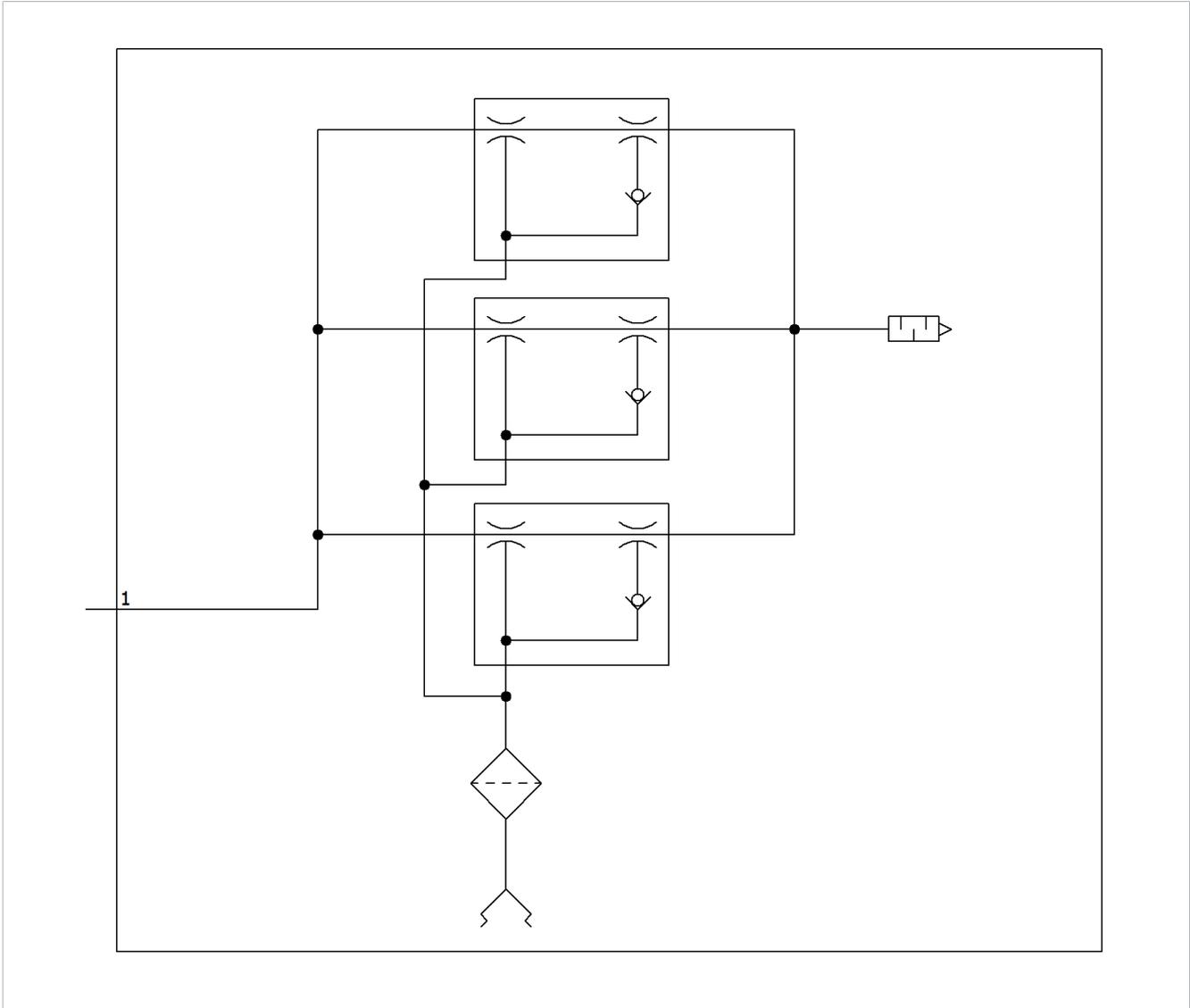
Size	d	SW2	G2	G4	X3	Y3
290x215	10	3	M5 int. thread	M6 int. thread	65	95
350x250		4			65	105

All dimensions are specified in the unit "mm".

