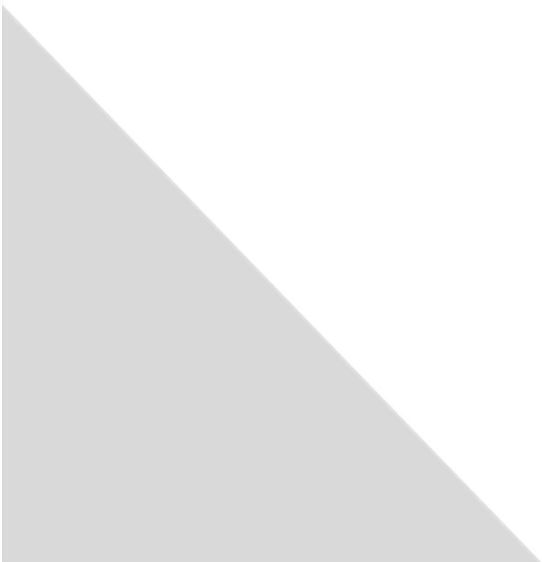


KÄRCHER

makes a difference

Translation of the Original Operating Manual IVR 100/40-Pp Sc, IVR 100/75-Pp Sc



Copyright

© Copyright by
Kärcher Industrial Vacuuming GmbH
Robert-Bosch-Straße 4-8
73550 Waldstetten
GERMANY

1	Safety Instructions	6
1.1	Terms.....	6
1.1.1	Operation	6
1.1.2	Maintenance	6
1.1.3	Qualified Staff	6
1.2	Symbols	6
1.3	General safety information.....	8
2	Delivery, internal transportation, unpacking	9
2.1	Delivery	9
2.2	Internal transport.....	9
2.2.1	Dimensions and weight.....	9
2.3	Unpacking.....	9
2.4	Packaging material	9
3	Appliance description	10
3.1	Intended Use	10
3.1.1	Dust class "L"	10
3.1.2	Dust class "M"	10
3.2	Non-Intended Use.....	11
3.2.1	Dust class "L"	11
3.2.2	Dust class "M"	11
4	Layout and function	12
4.1	Main dimensions.....	12
4.2	Technical data Pp-drive units for system-ø517	12
4.3	Ambient conditions	13
5	Main components	14
5.1	Components	14
5.2	Functional description of the chip suction plant.....	14
6	Initiation.....	15
6.1	Initial operation of the chip.....	15
6.2	Potential equalization conductors.....	15
6.3	Supply	15
6.4	Connection chart.....	16
7	Operation.....	17
7.1	Operation	17
7.2	Operation compressed air drive	17
7.3	Suction process	18
7.4	Filter cleaning	19
7.4.1	Manual filter cleaning.....	19
7.5	Empty collection container with PE dust bag.....	19
8	Troubleshooting and fault elimination	21
8.1	Safety instructions	21
8.2	Initial fault elimination measures	21
9	Maintenance/Repair.....	22
9.1	Maintenance regulations.....	22
9.2	Maintenance intervals table	23
9.3	Cleaning.....	23

9.4	Maintenance of the compressed air drive unit /40, /75, /110, /150	24
9.4.1	General notes	24
9.4.2	Checking for best suction power.....	24
9.4.3	Servicing the vacuum pump	24
9.4.4	Special designs.....	25
9.4.5	Spare parts note	25
9.5	Disassembly of the bag-type filter	26
9.6	Changing the filter cloth for the bag-type filter.....	27
9.6.1	Work steps for pocket filter change	28
9.7	Warnings on the suction device.....	30
9.7.1	Warning sign for devices in class "M".....	30
9.7.2	Marking: Vacuum cleaner.....	30
9.8	Wear parts list.....	31
10	Decommissioning, storage	32
11	Disposal.....	33
12	Spare Parts List	34
12.1	Industrial suction unit	34
12.2	Industrial suction unit	34
12.3	Compressed air drive unit /40, /75, /110, /150.....	35
12.4	Compressed air drive unit /40, /75, /110, /150.....	35
12.5	Chassis	36
12.6	Chassis	36
12.7	Locking device	37
12.8	Locking device	37
12.9	Collecting Container (2101026).....	38
12.10	Collecting Container (2101026).....	38
12.11	Spare parts list/drawing collection tank 100 litres, V2A (1100332)	39
12.12	Spare parts list/drawing collection tank 100 litres, V2A (1100332)	39
12.13	Pressure balancing hose type "A" ø25, (2630267).....	40
12.14	Pressure balancing hose type "A" ø25, (2630267).....	40
12.15	Spare Parts List Suction hose DN 40, all Types (2600484-Z).....	41
12.15.1	Spare Parts List Suction hose DN 40, all Types (2600484-Z).....	41
12.16	Spare Parts List Suction hose DN 50, all Types (2600398-Z).....	42
12.16.1	Spare Parts List Suction hose DN 50, all Types (2600398-Z).....	42
12.16.2	Spare Parts List Suction hose DN 70, all Types.....	43
12.16.3	Spare Parts List Suction hose DN 70, all Types.....	43
12.17	Accessories List.....	44
13	Component documentation.....	45
13.1	Documentation Multijector	45
14	EEC-Declaration of Conformity.....	46

1 Safety Instructions

1.1 Terms

1.1.1 Operation

includes installation, initiation (placing at disposal for usage), operation (handling, connection, disconnection, etc.)

1.1.2 Maintenance

includes control and attendance (inspections, revisions), maintenance and repair (detection of errors and their elimination).

1.1.3 Qualified Staff

are employees authorised by the person responsible for the security of the installation to carry out the operations required in each case and who are able to recognise and avoid possible dangers by reason of their training, experience and instructions as well as their knowledge of relevant norms, prescriptions, accident-prevention rules and working conditions.

1.2 Symbols

NOTICE

Denotes information that does not relate to personal injuries.
This information contains additional directions or general hints.



CAUTION

Dangerous situation, which could result in minor to moderate injury if it is not avoided.
This information must be regarded strictly to avoid damages to the installation or environment!



WARNING

Dangerous situation, which could result in serious injury or death if it is not avoided.



DANGER

Dangerous situation, which will definitely result in serious injury or death if it is not avoided.



Significance of the Operating Manual

This Operating Manual is part of the supplied product.

The Operating Manual remains valid throughout the product's lifetime, provided that no technical changes are made.

If the product is sold, the Operating Manual must be handed over to the next owner or user.



This information must be read before first commissioning.



WARNING - Read the instructions before using the machine



CE marking

The CE marking means "Communautés Européennes". It is the external symbol which states

	that a product fulfils the requirements imposed on the manufacturer by the European Community.
	Only use with safety shoes (acc. to EN ISO 20345)
	Only use with work gloves
	Respiratory protection (EN 149:2001)
	Use protective clothing (acc. to EN 13982-1)
	Use protective glasses (acc. to DIN EN 166 1349-BT)
	Before starting work <i>remove the plug from the wall socket!</i>
	Disconnect before starting work
	While operating electrical machines, certain parts of them are inevitable alive dangerously or under mechanical stress.
	Hand injury warning sign!
	Recycling symbol This information must be observed in order to preserve the environment!

1.3 General safety information**WARNING**

While operating electrical machines, certain parts of them are inevitable alive dangerously or under mechanical stress.

- Due to their electrical and mechanical functional properties, machines can cause severe injuries and damage to property. This particularly applies in the event of incorrect use, operation or maintenance, or in the event of unauthorized interventions!
- All mechanical work must be carried out according to instructions (see Maintenance / Repair). The device may be operated only by qualified personnel who have read and understood the operating instructions.
- The operator must be provided with information, instructions and training on the materials to be absorbed, including a secure procedure for removal of the absorbed material, before use.
- All notes and data on the machines must be observed!
- Faultless and safe use of this machine includes correct transport and storage, as well as operation in accordance with regulations and careful maintenance!
- This device is not intended for being used by persons (including) with limited physical, sensory or mental skills or lack of experience and/or lack of knowledge except if they are supervised by a person responsible for their safety or were instructed in how to use the device by this person. Children should be supervised to ensure that they do not play with the device.
- Operation of the device is only permitted on underground sloping no more than 10° and with sufficient load-bearing capacity.

**CAUTION**

Only use with safety shoes (acc. to EN ISO 20345)

- Do not place any limbs between parts to be joined during assembly of the machine parts. When moving the parts, pull limbs from tightening spaces in time.
- Starting without a filter or with a damaged filter is not allowed
- The suction device must not be operated if wear is detected on fasteners or mounting brackets. Please arrange for a service immediately, or send the industrial vacuum cleaner for repair to:

Kärcher Industrial Vacuuming GmbH

Abt. Service

Robert-Bosch-Straße 4-8

73550 Waldstetten

Tel: +49(0)7171-94888-523

Delivery, internal transportation, unpacking

2 Delivery, internal transportation, unpacking

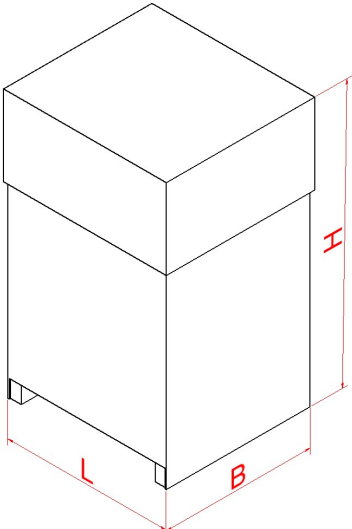
2.1 Delivery

Unload the scope of delivery on level ground with sufficiently sized industrial trucks.

2.2 Internal transport

Transport scope of supply to the site of setup secured against movement or tipping with a sufficiently sized industrial truck.

2.2.1 Dimensions and weight

	Packaging	
	L (mm)	910
	W (mm)	830
	H (mm)	1500
	Weight with packaging (kg)	V12: 121 V27: 127 V45: 138

2.3 Unpacking

Make sure that no components are left in the packaging.

Scope of delivery: -Suction device
 -Technical Manual

2.4 Packaging material

The packaging materials must be disposed of in accordance with the valid legal requirements.

