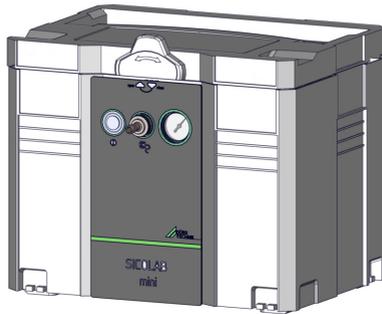


Oil-free compressor station SICOLAB mini

EN



Installation and operating instructions

CE

0715100100L02



 DÜRR
TECHNIK

1808V004

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Addresses



Important information

1 About this document

These installation and operating instructions represent a part of the unit. They correspond to the relevant version of the unit and the status of technology valid at the time of its market launch.



In the event that the instructions and notes in these installation and operating instructions for are not observed, Dürr Technik accepts no warranty or liability of any kind for the safe operation and reliable function of the units.

This translation was prepared to the best of our knowledge. The original German language version of the manual is the definitive version. Dürr Technik is not liable for translation errors.

1.1 Warnings and symbols

Warnings

The warnings in this document are intended to draw your attention to possible risks of personal injury or material damage.

The following warning symbols are used:



General warning symbol



Warning – dangerous high voltage



Warning – hot surfaces



Warning - automatic start-up of the unit

The warnings are structured as follows:



SIGNAL WORD

Description of the type and source of danger

Here you will find a description of the possible consequences of ignoring the warning.

- › Follow these measures to avoid the danger.

The signal word differentiates between four levels of danger:

– DANGER

Immediate danger of severe injury or death

– WARNING

Possible danger of severe injury or death

– CAUTION

Risk of minor injuries

– ATTENTION

Risk of extensive material/property damage

Other symbols

These symbols are used in the document and on or in the unit:



Note, e.g. specific instructions regarding efficient and cost-effective use of the unit.



Comply with the specification in the accompanying documents.



Date of manufacture



CE labelling



Dispose of the unit properly and in accordance with applicable national, regional and local laws.



Switch off and de-energise the unit (e.g. unplug from mains).

1.2 Copyright information

All names of circuits, processes, names, software programs and units used in this document are protected by copyright.

The reprinting of the installation and operating instructions, even in extracts, is only permitted with the written permission of Dürr Technik.

2 Safety

Dürr Technik has developed and constructed the units in such a way that danger is to a large extent excluded if the units are used as intended. Nevertheless, residual risks can remain. You should therefore observe the following notes.

2.1 Intended use

The unit is intended for the compression of atmospheric air. The unit has been designed for operation in dry, ventilated rooms. The unit must not be operated in a damp or wet environment. Its use in the vicinity of gases or flammable liquids is prohibited. Only operate the units in a stationary, upright position.

2.2 Improper use

Any other usage or usage beyond this scope is deemed to be improper. The manufacturer accepts no liability for damages resulting from improper use. In these cases the user/operator will bear the sole risk.



WARNING

Serious injury and material damage due to improper usage

- › Conveying explosive mixtures in any way other than that specified is not permitted.

2.3 General safety information

- › Always comply with the specifications of all guidelines, laws, and other rules and regulations applicable at the site of operation for the operation of this unit.
- › Check the function and condition of the unit prior to every use.
- › Do not convert or modify the unit.
- › Comply with the specifications of the Installation and Operating Instructions.
- › The Installation and Operating Instructions must be accessible to all operators of the unit at all times.

2.4 Qualified personnel

Operation

Unit operating personnel must ensure safe and correct handling based on their training and knowledge.

- › Instruct or have every user instructed in handling the unit.

Installation and repairs

- › Always arrange for any assembly work, readjustments, alterations, extensions, and repairs to be performed by Dürr Technik or by personnel authorised and trained by Dürr Technik. Qualified personnel are defined as those trained by Dürr Technik; who are familiar with the unit technology; and are aware of the dangers presented by the unit.