6.4 Pneumatic Circuit Diagram

Key:

1 | Compressed air connection



7 Transportation and Storage

7.1 Checking the Delivery

The scope of delivery can be found in the order confirmation. The weights and dimensions are listed in the delivery notes.

1. Compare the entire delivery with the supplied delivery notes to make sure nothing is missing.
2. Damage caused by defective packaging or occurring in transit must be reported immediately to the carrier and J. Schmalz GmbH.

7.2 Storage of Suction Cups and Other Elastomer Products



NOTE

The effects of ozone, light (especially UV), heat, oxygen, humidity as well as mechanical influences can reduce the service life of rubber products.

Damage to the suction plates due to incorrect storage!

- ▶ You must store rubber parts such as suction cups and suction plates in a cool place (0° C to +15° C, max. 25° C) that is dark, dry, low in dust and that offers protection from the weather, ozone and drafts. They should also be free of tension (e.g. stacked appropriately to avoid deformation).



NOTE

Damage to suction cups or sealing material due to inappropriate storage position!

- ▶ Do not set the gripper down on the sealing ring.

For the elastomer parts, observe the following storage regulations in accordance with DIN 7716 and ISO 2230:

- Suction cups must be protected against light and air during storage. Airtight, sealed containers can be used for this purpose. Alternatively, they may be stored in airtight plastic bags in small load carriers or boxes with covers (e.g. a dark intermediate layer).
- The storage temperature should be between 0° C and 25° C.
- Suction cups must be packaged and stored free of voltage. This applies to shipping packaging as well.
- Solvents, fuels, lubricants, chemicals, acids, disinfectants, and other volatile substances stored in containers that are not gas-tight may not be stored in the same storage room as suction cups.

8 Installation

8.1 Installation Instructions



⚠ CAUTION

A strong vacuum is produced on the suction cup and suction lines.

Hair, skin, body parts and items of clothing can be sucked in.

- ▶ Wear protective glasses and tight-fitting clothing.
- ▶ Use a hairnet if necessary.
- ▶ Do not look or reach into the suction cup openings.



⚠ CAUTION

Noise pollution due to incorrect installation of the pressure and vacuum connections

Hearing damage!

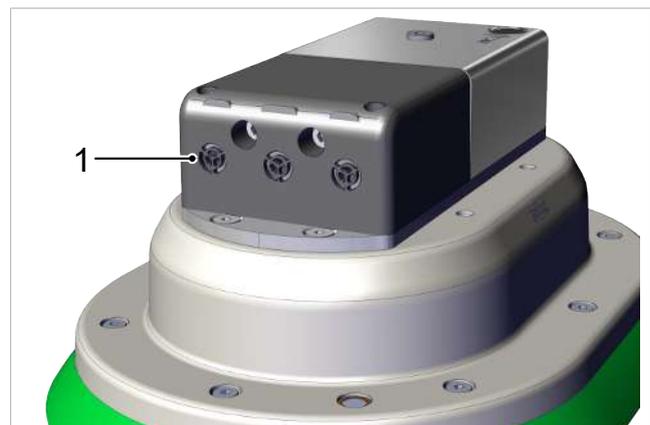
- ▶ Correct installation.
- ▶ Wear ear protectors.

Take note of the following when mounting:

- Use only the provided connections and mounting threads.
- Dirt particles or foreign bodies in the suction plate connections, hoses or pipelines can lead to malfunctions or failure.
- Shorten the hoses and pipelines as much as possible.
- Evacuation time is increased if the selected internal diameter of the hoses or pipelines is too short.
- Hose lines must be laid without bends or crimps.