Correct disposal of this product (electrical waste) (applicable in the countries of the European Union and other European countries with a separate collection system)

The identification on the product and on the associated literature states that it must not be disposed of along with normal domestic waste at the end of its service life. Please dispose of this device separately from other waste, in order to prevent damage to the environment or to human health through uncontrolled waste disposal. Please recycle this device, in order to promote sustainable re-use of material resources. Private users should contact the dealer from whom they purchased the product or the competent authorities, in order to find out how they can recycle the device in an environmentally-friendly manner. Commercial users should contact their supplier. This product must not be disposed of along with other commercial waste.



Recycling symbol

This information must be observed in order to preserve the environment!

3 Appliance description

3.1 Intended Use

NOTICE

- This device, which has been delivered ready for operation, is designed as a *wet and dry vacuum cleaner* for commercial and industrial applications e.g. in hotels, schools, hospitals, factories, shops, offices and rent transactions. It is particularly suitable for vacuuming up *chips, granulate, silt and flammable liquids (flashpoint over 55°C)*
- The machine may only be operated when all filters installed correctly and undamaged.
- Switch off immediately if foam or liquid escapes!



WARNING

3.1.1 Dust class "L"



Observe warning sign on the device!

- The device is **suitable** for dusts hazardous to health and not flammable with workplace limit **>1mg/m³** according to **dust class L** (max. permeability <1%) according to DIN EN 60335-2-69 Annex AA:2010.

3.1.2 Dust class "M"



Observe warning sign on the device!

- Dust class **"M" contains** dust class **"L"**.
- The device is suitable for dusts hazardous to health and not flammable with workplace limit **≥0.1mg/m³** according to **dust class M** (max. permeability <0.1%) according to DIN EN 60335-2-69 Annex AA:2010.

3.2 Non-Intended Use

NOTICE

- For all personal injuries and material damages, which are caused by a not -asdirected- use, the operator and not the manufacturer of the machine is responsible for !
- May not be used outdoors!



WARNING

- This device is **not suitable** for taking up and extracting **combustible dusts**.
- This device is **not suitable** for taking up and extracting **flammable liquids (flammable, highly flammable, highly flammable hazardous substances according to Directive 67/548/EEC) (Flash Point under 55°C)** as well as **mixtures of combustible dusts with flammable liquids**.
- The vacuum cleaner is *not* approved for operation in potentially explosive areas!



DANGER

- With improper use may cause explosion and fire!

3.2.1 Dust class "L"



Observe warning sign on the device!

- The device is **not suitable** for **dust class M** and **H**.
- The device is **not suitable** for **carcinogenic hazardous substances** purs. to **GefStoffV §10, TRGS 905 or TRGS 906**.
- The device is **not suitable** for **asbestos** pursuant to **TRGS 519**.

3.2.2 Dust class "M"



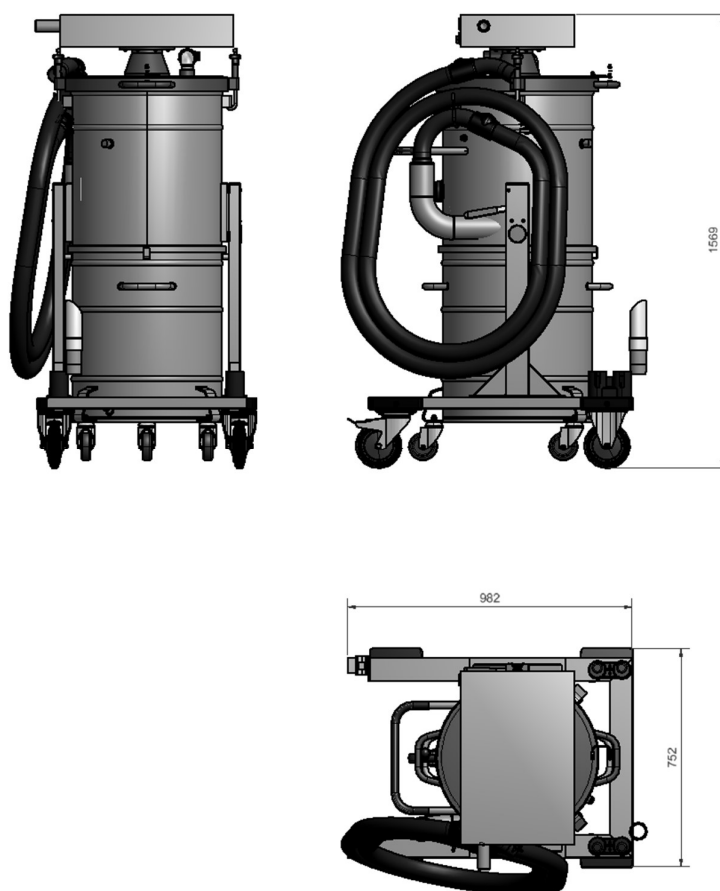
Observe warning sign on the device!

- The device is **not suitable** for **dust class H**.
- The device is **not suitable** for **carcinogenic hazardous substances** purs. to **GefStoffV §10, TRGS 905 or TRGS 906**.
- The device is **not suitable** for **asbestos** pursuant to **TRGS 519**.

4 Layout and function

4.1 Main dimensions

Kärcher industrial vacuum cleaners and mobile dust collectors are delivered in operational condition



4.2 Technical data Pp-drive units for system-ø517

Technical Data	Unit	/40	/75	/110	/150		
Extraction air volume max.	[litres/min]	5690	12200	16250	20313		
Compressed air demand at 5.6 bar	[litres/min]	1200	2580	3440	4300		
Compressed air supply	[bar]	4.5-6	4.5-6	4.5-6	4.5-6		
Compressed air connection min.		DN 20	DN 20	DN 25	DN 32		
Extraction performance	[≈kW]	3.0	5.5	7.5	11		
Sound pressure level according to DIN EN ISO 3746 in accuracy class 3	[dB(A)]	55-80	55-80	55-80	55-80		
Drive unit weight	[kg]	20	26	31	37		
Dimensions øxH	[mm]	563x260	563x260	563x260	563x260		
Ambience temperature	[°C]	-20/+60	-20/+60	-20/+60	-20/+60		

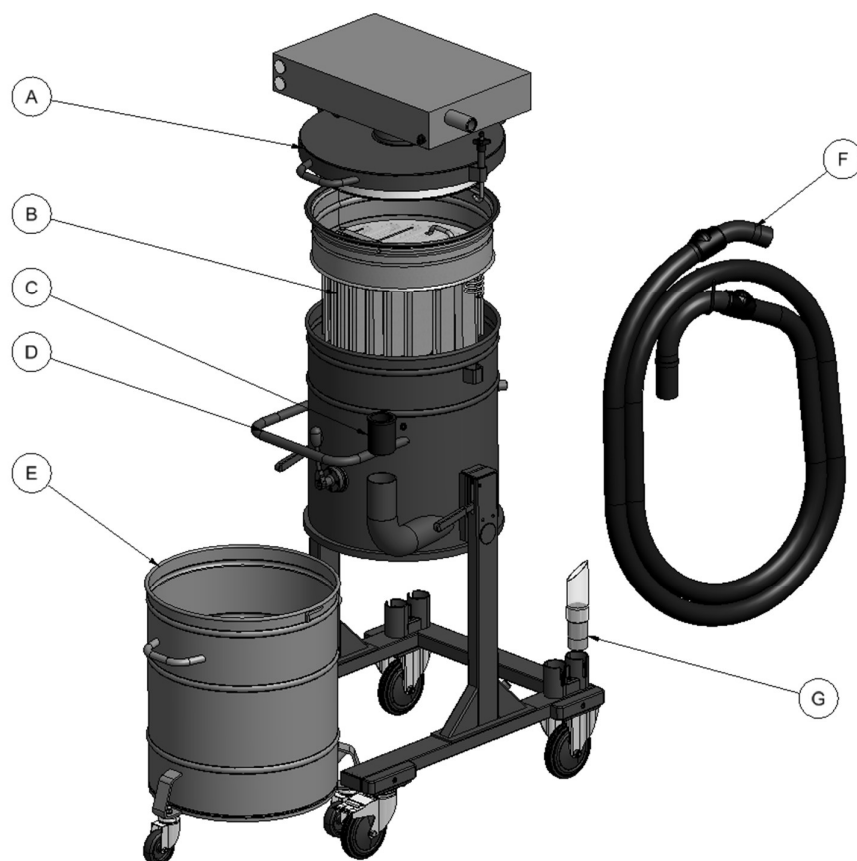
Layout and function

4.3 Ambient conditions

permitted ambient temperature:	max.	+40°C
	min.	-20°C
Intake temperature of medium being pumped:	max.	+40°C
Blow-off temperature of medium being pumped:	max.	+135°C
Installation height:	max.	1000m above sea level
May not be used outdoors!		

5 Main components

5.1 Components



A	Drive unit
B	Pocket filter
C	Reducing sleeve
D	Filter tank/chassis
E	Collection container
F	Suction hose unit
G	Nozzle

5.2 Functional description of the chip suction plant

A vacuum is generated in the collecting tank by means of suction turbines in the drive unit. The raw air is sucked in through the nozzle and the suction tube. Coarser particles fall out of the air current into the collecting tank or perforated basket. The baffle plate prevents damage to the bag-type filter on the drive unit. Smaller particles and dust are collected on the surface of the filter material as they pass through the bag-type filter. The resulting clean air is blown back into the work area via the suction turbines and the sound-damping exhaust air tube.

The cooling air for the suction turbines is drawn into the air intakes on the hood and flows along the motor. This heated air is discharged back into the work area again through various air gaps on the hood.

6 Initiation



Only use with safety shoes (acc. to EN ISO 20345)

6.1 Initial operation of the chip



CAUTION

- This Kärcher industrial vacuum cleaner may only be operated when wearing safety shoes
- The operating conditions must match the data on the plate and the supplied documentation, if applicable.
- Starting without a filter or with a damaged filter is not allowed

NOTICE

- The industrial vacuum cleaner must be correctly installed, with all necessary lines and tubes connected.
- The cooling air duct must be fully functional, the cooling effect must also not be impaired by soiling of the cooling surfaces.
- Check that baffle plate and perforated basket, if applicable, are correctly inserted.
- Insert desired suction nozzle into the plug-in cone on the handle of the suction tube.
- Check that the drive unit is centrally located on the tank.