2.5 Electrical safety

- › Observe and comply with all the relevant electrical safety regulations when working on the unit.
- › Replace any damaged cables or plugs immediately.

2.6 Only use original parts

- › Only use accessories and special accessories that are specified or approved by Dürr Technik.
- › Only use original working and spare parts.



Dürr Technik accepts no liability for damage resulting from the use of non-approved accessories, special accessories or any working parts or spare parts other than original parts.

2.7 Transportation and storage

The original packaging provides optimum protection for the unit during transport.



Dürr Technik will not accept any responsibility or liability for damage occurring during transport due to the use of incorrect packaging, even where the unit is still under guarantee.

- Only transport the unit in its original packaging.
- Keep the packing materials out of the reach of children.



WARNING

Risk of explosion of the pressure vessel and pressure hoses

Serious personal injury and material damage

- › The pressure vessel and the pressure hoses must be vented before they are stored or transported.
- › Protect the unit from moisture during transportation.
- › Always transport the unit in an upright position.
- › Only transport the unit using the transport handles provided.

The unit may be stored in its original packaging

- in warm, dry and dust-free rooms;
- protected from contaminants.



If possible, retain the packaging material.

Ambient conditions during storage and transport

Ambient conditions during storage and transport

Temperature	°C	-25 to +55
Rel. humidity	%	10 % to 90 %

Please refer to the labels on the packaging padding.

2.8 Disposal

Unit



Dispose of the unit properly and in accordance with applicable national, regional and local laws.

Packaging



Dispose of the packaging material in an environmentally responsible manner.

- Note current disposal routes.
- Keep the packing materials out of the reach of children.



3 Overview

The unit draws in atmospheric air and compresses it. The oil-free compressed air is then transported to the pressure vessel. The oil-free and filtered air is made available to the consumers in the pressure vessel.

If compressed air is removed for a consumer, the pressure in the vessel drops. When the switch-on pressure is reached, the unit is automatically switched on again via the pressure switch. When the cut-off pressure is reached, the unit is automatically switched off. A safety valve prevents the maximum permissible vessel pressure from being exceeded.

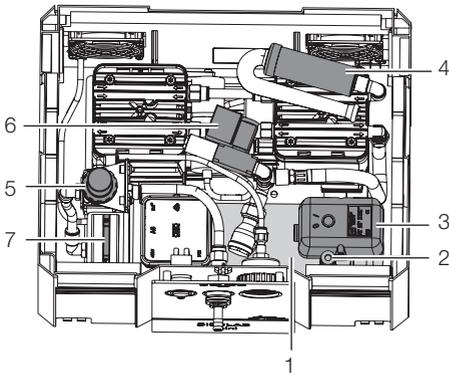


Figure 1: SICOLAB 062 mini top view (without unit cover)

- 1 Pressure vessel
- 2 Safety Valve
- 3 Pressure switch
- 4 Air intake filter
- 5 Pressure reducer with condensate separator and fine filter 5 µm
- 6 Solenoid valve*
- 7 Operating time counter

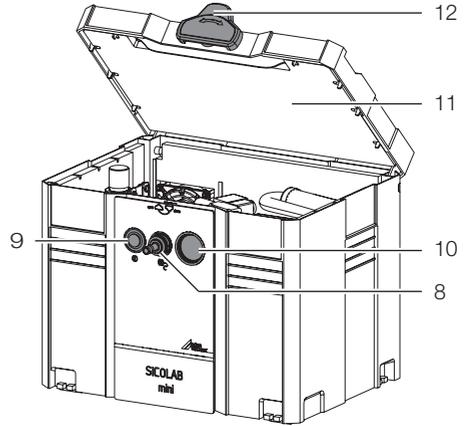


Figure 2: SICOLAB 062 mini front view

- 8 Quick-release coupling (choked)
- 9 On/Off switch
- 10 Pressure gauge
- 11 Unit cover
- 12 Unit cover lock