Only relevant for variant X

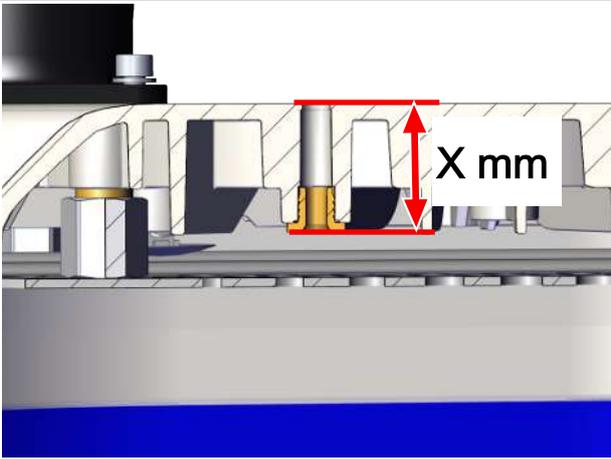
When mounting the device, ensure that the area around the exhaust outlet (1) remains free to ensure the unimpeded discharge of the escaping air.



8.2 Mechanical Attachment

You adapt the sack gripper to a handling device.

Size-M6 threaded inserts are installed in the housing for this purpose. To determine the required screw length, take the following dimensions into account in the design:

Size	Depth X , mechanical connection	Sketch
290x215	17 mm	
350x250	20 mm	
405x305	28 mm	

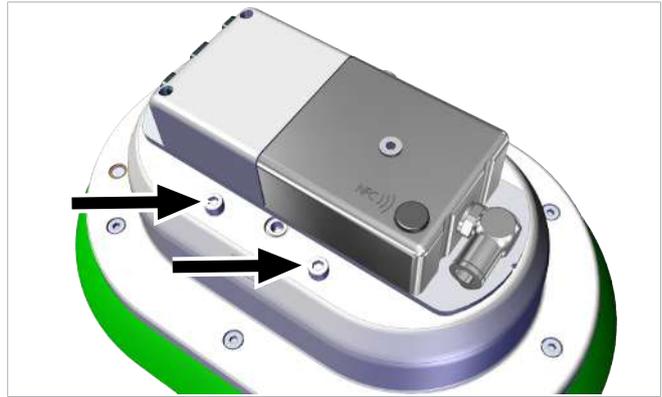
Variant M:

- ▶ Use the four G4 female threads (M6) with a max. tightening torque of 2 Nm. Ensure that all four screws are always used and that the thread depth is considered when selecting the screws.



Variant X:

- ▶ Use the four G4 female threads (M6) with a max. tightening torque of 2 Nm. Ensure that all four screws are always used and that the thread depth is considered when selecting the screws.

**8.3 Pneumatic Connection of the Product**

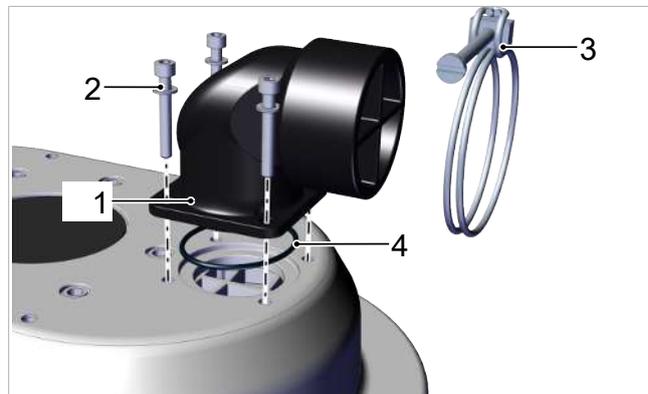
The illustrations shown below may deviate from the customer's version because they serve as examples of different versions of the product.

Variant M:

Use a vacuum hose to connect the variant with an external vacuum supply to the vacuum generator via the vacuum connection.

Except for the required vacuum hose, all the components required for the vacuum connection are included in delivery.