6.2 Potential equalization conductors

Before commissioning, always check that the potential equalization conductors (earthing conductors) are connected!



- Check compressed air connection.

6.3 Supply



CAUTION

A pressure of up to 7.5 bar (0.75 Mpa, 108 PSI) may be pending at the compressed air input of the vacuum pump.

The best operating pressure is at 5.6 bar (0.56 Mpa, 81 PSI)

The connected compressed air must be clean, dry and oil-free.

The compressed air must be prepared accordingly to reach a long service life and interference-free operation of the pump.

The exhaust opening of the pump must be applied with a muffler. Unhindered outflow of exhaust must be warranted.

The exhaust may be connected to an on-site exhaust system for best air cleaning and for reasons of noise reduction.

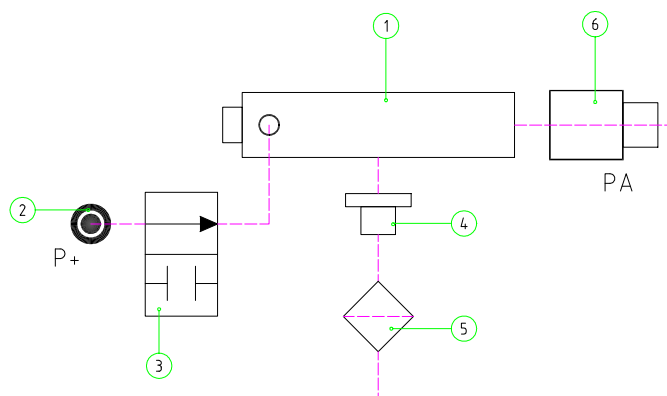
Observe that there is no mechanical strain on the pump.

6.4 Connection chart

- Vacuum pump (1)
- Compressed air connection (2) (5.6 bar)

Type	Connection Ø at least
/40	DN 19
/75	DN 20
/110	DN 25
/150	DN 32

- Solenoid valve, ball valve, etc. (3), on site
- Vacuum connection P-(4)
- Vacuum filter (5)
- Exhaust exit PA (6)



NOTICE

When connecting external components, the connection diameter must be sufficiently large.
Use exhaust adapters to discharge the exhaust air if required.

7 Operation

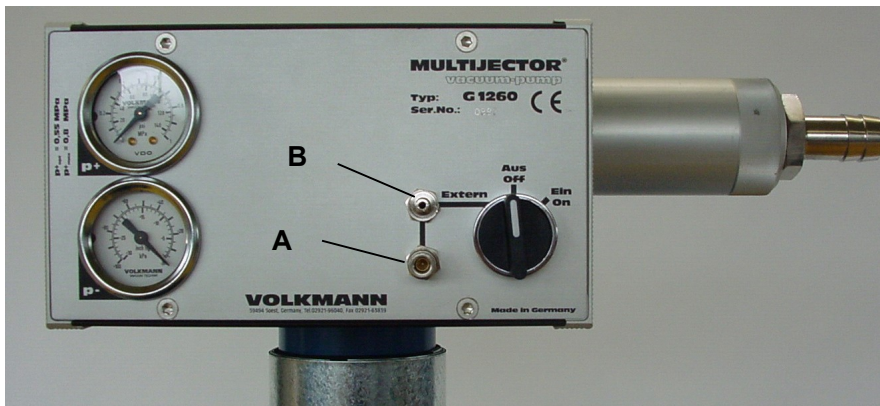
7.1 Operation



CAUTION

- Only operate the device with the parking brakes activated.
- Only move the device at walking speed. Act with care. In case of sloping paths, bring in a second person to help.

7.2 Operation compressed air drive



ON = Pump extracts continually

OFF = Pump is out of operation

EXTERNAL = external control via miniature quick-action couplings

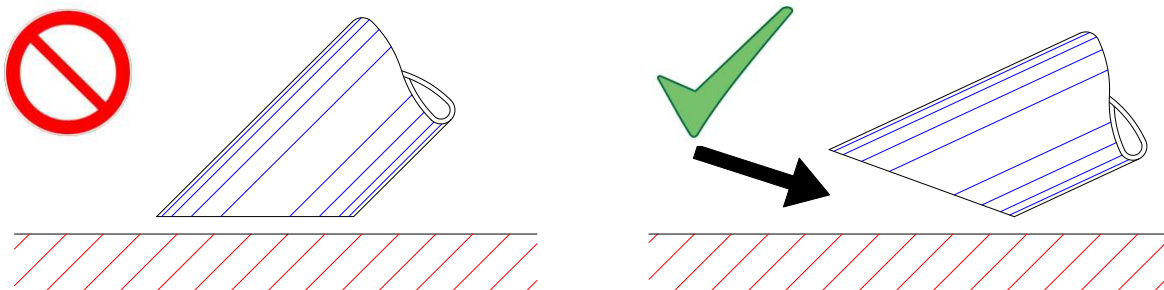
The drive unit is controlled at the compressed air side. The full power is available at once right after activation of the pump via the operation selection switch

NOTICE

The switch position "**EXTERNAL**" means that **A** is pressurised. If it is routed to **B**, the pump will extract. If **B** is depressurised, the pump is switched off

7.3 Suction process**NOTICE**

- When vacuuming up liquids only immerse halfway, so that sufficient air is absorbed
- When vacuuming up dust only immerse halfway, so that sufficient air is absorbed
- Insert desired suction nozzle into the plug-in cone on the handle of the suction tube.



Do not **immerse** the entire area of the nozzle!

Hold the nozzle **diagonally** to the suction surface, so that both air and **liquid** are absorbed

7.4 Filter cleaning

7.4.1 Manual filter cleaning



CAUTION

- After deactivation of the extraction turbine, clean the fine dust pocket filter by manual filter cleaning by shaking movement of the hand shaker grip.
- If the plant is operating permanently a certain point of time for cleaning has to be fixed by the operating staff and the fine dust pocket filter has to be cleaned.
- Because of the slowing-down time of the turbine, the vibration process must only be started 1-2min after turn off.
- Wait approx. 30sec. for the dust to settle, before restarting the device.



7.5 Empty collection container with PE dust bag



WARNING



Disconnect before starting work



Suitable work gloves must *always* be worn when carrying out maintenance and service tasks, in order to prevent injuries and soiling with contaminated substances



Respiratory protection (EN 149:2001)



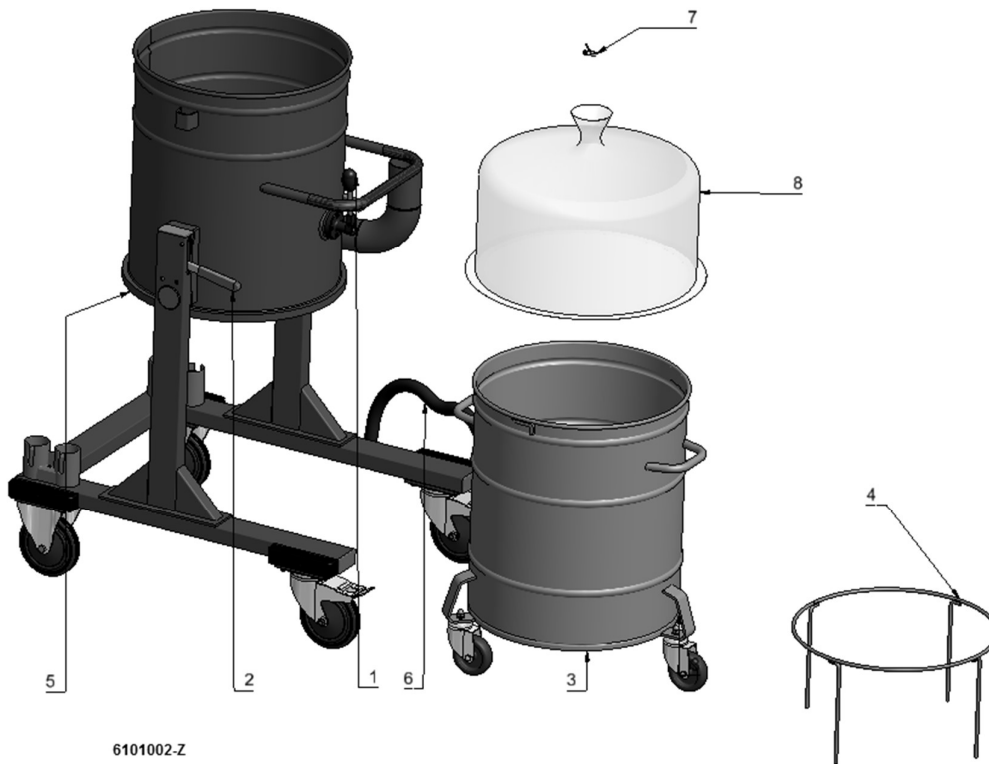
Use protective glasses (acc. to DIN EN 166 1349-BT)



Use protective clothing (acc. to EN 13982-1)

These work processes may only be carried out in compliance with the valid legal requirements and by trained specialized personnel with appropriate protective gear. Make sure that no dust is raised during these work processes. Wear protective mask P3. The disposal of the PE dust bag may only be carried out by trained personnel, in accordance with the valid regulations.

Before emptying the dust container, switch off the device and wait for the engine to stop. In addition, the pocket filter "1" should be shaken off, then wait approx. 60 seconds until the dust has settled in the collection container.



6101002-Z

- Lower the dust container "3" with the lifting device "2" and it pull out .
- Switch on the suction system again to prevent dust from escaping from the filter container due to vibrations.
- Take out downholder "4"
- Carefully pull the PE dust bag over the bead on the collection container and close it tightly with cable tie "7" (not included in the scope of delivery).
- Remove the PE dust bag "8" from the collection container
- If necessary, clean the collection container and insert a new PE dust bag (see wear parts list), carefully placing the edge over the bead on the collection container so as not to damage the PE dust bag.
- Insert downholder "4"
- Check the seal "5" on the filter container.
- Switch off the suction system, then position the collection container "3" under the filter container, do not pinch the pressure compensation hose "6", and raise it using the lifting device "2".

8 Troubleshooting and fault elimination

8.1 Safety instructions



WARNING

- If harmful substances escape due to a defect (eg filter defect), the machinery must be switched off immediately and the room has to be aired or leave!
- Before taking up work at the industrial extractor, the industrial extractor must be properly depressurised and the drive unit must stand still!