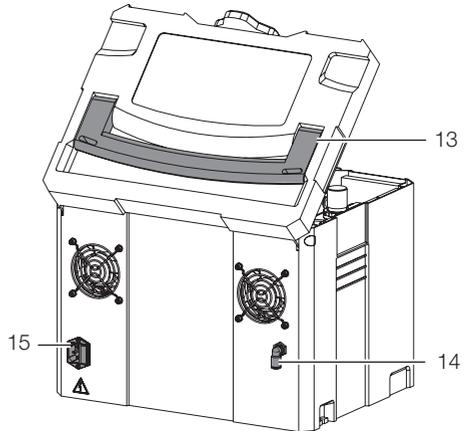


Figure 3: SICOLAB 062 mini rear view

- 13 Carry handle
- 14 Condensate drain hose
- 15 Power plug with fuses

3.1 Unit 8012100011

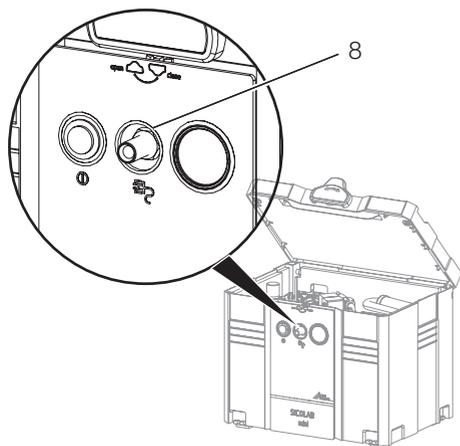


Figure 4: SICOLAB 062 mini; Article 8012100011 with bulkhead fitting; front view

8 Bulkhead fitting*

* Bulkhead fitting G 1/4" - tightening torque max. 15 Nm

3.2 230 V units

The units are available in the following 230 V variants:

Description	Article no.	Air intake filter cartridge, long 0714200050	Fine filter cartridge 5 µm 0715100052
SICOLAB 025 mini	0715100035	●	●
SICOLAB 038 mini	0715100033	●	●
SICOLAB 038 mini	8012100013	●	●
SICOLAB 062 mini	0715100007	●	●
SICOLAB 062 mini	8012100011	●	●

- Present

3.3 Units for endoscopy

Unit variants for use in endoscopy

Description	Article no.	Air intake filter cartridge, long 0714200050	Fine filter cartridge 5 µm 0715100052	Fine filter 0.3 µm 0715100045	Cleaning gun with hose 0654 0720
SICOLAB mini Endo	0715100041	●	●	●	●

- Present

3.4 115 V units

The units are available in the following 115 V variants:

Description	Article no.	Air intake filter cartridge, long 0714200050	Fine filter cartridge 5µm 0715100052
SICOLAB 038 mini	0715100040	●	●
SICOLAB 062 mini	0715100039	●	●

- Present

3.5 Wear parts and replacement parts

The following wearing parts need to be replaced at the specified maintenance intervals (see "8.1 Maintenance schedule").