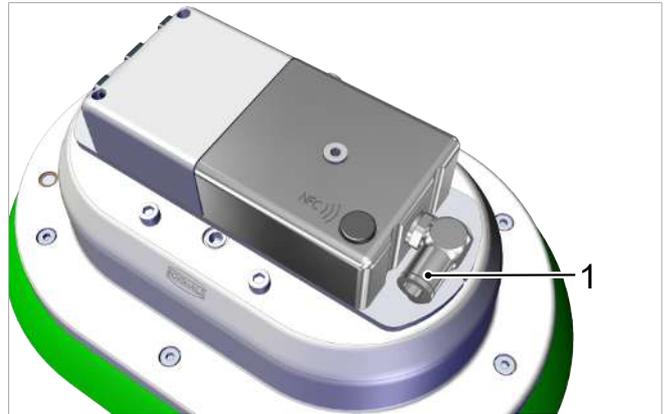
1. Insert the O-ring (4) into the connecting component (1).
2. Use the four fastening screws (2) and washers to attach the connecting component (1) to the gripper with the desired orientation. The max. tightening torque is 2 Nm.
3. Slide the hose clamp (3) over the vacuum hose.
4. Slide the vacuum hose over the connecting component (1) and fasten with the hose clamp (3).



Variant X:

Connect the variant with the internal vacuum supply via the compressed air connection.

- ▶ Connect the size-10/6 compressed air hose to the plug connector (1).



9 Before Initial Start of Operations

Before the initial start of operations following installation, repair, servicing or maintenance work, you must check the following:

- Check the device for visible damage. Correct any faults or report them to the supervising personnel.
- All mechanical connectors are properly attached and secured.
- All screws and nuts are tightened to specified torques.
- The supply hoses are properly routed.
- The EMERGENCY STOP switch for the overall system is working.



⚠ CAUTION

Noise pollution due to incorrect installation of the pressure and vacuum connections

Hearing damage!

- ▶ Correct installation.
- ▶ Wear ear protectors.



⚠ CAUTION

Vacuum close to the eye

Severe eye injury!

- ▶ Wear eye protection.
- ▶ Do not look into vacuum openings, e.g. suction cups.



⚠ CAUTION

Risk of crushing if the suction cup is abruptly attached to the load!

- ▶ Do not place any body parts between the suction cup and load.



Before full implementation, testing using original samples is recommended. Schmalz can perform these tests on your behalf.

10 Maintenance and Cleaning

10.1 Maintenance Schedule



Schmalz stipulates the following checks and inspection intervals. The operator must comply with the legal regulations and safety regulations applicable at the location of use. These intervals apply to single-shift operation. For heavier use such as multi-shift operation, the intervals must be shortened accordingly.

Key: w = weekly / m = monthly / 3m = quarterly / 6m = every six months / 12m = annually

Maintenance task	w	m	3m	6m	12m
Check the general condition of the overall system, particularly the gripper. Perform a visual inspection for damage.	X				X
Clean the sealing ring.	X				X
Check the sealing lip of the sealing ring for wear and cracks.	X				X
Check the legibility of the type plate. Clean if necessary.					X
Check the condition of the hose connections. Replace fragile, kinked, leaking hoses.			X		X
Check the screw unions and plug connections for tightness and leakage.			X		
The operating instructions are available, legible, and can be accessed by personnel.					X

Variant X only

Maintenance task	w	m	3m	6m	12m
Check the operating pressure.		X			X
Check the max. vacuum level of the vacuum generator.	X				X
Check ejector modules for dirt and wear; clean or replace them if necessary.		X			
Check the silencer.			X		

10.2 Cleaning the Product/Sealing Ring

Only use cleaning agents with a pH between 7 and 12.



NOTE

Aggressive cleaning agent

Damage to the suction plates and vacuum hoses!

- ▶ Clean suction plates only with an agent containing active tensides.
- ▶ Also clean mechanically (soft brush or ultrasonic).
- ▶ Do not use aggressive cleaning agents such as cold cleaners, carbon tetrachloride, hydrocarbons or vinegar-based cleaning products.
- ▶ Do not use sharp-edged objects (wire brushes, sandpaper, etc.).

Clean and check the suction cup/sealing ring at least once a week:

1. Remove clinging matter and dirt such as adhesive, glue, chips, and dust from the suction cup/sealing ring.
2. Allow to dry at room temperature.
3. Check the suction cup/sealing ring for damage such as cracks, holes, corrugation or non-uniformity of the sealing lip.
4. Replace the damaged or worn suction cup/sealing ring immediately.