8.2 Initial fault elimination measures

All the errors mentioned in the table below may be eliminated by yourself. In case of major problems or other failures please contact the customer service of Kärcher Industrial Vacuuming GmbH immediately. Tel. +49(0)7171-94888-0
Perform maintenance tasks in accordance with the description in the Maintenance/Service chapter

Fault	Possible cause	Elimination
Reduced suction capacity	• Suction tube or nozzle blocked • Suction tube leaking • Suction tube incorrectly positioned in the suction nozzle • Collecting tank full • Bag-type filter soiled • Seal between drive unit and collecting tank defective	• Eliminate obstruction • Replace tube • Insert tube correctly • Empty collecting tank • Clean or replace filter • Clean or replace seal
Suction motor not running correctly	• see Chapter 9	

9 Maintenance/Repair

9.1 Maintenance regulations

NOTICE	
	Suitable work gloves must <i>always</i> be worn when carrying out maintenance and service tasks, in order to prevent injuries and soiling with contaminated substances
	Respiratory protection (EN 149:2001)
	Use protective glasses (acc. to DIN EN 166 1349-BT)
	Use protective clothing (acc. to EN 13982-1)
	Only use with safety shoes (acc. to EN ISO 20345)

- Careful and periodical inspections and maintenance works are necessary to enable an early detection and elimination of possible errors before they cause bigger problems and damages.
- Kärcher Industrial Vacuuming GmbH assumes liability and guarantee only in case of proper use and compliance with the following maintenance instructions.
- The operational reliability of the industrial vacuum cleaner can only be maintained if original or approved spare parts are used exclusively for all maintenance and repairs.
- For maintenance by the user the device must be disassembled, cleaned and maintained, as far as practicable, without causing danger for the maintenance personnel or other people. Appropriate precautions include cleaning before disassembly, providing for filtered forced venting in the location where the device is disassembled, cleaning the maintenance area and wearing suitable personal protective equipment.
- The manufacturer or a trained person must carry out a technical inspection at least once a year, which comprises, for example, inspection of the filters for damage, checking the machine for leaks and checking correct functioning of the control device.
- When performing maintenance or repair work, all contaminated objects which cannot be satisfactorily cleaned must be disposed of. Such objects must be disposed of in impervious bags, in compliance with the valid regulations for the elimination of such waste. All machine parts must be considered contaminated when removed from the hazardous area, and appropriate measures must be taken to avoid dust distribution.

9.2 Maintenance intervals table

Interval	Check	Measure
daily	• Pocket filter • Suction hose leaking? (see wear parts list) • Collecting tank full? • Area filter contaminated? (see wear parts list) • Seal between drive unit and collecting tank (see wear parts list) • Compressed air display • Vacuum display at pump must reach at least 90% vacuum	• clean • Replace hose • Empty collecting tank • Clean filter • Clean or replace seal • Ensure best compressed air supply of 5.6 bar • Pump maintenance, see chapter 9
weekly	• Collecting tank	• clean
monthly	• Fill level inspection and emptying hose	• clean
annually	• Filter foam	• replace

NOTICE

9.3 Cleaning

Dust on the appliance must be avoided and must be removed by regularly cleaning.

Before cleaning the device, be sure to switch off the motor protection switch and unplug the device from the power supply. Cleaning can take place with a damp cloth or a suitable industrial vacuum cleaner. Do not use solvents such as thinner, alcohol or benzene. Never immerse the device in water.

9.4 Maintenance of the compressed air drive unit /40, /75, /110, /150

9.4.1 General notes

This compressed air drive unit contains no moving parts except for the integrated differential piston valve and is nearly maintenance-free.

NOTICE

We recommend checking the operating pressure and vacuum filter every day. The vacuum filter must be cleaned if contaminated.

If dirt is sucked in because of the operating conditions (dust, oil mist), we recommend regular maintenance of the pump about every 3-6 months

9.4.2 Checking for best suction power



CAUTION

If the suction power drops earlier, check the following:

A: Check compressed air supply:

- Are hoses bent, leaking, defective?
- Is the on-site compressed air filter/controller clogged or defective?
- Is the required operating pressure of 5.6 bar pending?
- Is the compressed air filter in the connection sleeve clean and open?

B: Check maximum vacuum:

- Close suction connection with blind plug or similar
- Set operating pressure to precisely 5.6 bar. This operating pressure must reach a maximum vacuum of 90%.
- If the vacuum of 90% is reached, the cause of the power drop is in the on-site system (leaks in the suction line, the filter, etc).
- Check all screw connections, hoses, etc. for tightness.

9.4.3 Servicing the vacuum pump

NOTICE

If the pump vacuum is clearly below 90% after inspection of items A and B, the vacuum pump must be inspected and serviced.

Procedure:

- Remove the pump from the extractor.
- For this, loosen the clamping ring or pipe coupling.
- Screw of side lid of the pump (use TORX-T20 screw driver)
- Remove lid seal and inspect the inside of the pump. It is important that you mark the lid position for later assembly of the pump.
- If any dirt deposits occur, they can be cleaned with a brush. If the nozzle inside is more strongly contaminated, we recommend sending the pump in to have it cleaned.
- Never use any hard, scratching objects to clean the nozzles.
- The pneumatics behind the front plate should be inspected for leaks and bent hoses.
- Before assembly, the three inner rubber check valves and the lid seals must be inspected for proper seat and damage.
- These parts must be replaced when damaged
- Install the side lid again; always observe the lid position for this. Do not install mirror-inverted, since this would cause the pump to leak.

- Tighten lid screws, observe torque:

Front sheet with operating elements: tighten slightly, **approx. 1Nm**

Silencer: tighten slightly, **approx. 1Nm**

Screws at the side lids: the 4 corner screws **approx. 1Nm**

all other screws: **2.5 to 3Nm**

NOTICE

If the pump does not reach the maximum vacuum of 90% after this process, contact your dealer or Kärcher Industrial Vacuuming GmbH (phone: +49(0)7171-94888-523) directly.

9.4.4 Special designs

If the compressed air drive unit has the optional vacuum retention valve, the pump will lock all internal suction channels after deactivation. No air can flow back through the pump into the previously evacuated space.

Pumps with this vacuum retention valve have one rubber check valve more than the standard design. This flap is located in the insert of the first nozzle stage (the stage with the smallest nozzles).

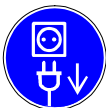
Ensure that you order this additional flap as well when ordering spare parts.

9.4.5 Spare parts note

The compressed air drive units are equipped with two different sealing sets, either NBR or VITON. Please indicate the desired design (item numbers according to spare parts list) when ordering spare parts.

9.5 Disassembly of the bag-type filter

NOTICE



Before starting work *remove the plug from the wall socket!*



Respiratory protection (EN 149:2001)



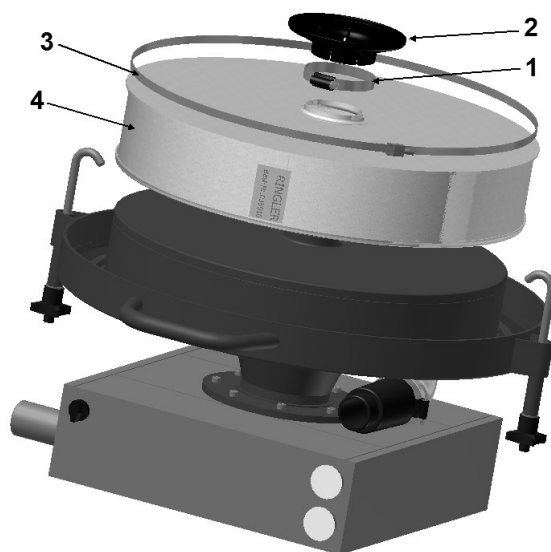
Use protective glasses (acc. to DIN EN 166 1349-BT)



Suitable work gloves must *always* be worn when carrying out maintenance and service tasks, in order to prevent injuries and soiling with contaminated substances



Use protective clothing (acc. to EN 13982-1)



- Place drive unit on suitable basis in illustrated position,
- Loosen clamping belt (41) and remove with the small baffle plate (40).
- Take off clamping belt (19), observe correct seat during assembly.
- Surface filters (46) remove and seal it in a bin liner.
- Accumulated dirt on the clean air side with a damp cloth to remove
- Install new filter surface (46) (see wear parts list).
- Assembly occurs in the inverse order.

9.6 Changing the filter cloth for the bag-type filter

 WARNING	
	Before starting work <i>remove the plug from the wall socket!</i>
	Suitable work gloves must <i>always</i> be worn when carrying out maintenance and service tasks, in order to prevent injuries and soiling with contaminated substances
	Respiratory protection (EN 149:2001)
	Use protective glasses (acc. to DIN EN 166 1349-BT)
	Use protective clothing (acc. to EN 13982-1)

- At the work it is absolutely necessary to wear personal protection equipment (single-way suits, protecting mask and protective goggles)!
- The contaminated filter must be disposed of in closed plastic bags in compliance with the valid regulations for the elimination of such waste.
- Do not raise any dust during these work processes!
- While carrying out this work, an endangering of other persons must be ruled out!
- Replacing the filter is an important procedure. It must be replaced with another filter which has the same attributes, the same fineness, the same filter area, and which belongs to the same category.