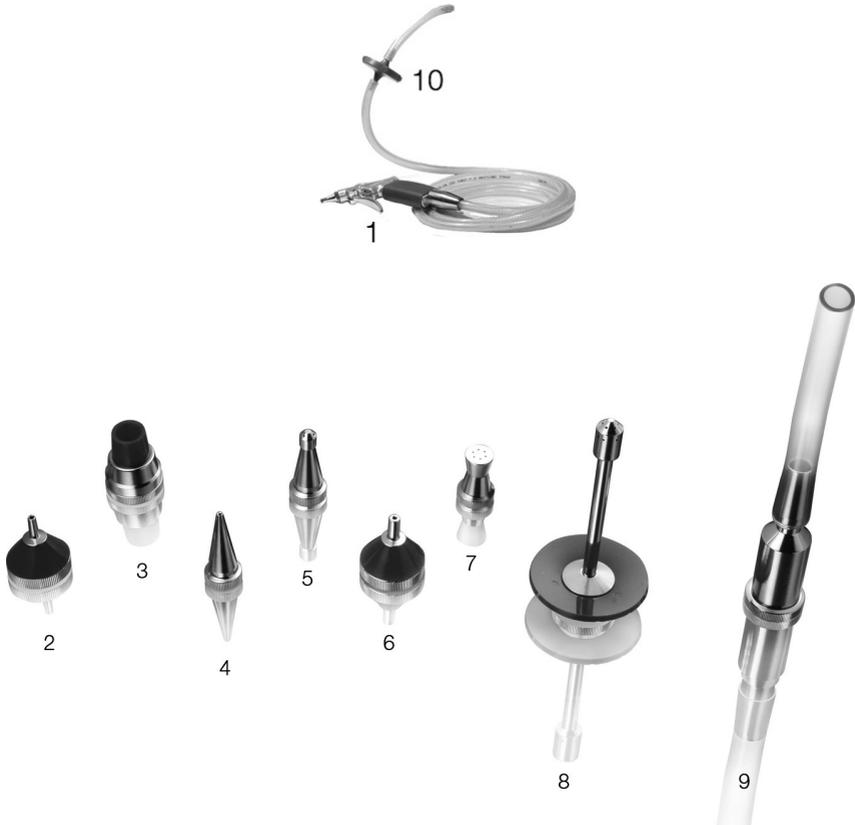
Spare parts SICOLAB 025 / 038 / 062 mini		Remark
Air intake filter cartridge, long	0714200050	Filter cartridge
Fine filter cartridge 5 µm	0715100052	Filter cartridge in condensate separator
Fine filter 0.3 µm	0715100045	Filter for SICOLAB mini Endo 3 in one set

Spare parts and accessories

Fuses (mains fuses) SICOLAB 025 mini / SICOLAB 038 mini (230 V)	9000-115-0012
Fuses (mains fuse) SICOLAB mini Endo.	9000-115-0012
Fuses (mains fuse) SICOLAB 062 mini (230 V).	9000-115-0013
Fuses (mains fuse) SICOLAB 038 mini (115 V).	9000-115-14
Fuses (mains fuse) SICOLAB 062 mini (115 V).	9000-115-46
powercord (RW-F3G1,00; length 2,5m), CN plug - IEC	8012100014
powercord (H05VV-F3G1,00; length 2,5m); UK plug - IEC	8012100015

3.6 Special accessories for SICOLAB mini Endo

The following optional items can be used with the device:



Special accessories	Item no.	Article no.
Cleaning gun with hose	1	0654 0720
Rekord connector	2	0654 0711
Pipette connector	3	0654 0712
Catheter connector	4	0654 0713
Drainage connector	5	0654 0714
Luer-Lock connector	6	0654 0715
Spray nozzle connector	7	0654 0716
Bottle rinsing attachment connector	8	0654 0717
Water jet connector	9	0654 0718
Fine filter 0.3 µm	10	0715100045

4 Technical data

4.1 230 V units

Electrical data		SICOLAB 025 mini 0715100035		SICOLAB 038 mini 0715100033 8012100013		SICOLAB 062 mini 0715100007 8012100011
Electrical frequency	Hz	50	60	50	60	50
Nominal voltage	V	230	230	230	230	230
Rated power	P1 (kW)	0.22	0.27	0.34	0.34	0.44
Nominal current	A	1.0	1.2	1.8	1.6	2.1
Nominal pressure	bar / MPa	7 / 0.7	7 / 0.7	7 / 0.7	7 / 0.7	7 / 0.7
Mains fusing	A	2	2	2	2	2.5