10.3 Replacing the Sealing Ring**NOTE****Sharp objects cause damage to rubber components.**

Damage and malfunction

- ▶ Do not use sharp objects (e.g. screwdriver, etc.) to mount or disassemble rubber components.

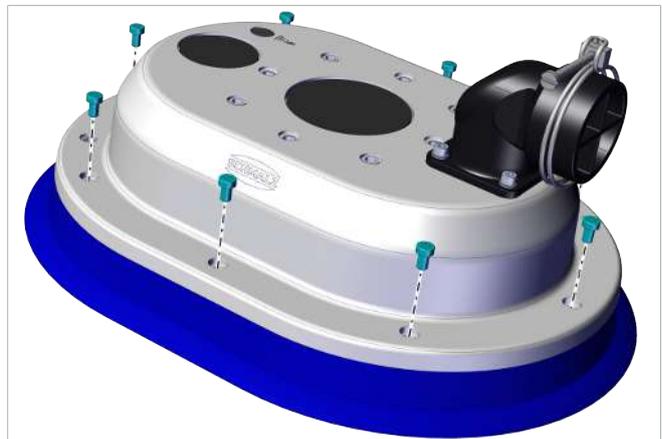
The sealing ring sustains various degrees of wear depending on the application and is thus considered a wearing part.

The following section describes how to replace a worn sealing ring.

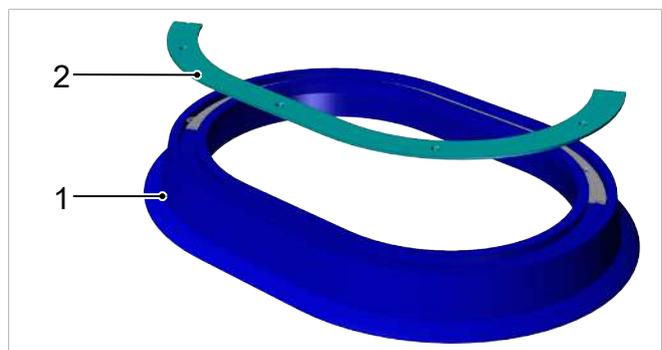
Removing the Worn Sealing Ring from the Suction Cup Connection Disc:

- ✓ Deactivate the device and depressurize the pneumatic systems.

1. Loosen and remove the screws.



2. Remove the sealing ring (1) from the housing and remove the two metal inserts (2).



3. Mounting is carried out as described above but in the reverse order. Tighten the screws with a tightening torque of 2.5 Nm.

10.4 Cleaning or Replacing the Filter Plate

If there is a large amount of dust, oil, and so on, in the air that is drawn in, the filter plate becomes soiled over time. This leads to a reduction in the suction capacity of the sack gripper.

To clean or replace the filter plate, perform the following work steps:

- ✓ Deactivate the device and depressurize the pneumatic systems.

1. Release and remove the four M5 screws from the support grid.



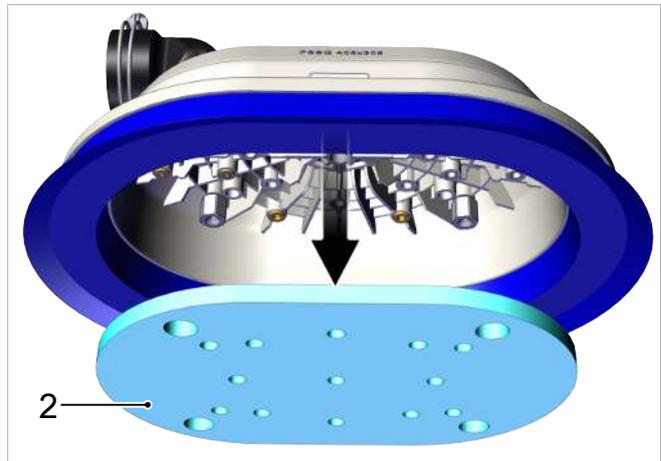
2. Remove the support grid (1).