9.6.1 Work steps for pocket filter change

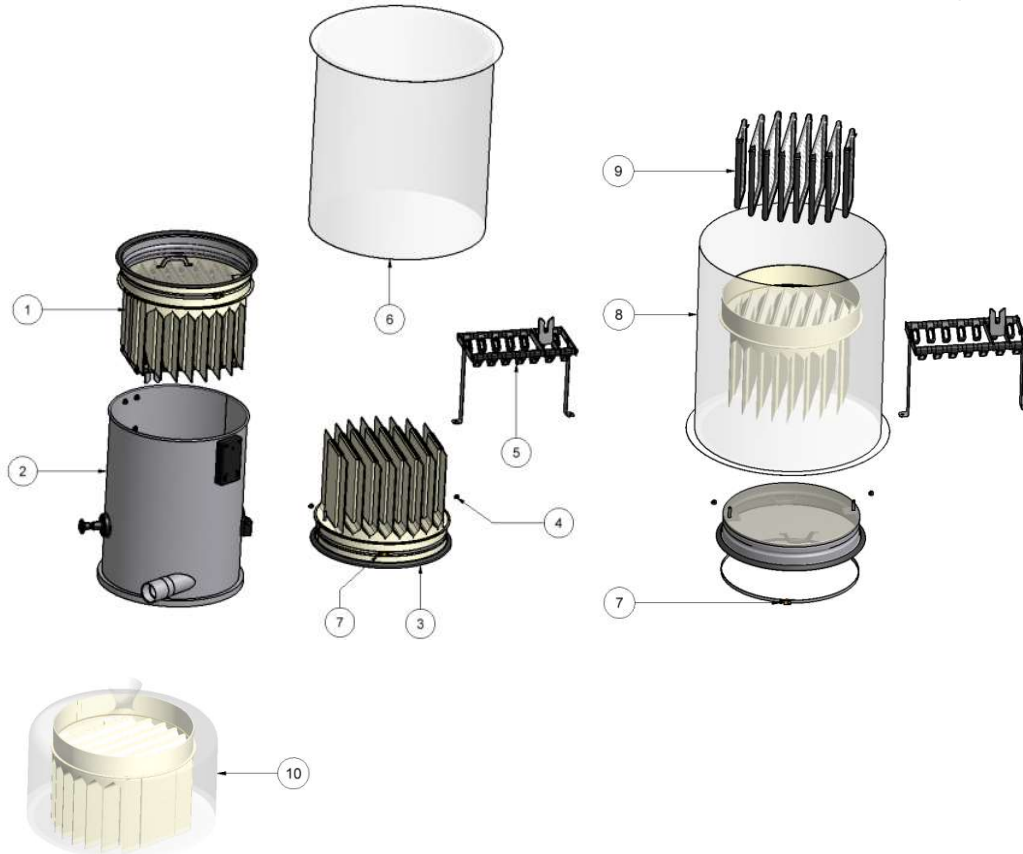
- (1) Remove bag-type filter insert complete from (2) filter case.

Removing the filter cloth:

- (3) Place on a suitable flat surface with perforated plate side down,
- (4) Loosen hexagon nuts, (5) Remove spacer grille with leaf springs,
- (6) Put impervious plastic bag over soiled filter cloth,
- (7) Loosen retaining band,
- (8) Raise filter cloth together with plastic bag 200mm, rotate by 180° and place on a flat surface,
- (9) Remove spacer frame from individual pockets of filter cloth,
- (10) Seal plastic bag with filter cloth inside tightly and ensure correct disposal.
- Replace filter foam
- Clean remaining parts for re-use.

Fitting the filter cloth:

- Insert spacer frame into new filter cloth (see wear parts list)
- Insert new filter foam
- Rotate filter cloth with spacer frame by 180° and position on filter insert,
- Fix retaining band over the filter cloth in the area of the bead,
- Mount spacer grille with leaf spring, align pockets of filter cloth with holes on spacer grille.



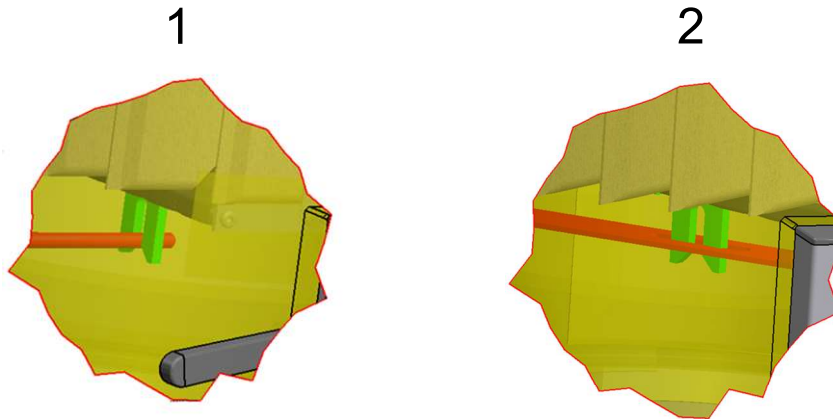
- At installation, in particular correct position of the fine dust pocket filter in the pre-separator container must be observed!

At manual filter shaker:(1)

The tab at the filter insert must be inserted into the shaft.

At electric filter shaker:(2)

The tab at the filter insert must be inserted into the recess



9.7 Warnings on the suction device

9.7.1 Warning sign for devices in class "M"

Attention: This device contains harmful dust. Emptying and maintenance procedures, including the disposal of dust collectors, may only be performed by expert personnel wearing the appropriate protective equipment. Do not operate without the complete filtration system.



0431002

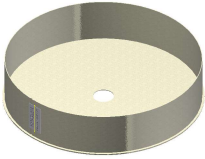
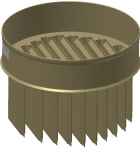
9.7.2 Marking: Vacuum cleaner



0431024

No suck in glowing dust or other ignition sources

9.8 Wear parts list

Figure	Designation	Order number
	Seal 30x6	0450018 9.980-354.0
	Pressure Balancing Hose Type A ø25, 1600mm	2630268
	Area filter 0.45m², category "L", antistatic	0350107
	Filter cloth for pocket filter 1,75 m² category "M" antistatic	2350112
	Round bottom bag PE, 100 litres	0630107A
	Suction hose	See spare parts list (Chapter 12)

*specify length when ordering

10 Decommissioning, storage**WARNING**

- Switch the device off and remove the mains plug from the mains socket.
- Roll up the connection cable.
- Empty the collecting tank, in accordance with the instructions in the chapter "Operation, Control".
- Cleaning of the device as specified in the chapter "Maintenance, Repair".
- When vacuuming up aggressive substances, rinse out the tank with clean water.
- Store the device in a dry place and out of reach of unauthorized personnel.
- "ATTENTION" - This product should be kept indoors only!

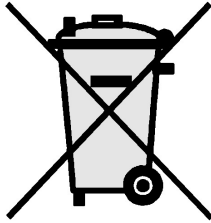
11 Disposal



WARNING

- Note preceding chapter "Decommissioning, Storage"!
- The filter inserts must be disposed of separately in accordance with environmental standards, depending on the medium vacuumed up.

Dispose of the device in accordance with the valid legal regulations.

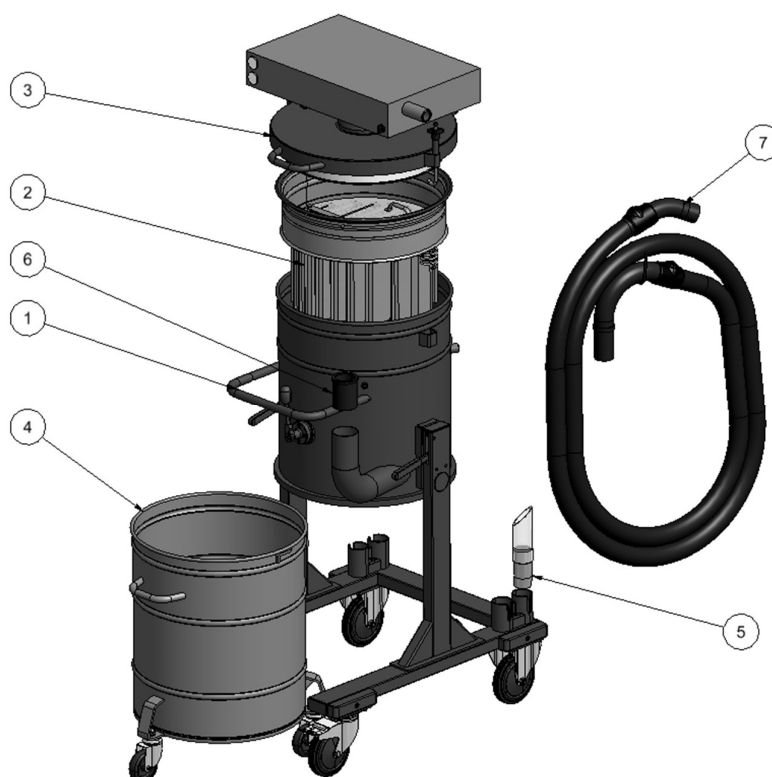


Correct disposal of this product (electrical waste) (applicable in the countries of the European Union and other European countries with a separate collection system)

The identification on the product and on the associated literature states that it must not be disposed of along with normal domestic waste at the end of its service life. Please dispose of this device separately from other waste, in order to prevent damage to the environment or to human health through uncontrolled waste disposal. This product must not be disposed of along with other commercial waste.

12 Spare Parts List

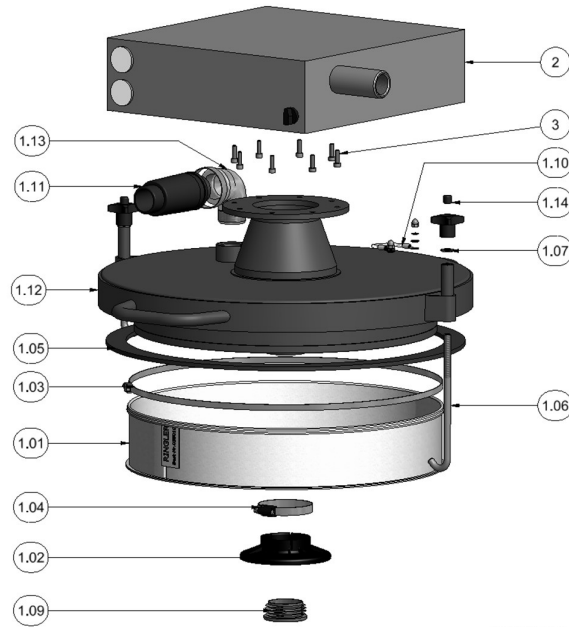
12.1 Industrial suction unit



12.2 Industrial suction unit

Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	Piece	2201015		Chassis without AT, complete with attachments
2	1	Piece	2350111	B	Pocket filter 1.75 m ² , cat. "M" (C), as
3	1	Piece	3400256	F	Compressed air drive unit V12
			3400257	D	Compressed air drive unit V27
			3400255	F	Compressed air drive unit V45
4	1	Piece	2101026		Collection tank 100 litres, mobile
5	1	Piece	1610116	D	Elastic nozzle DN 50
6	1	Piece	0480276	B	Reducer sleeve DN 70/DN 50, antistatic
7	1	Piece	2600403		Suction hose unit DN 50, type "E" 5 m
8	2	Piece	0090083	A	Plastic slider f. pipe outer ø 25 mm, black