General data						
Pressure vessel volume	L	2	2	2	2	2
Delivery quantity at 0 bar (0 MPa)	l/min	25	29	36	38	67
Delivery quantity at 5 bar (0.5 MPa)	l/min	8	9	20	23	36
Delivery quantity at 7 bar (0.7 MPa)	l/min	6	7	16	18	26
Duty cycle	%	100	100	100	100	100
Switch-on/cut-off pressure	bar / MPa	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7
Safety pressure PS	bar / MPa	8 / 0.8	8 / 0.8	8 / 0.8	8 / 0.8	8 / 0.8
Speed	min ⁻¹	1400	1600	1300	1500	1390
Noise level (at nominal pressure)	dB (A)	48	50	50	52	51
Weight	kg	15	15	16	16	20
Dimensions* (L x W x H)	mm	396 x 295 x 321				

*Dimensions without quick-release coupling and hose nozzle

Ambient conditions during operation						
temperature	°C	+5 to +40				
Relative humidity	%	Max. 95				

4.2 Units for endoscopy

Electrical data		SICOLAB mini Endo 0715100041	
Electrical frequency	Hz	50	60
Nominal voltage	V	230	230
Rated power	P1 (kW)	0.3	0.3
Nominal current	A	1.7	1.4
Nominal pressure	bar / MPa	1 / 0.1	1 / 0.1
Mains fusing	A	2	2

General data			
Pressure vessel volume	L	2	2
Delivery quantity at 0 bar (0 MPa)	l/min	36	38
Duty cycle	%	100	100
Switch-on/cut-off pressure	bar / MPa	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7
Safety pressure PS	bar / MPa	8 / 0.8	8 / 0.8
Speed	min ⁻¹	1300	1500
Noise level (at nominal pressure)	dB (A)	48	49
Weight	kg	16	16
Dimensions* (L x W x H)	mm	396 x 295 x 321	396 x 295 x 321

*Dimensions without quick-release coupling and hose nozzle

Ambient conditions during operation			
temperature	°C	+5 to +40	+5 to +40
Relative humidity	%	0 - 95	0 - 95

4.3 115 V units

Electrical data		SICOLAB 038 mini 0715100040		SICOLAB 062 mini 0715100039
Electrical frequency	Hz	50	60	60
Nominal voltage	V	115	115	115
Rated power	P1 (kW)	0.35	0.38	0.58
Nominal current	A	4.0	3.2	4.8
Nominal pressure	bar / MPa	7 / 0.7	7 / 0.7	7 / 0.7
Mains fusing	A	4	4	6.3

General data				
Pressure vessel volume	L	2	2	2
Delivery quantity at 0 bar (0 MPa)	l/min	36	42	77
Delivery quantity at 5 bar (0.5 MPa)	l/min	20	23	41
Delivery quantity at 7 bar (0.7 MPa)	l/min	16	18	29
Duty cycle	%	100	100	100
Switch-on/cut-off pressure	bar / MPa	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7	5 - 7 / 0.5 - 0.7
Safety pressure PS	bar / MPa	8 / 0.8	8 / 0.8	8 / 0.8
Speed	min ⁻¹	1370	1630	1620
Noise level (at nominal pressure)	dB (A)	52	53	54
Weight	kg	16	16	20
Dimensions* (L x W x H)	mm	396 x 295 x 321	396 x 295 x 321	396 x 295 x 321

*Dimensions without quick-release coupling and hose nozzle

Ambient conditions during operation			
temperature	°C	+5 to +40	+5 to +40
Relative humidity	%	0 - 95	0 - 95

4.4 Pressure tank

Pressure vessels from Behälter-Werk Burgau GmbH are installed in the unit.

The instructions for use given below apply to the following pressure vessel type:

Type	Pressure ¹⁾	Vessel ²⁾	APP ³⁾	c ⁴⁾	Remark ⁵⁾
316206 / 0715100005	PS 11 bar	V 2 l	B	c = 1.0 mm	1; 2

For serial number and build year refer to the labelling on the vessel.