3. Remove the four mounting clips.



4. Remove the filter plate (2).



5. Install the cleaned or new filter plate in the reverse order.
The maximum tightening torque for the four M5 screws on the support grid is 1.5 Nm.
6. Connect the product to the supply lines.
7. Before starting the handling process, check to ensure proper installation and function.

10.5 Adjusting the Support Grid

The height of the support grid can be adjusted. The height depends on the products that need to be handled. It is adjusted using four spacer screws with fixed heights. The spacer screw with the lowest height is installed as standard.

To adjust the support grid, replace the four spacer screws accordingly.

- ✓ Deactivate the device and depressurize the pneumatic systems.
 - ✓ The new spacer screws are ready (> [See ch. 12 Spare and Wearing Parts, p. 33](#)).
1. Perform work steps 1 and 2 from the chapter on cleaning the filter plate (> [See ch. 10.4 Cleaning or Replacing the Filter Plate, p. 27](#)).

2. Release and remove the four spacer screws.



3. Install the four spacer screws with the desired height. The max. tightening torque is 1.5 Nm.

4. Insert the support grid (1) and secure using the four size-M5 screws. The max. tightening torque is 1.5 Nm.



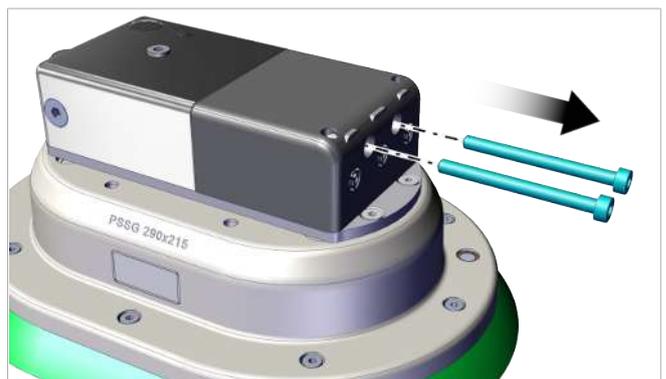
5. Connect the product to the supply lines.
6. Before starting the handling process, check to ensure proper installation and function.

10.6 Variant X only: Cleaning or Replacing the Ejector Module

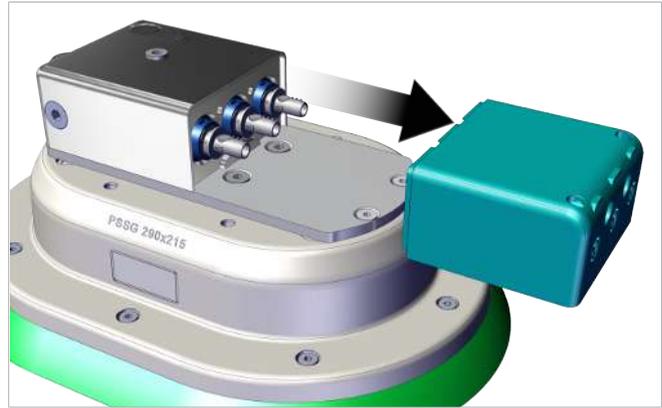
10.6.1 Removing the Ejector Module

- ✓ The device has been disconnected from all supply lines.

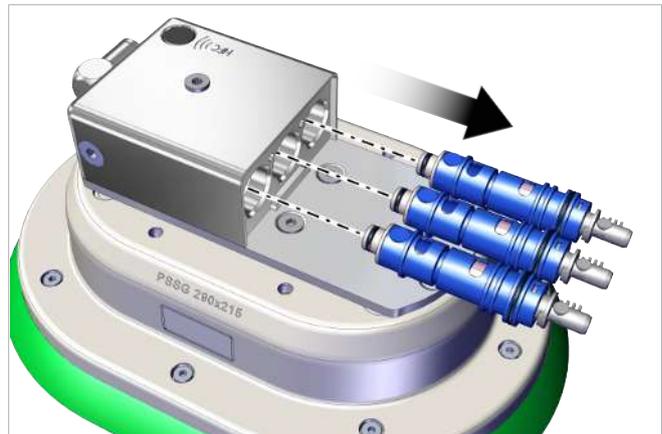
1. Release the fastening screws for the silencer cap.