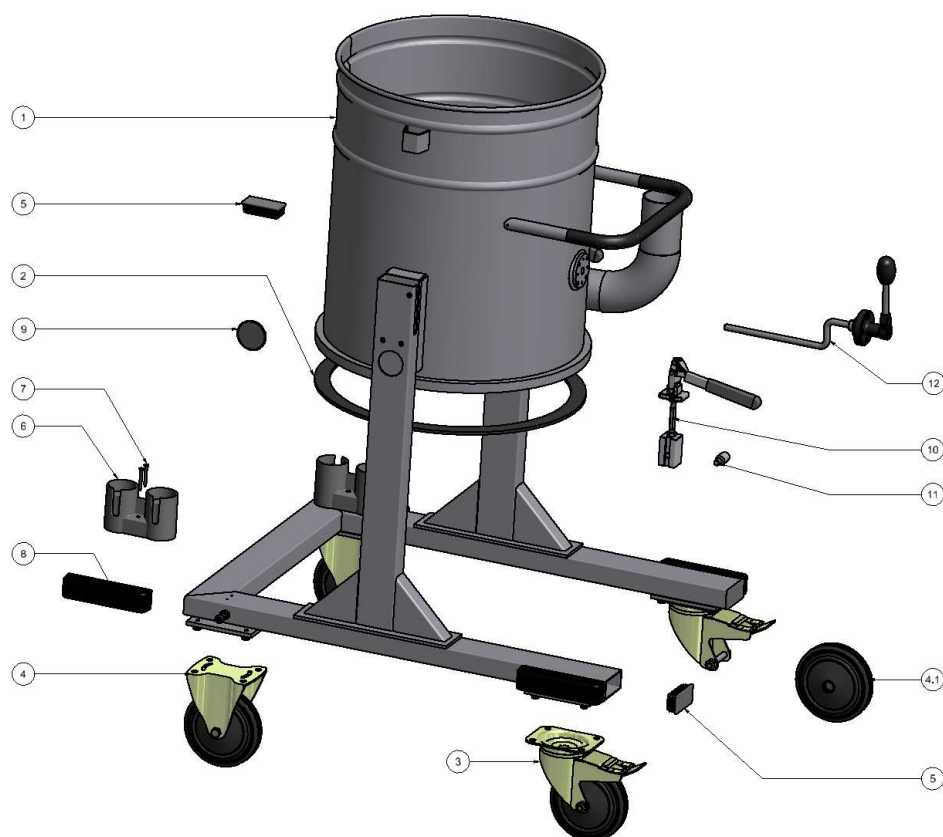
12.3 Compressed air drive unit /40, /75, /110, /150



3400257-Z

12.4 Compressed air drive unit /40, /75, /110, /150

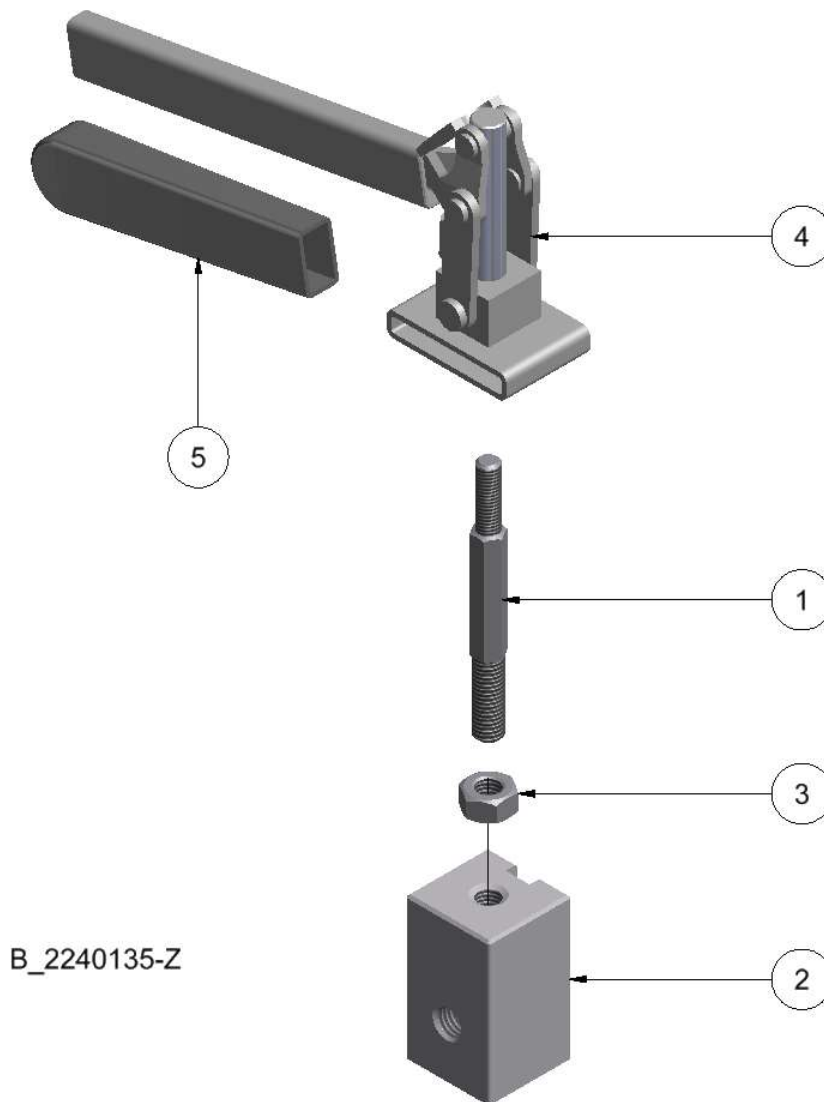
Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	Piece	1320244	D	Lid with flange for compressed air drive unit /75, /110, /150
1.01	1	Piece	0350106-001		Area filter 0.45m ² , cat. "L", installation position
1.02	1	Piece	0700206		Small baffle plate, ø137 mm, plastic, conductive
1.03	1	Piece	0050036-470		Clamping belt with lock, ø60 - 540 mm, ø470 (for area filter)
1.04	1	Piece	0050006		Hose clamp ABA ø60-80 mm
1.05	1	Piece	0450018		Seal 30 x 6
1.06	2	Piece	0240203	D	Retention rod for closure 2240207
1.07	2	Piece	0010704	A	U-washer ø10.5 DIN 125 B, zinc-plated
1.08	2	Piece	0090094	B	Cross-handle nut of PA with threaded insert M10
1.09	1	Piece	0090087		Lamella plug for pipe ø65x3
1.10	1	Piece	2040327		Earthing cable 6 ² , green-yellow, 150mm long, complete with nuts and washers
1.11	1	Piece	0330114	B	Pressure limiter valve 1 1/4" 500 mbar
1.12	1	Piece	1321048		Adapter lid for compressed air drive unit /75, /110, /150
1.13	1	Piece	0120141	A	Angle 90°, 1 1/4" inner-outer thread, black
1.14	2	Piece	0090032-01		Plastic slider f. pipe outer ø8 mm, extended to ø10
2	1	Piece	0400257		/75: Multijektor type G 2700
	1	Piece	0400258		/110: Multijektor type G 3600
	1	Piece	0400255		/150: Multijektor type G 4500
	1	Piece	0400256		/40: Multijektor type G 1260
3	8	Piece	0010063	D	Cylinder screw ISO 4762 - M6x20

12.5 Chassis

12.6 Chassis

Item	Qty.	Unit	Component number	Version	DESIGNATION
*1	1	Piece	1201005		Chassis, 910mm, with filter container 600mm
2	1	Piece	0450018		Seal 30 x 6
3	2	Piece	2220021		Caster ø160 antistatic, 3477 DVJ 160 P63
4	2	Piece	2220002	B	Block roll ø160 mm, full-rubber propeller black
4.1	1	Piece	0220015		Spare tyre antistatic ø160
5	4	Piece	0090016		Plastic glider 80x40
6	2	Piece	0211167		Nozzle holder DN40/50 conductive design
7	4	Piece	0011008		Lens-head sheet s. TORX ø4.8 x 45, DIN 7981, zinc-plated
8	4	Piece	0250118	B	Skirting board for chassis
9	2	Piece	0090040		Cover for bore ø53 (GPN 910/715)
10	2	Piece	2240135	A	Lifting device, compl.
11	2	Piece	0250185	B	Shaft screw for lifting device, zinc-plated
12	1	Piece	2380188	B	Hand vibrator for 1.4 / 1.75 / 3.2 / 5.2 m² filter