¹⁾ Pressure	Maximum operating pressure PS in bar
²⁾ Vessel	Vessel volume V in litres
³⁾ Application (APP)	B = Pressure vessel for stationary systems
⁴⁾ Corrosion allowance	c in mm
Maximum temperature	+100 °C
Minimum temperature	-10 °C
Medium	Air/nitrogen
⁵⁾ Remark	1: The vessel is capable of sustained operation within a pressure fluctuation range of 2.2 bar (20% PS)
Applied standards	EN 286-1:1998/A2:2005



4.5 Instructions for use for the pressure vessel (explanation by Behälter-Werk Burgau GmbH)

The pressure vessel must only be used in accordance with the aforementioned intended purpose and in accordance with the specified technical data. Other forms of use are not permitted for reasons of safety. The pressure vessel has been designed in accordance with Directive 2014/29/EU and has been manufactured as a single component without safety equipment for the application area detailed above. The unit has been designed for internal pressure loads.

Before commissioning, the vessel must be fitted with the necessary safety equipment such as a pressure gauge and safety equipment designed to protect against overpressure, etc. These parts are not included in our scope of delivery.

No welding work or heat treatment may be carried out on the pressure-retaining walls of the vessel. It must be ensured that the internal pressure does not exceed the operating pressure PS specified in the labelling on the vessel during operation. However, this pressure may be temporarily exceeded by up to 10%. Vibration stress that would be damaging for the pressure vessel and corrosion on the vessel must be prevented using appropriate measures.

The assembly or installation of the pressure vessel must be carried out in such a way that safe use of the vessel is ensured (e.g. no rigid connection to the floor or machine base frame without vibration dampers).

The operating instructions to be provided by the equipment supplier must include the following information in accordance with the equipment fitted:

- a) Instructions for draining the condensate
- b) Instructions and information about maintenance to ensure safety of use

The supplier must also specify whether the pressure vessel, when fully equipped for operation, has to undergo an acceptance test before commissioning. The supplier/owner must observe the laws and regulations regarding the operation of the pressure vessel that apply in the country of operation.

The design is intended for predominantly static internal pressure loads and covers the following operating parameters: 1000 load changes from 0 to PS and capable of sustained operation within a pressure fluctuation range of 1.6 bar to 2.2 bar.

Refer to the "4.4 Pressure tank" **Remarks**.

4.6 Type plate

The type plate is located on the rear of the unit.



REF Order number

SN Serial number

This information is also required when ordering spare parts.

4.7 Declaration of conformity for machines in accordance with the 2006/42/EC Directive

We hereby declare that the unit described below conforms to all requirements of the machine directive 2006/42/EC.

The unit named below fulfills the requirements of the following directives:

- Electromagnetic Compatibility (EMC) Directive 2014/30/EU
- Simple pressure vessel directive 2014/29/EU
- RoHS directive 2011/65/EU

Manufacturer's name:	Dürr Technik GmbH & Co. KG
Manufacturer's address:	Pleidelsheimer Straße 30 D-74321 Bietigheim-Bissingen

Reference number:	0715 / 8012
Article designation:	SICOLAB mini
From the serial number:	H400000 (0715) / J400000 (8012)

We hereby declare that the unit may only be commissioned once it has been established that the machine into which this unit is to be installed complies with the provisions as set out in Machinery Directive 2006/42/EC.

The following harmonised standards and other standards have been applied:

DIN EN 1012-1:2011-02
DIN EN 60034-1:2011-02
DIN EN 60034-5:2007-09
DIN EN 60335-1:2014-11
DIN EN 61000-3-2:2015-03
DIN EN 61000-6-3:2012-11
DIN EN 60204-1:2010-05
DIN EN ISO 12100:2013-08

Bietigheim-Bissingen, 01/06/2017

Andreas Ripsam
Executive Board of Dürr Technik

Proof of signature in the
Original document held by Dürr Technik



5 Requirements

5.1 Installation/setup room

The room chosen for set up must fulfil the following requirements:

- Closed, dry, well-ventilated room.
- Should not be a purpose-made room (e. g. boiler room or wet room).
- Set up the unit on a clean, level and sufficiently stable surface (take the weight of the unit into account).
- Set up or install the unit so that the type plate can be easily read and the unit is easily accessible for operation and maintenance.
- Set up the units so that the socket to which the units is connected is easily accessible.
- Room temperature: +5°C to +40°C.
- Ensure that there is sufficient distance to the wall so that the air can flow in and out without any obstruction.