2. Remove the silencer cap.



3. Pull out the ejector modules.



4. The chapter "Opening and Cleaning the Ejector Module" in this manual describes how to clean the ejector (> [See ch. 10.6.2 Opening and Cleaning the Ejector Module, p. 30](#)).

During assembly, ensure the silencer cap is properly fitted on the basic module.

10.6.2 Opening and Cleaning the Ejector Module



NOTE

Incorrectly cleaning the product and its components

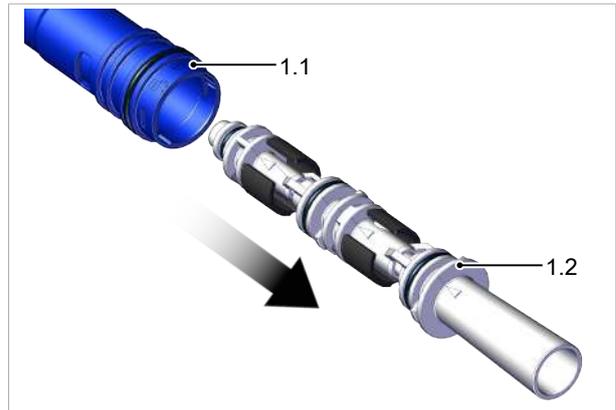
Damage to the product or individual components due to aggressive cleaning agents or excessive temperatures!

- ▶ For cleaning, use only cleaning agents that do not corrode or damage the materials used.
- ▶ Do not use sharp-edged objects (wire brushes, sandpaper, etc.).
- ▶ Do not exceed the specified max. temperature during cleaning.

1. Turn the nozzle fitting (1.2) to the “unlocked” position relative to the main body (1.1)

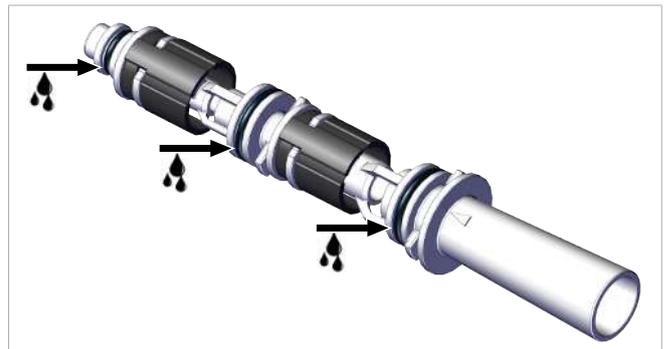


2. Pull the nozzle fitting (1.2) out of the main body (1.1) using only axial forces.



3. Blow off the components with compressed air or clean them under running water.

4. After cleaning, check the non-return valves (1.3) for wear and replace them if necessary.



5. Grease the O-rings slightly before mounting the ejector module.
6. The ejector module is assembled and sealed in the reverse order. Before assembling, ensure that the non-return valve is correctly positioned.

For more information about cleaning, see the section “Cleaning the Ejector”.

11 Troubleshooting

Fault	Cause	Solution
Vacuum level insufficient or vacuum build-up too slow	Operating pressure is too low	▶ Increase operating pressure
	Internal diameter of the pressure hose is too small	▶ Use hoses with a larger internal diameter
	Hose or screw unions are leaking.	▶ Seal or replace components.
	Gripper sealing ring is damaged.	▶ Replace the sealing ring.
	Location of use is higher than 1600 m above sea level.	▶ Observe the maximum altitude for location of use.
	Dirty ejector	▶ Clean the ejector
	Load has cracks, gaps or is air-permeable.	Handling the load with this lifting device is not permitted.
The object cannot be held.	Vacuum level too low	▶ See "Vacuum level insufficient"
	Insufficient suction capacity	▶ Increase the suction capacity if possible
	Load is lifted too quickly	1. Extend the retention time 2. Slow the lifting process and avoid acceleration peaks
	Clogged silencer	▶ Replace the silencer
	The gripper is not pressed firmly enough onto the workpiece to be lifted	▶ Press the gripper more firmly onto the workpiece. On even surfaces, we recommend compressing the suction cup by at least 50%.
Sealing ring wears out very quickly	The system is not positioned on the workpiece correctly	▶ Align the gripping system parallel to the workpiece surface

Malfunction cannot be corrected!