*not purchasable

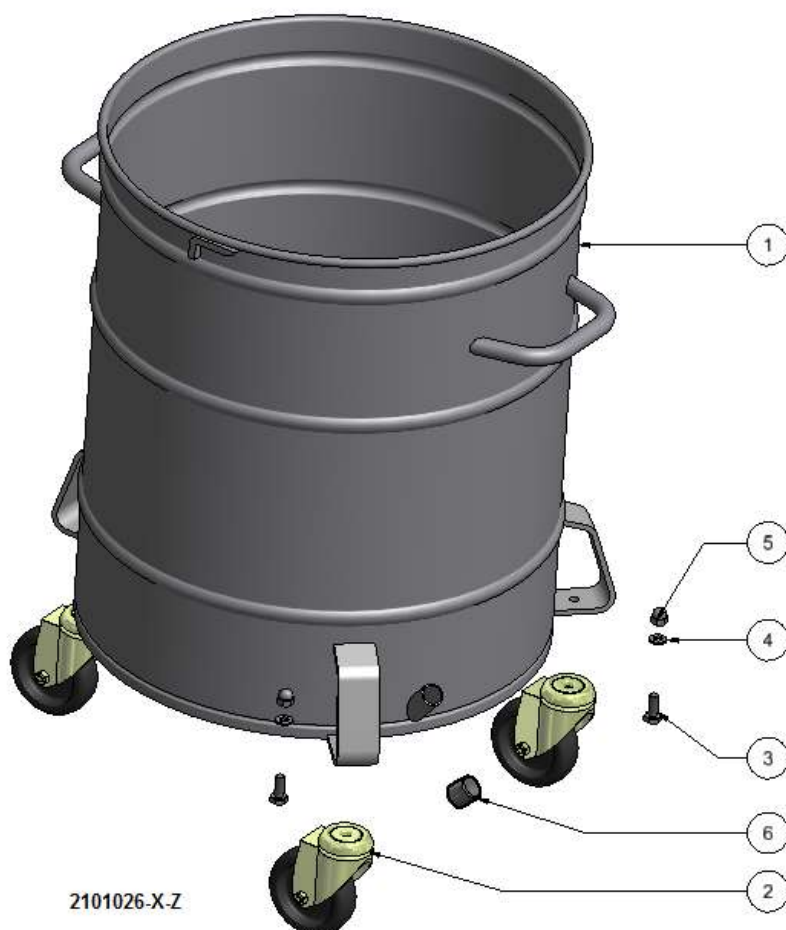
12.7 Locking device



12.8 Locking device

Item	Qty.	Unit	Order number	Component number	Version	DESIGNATION
1	1	piece	9.980-138.0	0250193		Stud for locking device
2	1	piece	9.980-143.0	0250351	A	Slide block for locking device with left-hand-thread
3	1	piece	9.974-235.0	0010409		Hexagon nut ISO 4032-M10, left-hand thread
4	1	piece	9.981-004.0	1240145	C	Push-rod clamping device, for locking device
5	1	piece	9.980-003.0	0090021		PVC handle sleeve

12.9 Collecting Container (2101026)

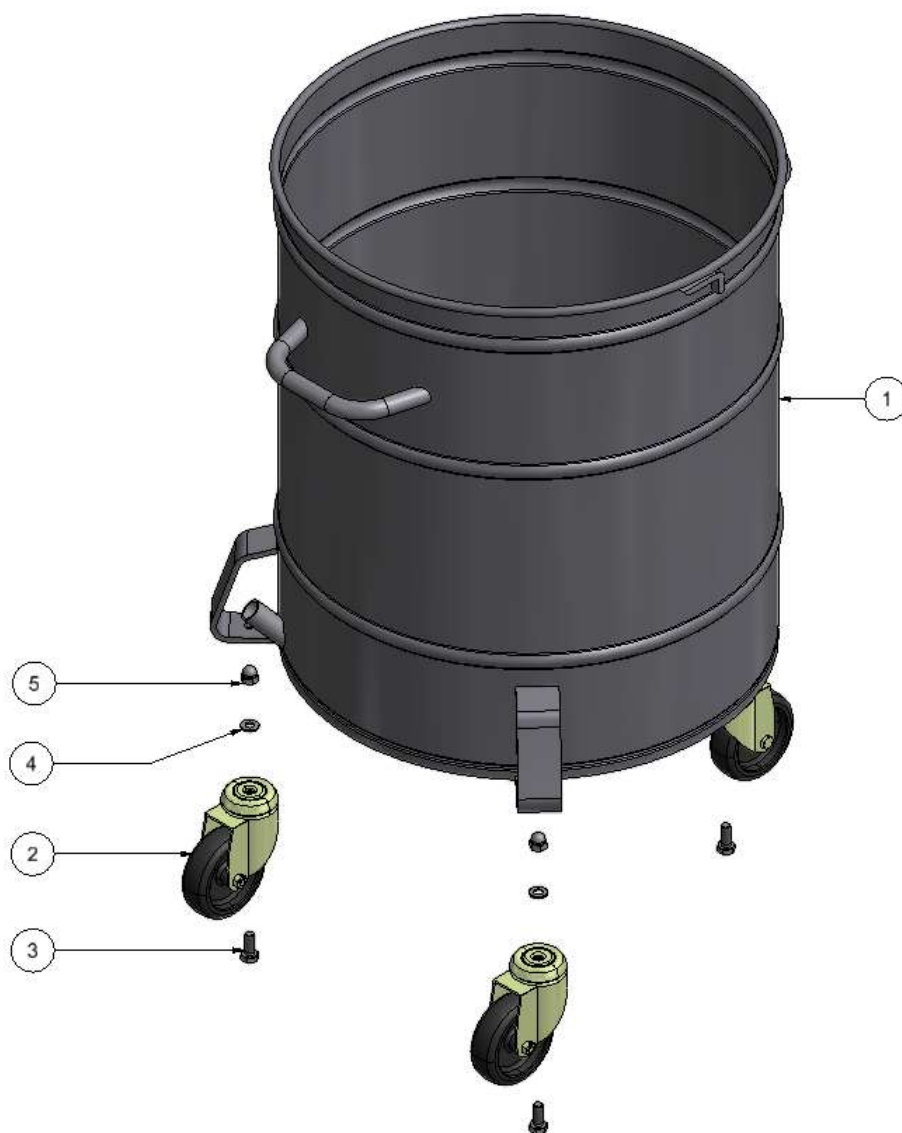


12.10 Collecting Container (2101026)

Item	Qty.	Unit	Order number	Component number	Version	DESIGNATION
*1	1	Piece	9.980-923.0	1100147	B	Collection container 100 litre without sight glass, with pressure balancing nozzle,
2	3	Piece	9.981-632.0	2220024	B	Caster ø100 mm without stop
3	3	Piece	9.974-111.0	0010134		Hexagon screw M10x25 DIN 933-8.8, zinc-plated
4	3	Piece	9.979-805.0	0010704	A	U-washer ø10.5 DIN 125 B, zinc-plated
5	3	Piece	9.979-800.0	0010430		Cap nut M10 DIN 1587, zinc-plated
6	1	Piece	9.974-766.0	0090083	A	Plastic slider f. pipe outer ø 25 mm, black

*not purchasable

12.11 Spare parts list/drawing collection tank 100 litres, V2A (1100332)

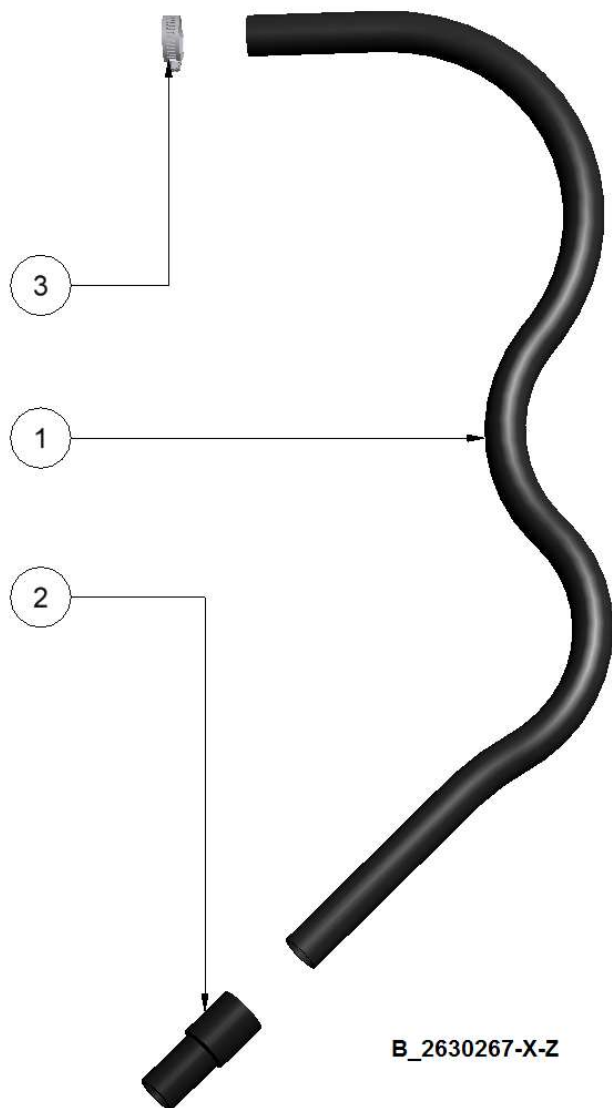


1100332-02X

12.12 Spare parts list/drawing collection tank 100 litres, V2A (1100332)

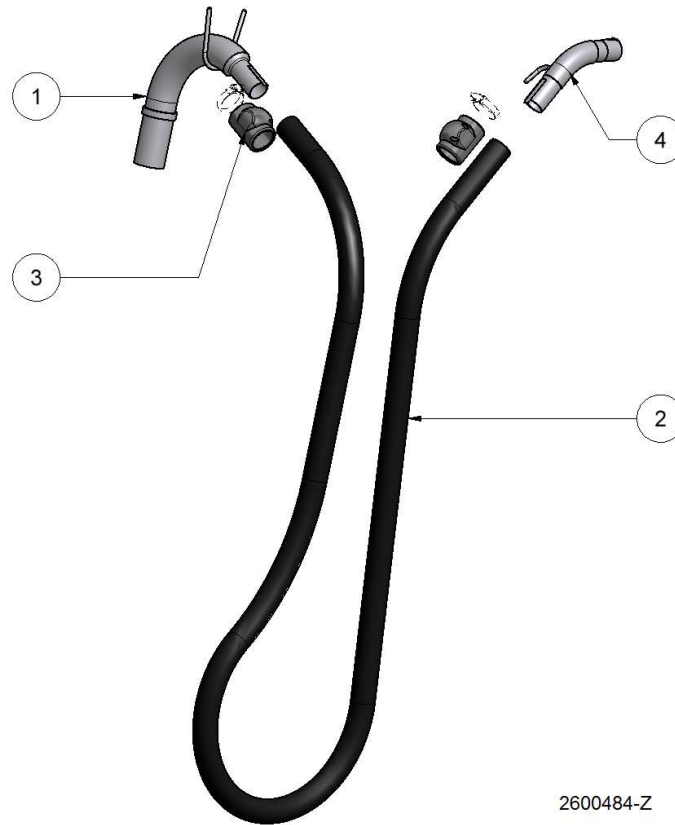
Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	Piece	1100221-V2A		Collection tank 100 litres, V2A, 600mm high
2	3	Piece	2220024	B	Caster ø100 mm without stop
3	3	Piece	0010134		Hexagon screw M10x25 DIN 933-8.8, zinc-plated
4	3	Piece	0010704		U-washer ø10.5 DIN 125 B, zinc-plated
5	3	Piece	0010430		Cap nut M10 DIN 1587, zinc-plated