If you cannot identify any of the listed causes, send the device to Schmalz customer service (see the first page for the address).

12 Spare and Wearing Parts

Maintenance work may only be carried out by qualified personnel.



⚠ WARNING

Risk of injury due to incorrect maintenance or troubleshooting

- ▶ Check the proper functioning of the product, especially the safety features, after every maintenance or troubleshooting operation.

	PSSG 290x215...	PSSG 350x250...	PSSG 405x305...	Type
Sack gripper (NBR)	PSSG M...NBR-60... 10.01.54.00031	PSSG M...NBR-60... 10.01.54.00035	PSSG M...NBR-60 ... 10.01.54.00005	Spare part
- with integrated VG	PSSG X...NBR-60... 10.01.54.00083	PSSG X...NBR-60... 10.01.54.00085	—	
Sack gripper (SI)	PSSG M ... SI-55... 10.01.54.00032	PSSG M ... SI-55... 10.01.54.00036	PSSG M...SI-55 ... 10.01.54.00006	Spare part
- with integrated VG	PSSG X ... SI-55... 10.01.54.00084	PSSG X ... SI-55... 10.01.54.00086	—	
Sealing ring	DR-PSSG...NBR-60 10.01.54.00043 DR-PSSG ... SI-55 10.01.54.00054	DR-PSSG...NBR-60 10.01.54.00060 DR-PSSG ... SI-55 10.01.54.00061	DR-PSSG...NBR-60 10.01.54.00009 DR-PSSG ... SI-55 10.01.54.00024	Wearing part
Wearing part set, sealing ring + insert	ERS-PSSG ... NBR-60+B 10.01.54.00094 DR-PSSG ... SI-55+B 10.01.54.00095	DR-PSSG ... NBR-60+B 10.01.54.00092 DR-PSSG ... SI-55+B 10.01.54.00093	DR-PSSG ... NBR-60 10.01.54.00009 DR-PSSG ... SI-55 10.01.54.00024	Wearing part
Hose connection - angled	SCHL-AN W 32.5 10.01.54.00050		SCHL-AN W 60.5 10.01.54.00016	Spare part
Hose connection - straight	SCHL-AN 32.5 10.01.54.00038		SCHL-AN 60.5 10.01.54.00023	Spare part
Perforated plate LOCH-PL	10.01.54.00046	10.01.54.00064	10.01.54.00019	Spare part
Perforated plate, height 29 mm	LOCH-PL 202x127x29 10.01.54.00057	LOCH-PL 235x135x29 10.01.54.00065	—	Spare part
Perforated plate, height 31.5 mm	—	—	LOCH-PL 288x188x31.5 10.01.54.00058	Spare part
Perforated plate, height 39 mm	—	LOCH-PL 235x135x39 10.01.54.00067	—	Spare part
Perforated plate, height 41.5 mm	—	—	LOCH-PL 288x188x44 10.01.54.00055	Spare part
Filter set	ERS-SET-FILT-PL... 10.01.54.00082	ERS-SET-FILT-PL... 10.01.54.00080	ERS-SET-FILT-PL... 10.01.54.00077	Spare part
Multi-stage nozzle, 1 pc., variant X only	SEP HF 2 13 22 10.02.01.01798		—	Spare part

13 Warranty

Schmalz guarantees this system pursuant to our General Terms and Conditions of Sale and Delivery. The same applies to spare parts, provided that these are original parts supplied by us.

Wearing parts are not covered by the warranty.

14 Disposing of the product

- ▶ Sort and dispose of all components according to the country-specific regulations.



For proper disposal, please contact a company specializing in the disposal of technical goods and instruct the company to observe the applicable disposal and environmental regulations. Schmalz is happy to assist you in finding a suitable company.

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Handling systems

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