12.13 Pressure balancing hose type "A" ø25, (2630267)



12.14 Pressure balancing hose type "A" ø25, (2630267)

Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	Piece	0601022		Hose ø25, type "A", 1300 mm long
			0601023		Hose ø25, type "A", 1600mm long (50l)
			0601024		Hose ø25, type "A", 1800mm long
2	1	Piece	0120142	A	PVC-end socket LW 25, black
3	1	Piece	0050004		Hose clamp ABA ø20-32 mm

12.15 Spare Parts List Suction hose DN 40, all Types (2600484-Z)


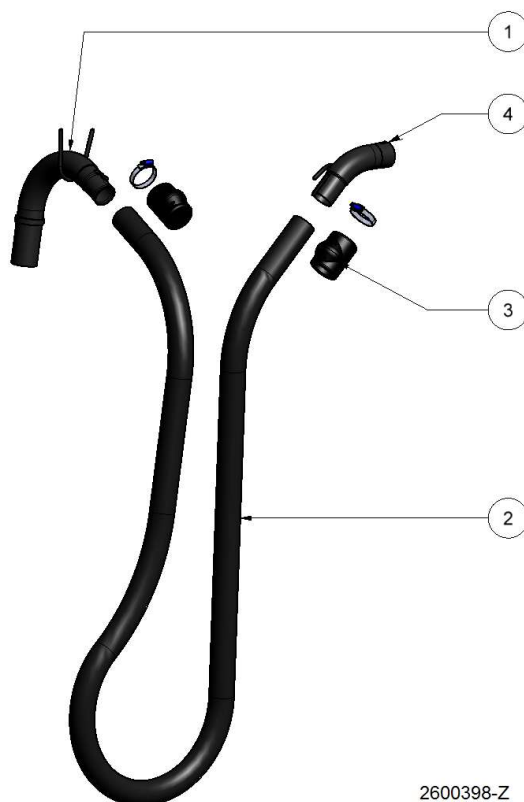
2600484-Z

12.15.1 Spare Parts List Suction hose DN 40, all Types (2600484-Z)

Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	piece	0490149	C	Push-in connection bow 115° DN40 black
2	1	piece	1600130		Spare hose DN40 Type "A", 3m
			1600131		Spare hose DN40 Type "A", 5m
			1600133		Spare hose DN40 Type "B", 3m
			1600134		Spare hose DN40 Type "B", 5m
			0600383		Spare hose DN40 Type "D", 3m
			0600384		Spare hose DN40 Type "D", 5m
			0600467		Spare hose DN40 Type "F as", sold by meter
3	1	piece	2050049		Mounting set for hose connection DN40 (DBP)
4	1	piece	1490148	A	Handle 45° with hose connection piece DN 40, black

if necessary the use of the reducing 0480276 from DN 70 to DN 50/40 is necessary.



12.16 Spare Parts List Suction hose DN 50, all Types (2600398-Z)


2600398-Z

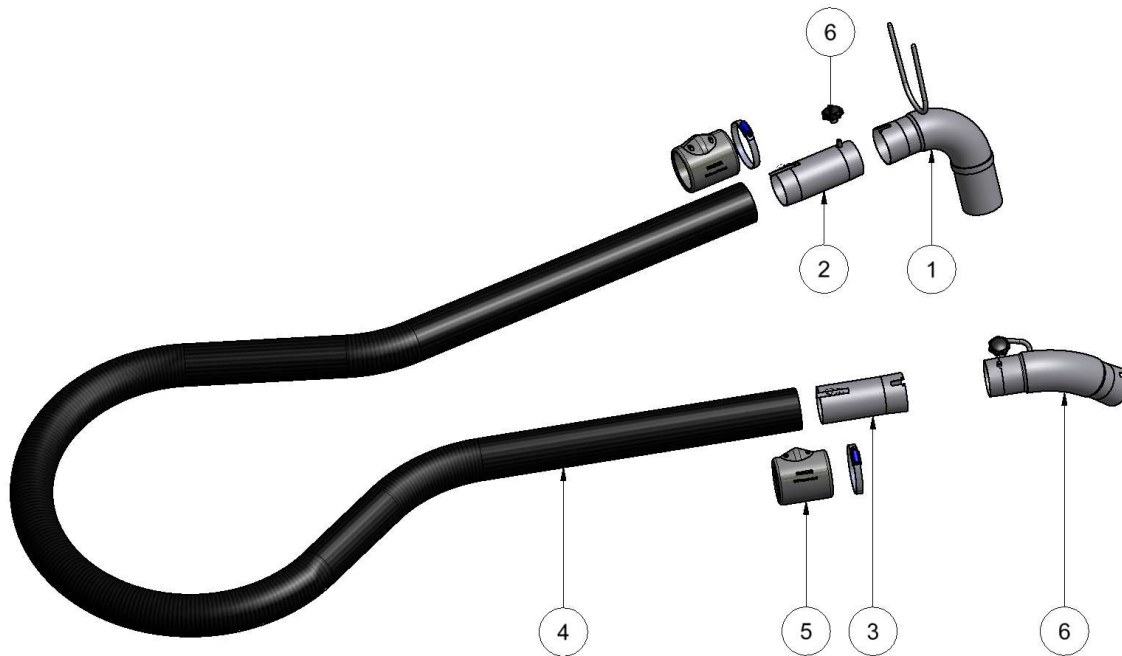
12.16.1 Spare Parts List Suction hose DN 50, all Types (2600398-Z)

Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	piece	0490098	G	Push-in connection bow 115° DN50 black
2	1	piece	1600118		Spare hose DN50 Type "A", 3m
			1600119		Spare hose DN50 Type "A", 5m
			1600109		Spare hose DN50 Type "C", 3m
			1600110		Spare hose DN50 Type "C", 5m
			1600112		Spare hose DN50 Type "D", 3m
			1600113		Spare hose DN50 Type "D", 5m
			1600474		Spare hose DN50 Type "E", 3m
			1600258		Spare hose DN50 Type "E", 5m
			0600454		Spare hose DN50 Type "F as", 3m
			0600455		Spare hose DN50 Type "F as", 5m
			0600281		Spare hose DN50 Type "G", 3m
			0600282		Spare hose DN50 Type "G", 5m
3	1	piece	2050039		Mounting set for hose connection DN50 (DBP)
4	1	piece	0490099	C	Handle 45° with hose connection piece DN 50, black

if necessary the use of the reducing 0480276 from DN 70 to DN 50/40 is necessary.



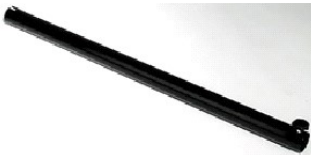
12.16.2 Spare Parts List Suction hose DN 70, all Types



12.16.3 Spare Parts List Suction hose DN 70, all Types

Item	Qty.	Unit	Component number	Version	DESIGNATION
1	1	Piece	1490040	B	Insertion bend 90°, DN 70 black
2	1	Piece	1480447	A	Hose connection piece with outer cone DN 70
3	1	Piece	1480446	A	Hose connection piece with inner cone DN 70
4	1	Piece	1600440		Hose DN70 type "A", 3m long
			1600441		Hose DN70 type "A", 5m long
			1600124		Hose DN70 type "C", 3m long
			1600125		Hose DN70 type "C", 5m long
			1600260		Hose DN70 type "D", 3m long
			1600261		Hose DN70 type "D", 5m long
			1600128		Hose DN70 type "E", 5m long
5	1	Piece	2050048		Assembly kit hose connection DN70 (DBP)
6	1	Piece	0490101	B	Handle DN 70, bent 45° black
7	1	Piece	0090008	B	Star handle E40 x M8

12.17 Accessories List

Image	Designation	Connection size (order)
	Elastic nozzle	DN 40 (1610115)
		DN 50 (1610116)
		DN 70 (1610117) *
	Flexible nozzle	DN 40 (1610118)
		DN 50 (1610119)
		DN 70 (1610120) *
	Flexible grooves nozzle 13mm	DN 40 (1610121)
		DN 50 (1610123)
	Extension tube	DN 40 (2610456)
		DN 50 (2610150)
		DN 70 (2610151) *
	Floor nozzle 370mm	DN 40 (2610106)
		DN 50 (2610108)

Additional accessories can be found on the website of the company Kärcher Industrial Vacuuming GmbH or in the accessories catalog.

* Accessories size not available for all devices

13 Component documentation

13.1 Documentation Multijector

Comprising of the following pdf documents:

0401010 Vacuum pumps German

0401037 Original operating instructions Multijector vacuum pump

These documents may be requested from Kärcher Industrial Vacuuming GmbH as a PDF file under number 0401010 or 0401037 on demand.

14 EEC-Declaration of Conformity**EC Declaration of Conformity in accordance with the
Machinery Directive 2006/42/EC Appendix II 1A**

The product described below:

This declaration shall cease to be valid if the machine is modified without our prior approval.

Designation: Industrial Vacuum Cleaner
Type: IVR 100/40-Pp Sc, IVR 100/75-Pp Sc
Serial number: 9.978-xxx.x
Year of build: 06.2024

produced by:	Kärcher Industrial Vacuuming GmbH Robert-Bosch-Straße 4-8 D 73550 Waldstetten	Person authorized for the compilation of technical documents
	Tel: +49(0)7171-94888-0 Fax: +49(0)7171-94888-28 e-mail: info.iv@de.kaercher.com	Alexander Haag Dept.: Design/Construction Robert-Bosch-Straße 4-8 D 73550 Waldstetten

complies with the following EC directives:

EC Directive (2006/42/EC)
EMC Directive (2014/30/EU)

The following harmonized standards were applied:

DIN EN ISO 13857	Safety of machinery; Safety distances to prevent upper and lower limbs coming into contact with danger points
DIN EN ISO 13854:2020-01	Safety of machinery; Minimum distances to avoid crushing of body parts.
DIN EN 60335-2-69	Special requirements for vacuum cleaners and water suction devices for industrial and commercial purposes.

Waldstetten, 26.06.2024



T. Wahl
Managing Director



A. Haag
Director R&D