 The air is filtered when it is sucked in. This does not alter the composition of the air. The source of the air taken in should be free of any harmful substances (e.g. do not draw in air from an underground garage or directly next to a suction machine).



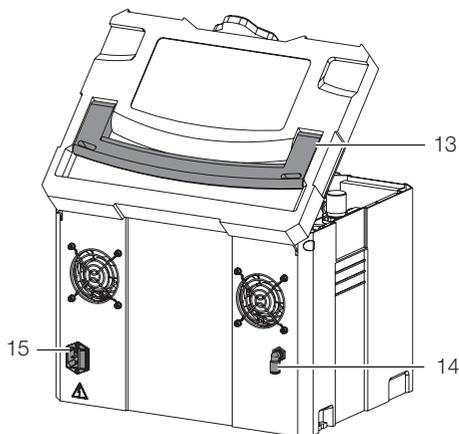
NOTICE

Risk of overheating due to insufficient ventilation

The units generates heat. Possibility of heat damage and/or reduced service life of the unit.

- > Do not cover the unit.
- > Air must be able to flow in and out unobstructed.
- > Ventilation openings must be sufficiently large.
- > Installed units may require an independent ventilation system in unfavourable cases.

The unit must only be operated on a stable, even base. The unit must not be used as a climbing aid. Danger of breakage! Place a collector tray under the black hose (14) on the rear of the unit to collect any condensate that is blown out.



WARNING

Do not reach into the fan grille with your fingers or any objects

Risk of injury from fan blades.

5.2 Pressure vessel test



The owner must comply with the national directives.

Example for Germany: German Ordinance on Industrial Safety and Health (BetrSichV)

6 Commissioning

6.1 Remove the packaging

The unit is securely protected with packaging material to ensure safe transportation.

- › Remove the packaging material.
- › Remove the protective film.
- › Check the unit for damage in transit.
- › Only lift the unit using the transport handles and/or from the bottom.

6.2 Establishing the compressed air connection

The unit has a 7.2 mm quick-release coupling on its outer side. The matching hose nozzle for a connecting hose with an internal diameter of 9 mm is included in the scope of delivery.



CAUTION

Damage to the quick-release coupling if the cover of the unit is open

The quick-release coupling can be damaged due to high compressive forces during connection of the pressure hose.

- › The cover of the unit must be closed and locked.

Quick-release coupling – operating panel



The compressed-air connection to the pressure reducer has a constant pressure (set at the factory) of 0 – 6 bar.

The pressure can be adjusted via the pressure reducer in the unit – see "7.3 Setting the pressure reducer".

- › Compressed air is extracted at the quick-release coupling (7.2 mm) via a hose adapter piece on the operating panel of the unit.
- › Secure the pressure hose to the hose adapter piece using a hose clip.
- › Connect the hose adapter piece to the quick-release coupling.

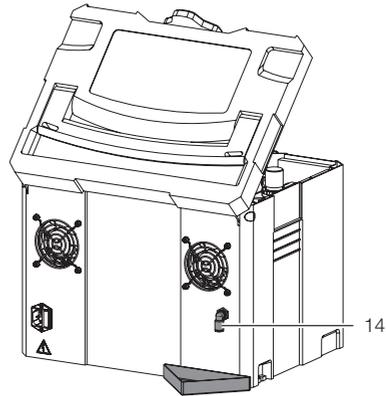
Article 8012100011 - Bulkhead fitting

- › Air is extracted at the bulkhead fitting G 1/4".
Tighten the bulkhead fitting with a maximum tightening torque of 15 Nm.

6.3 Condensate

When air from the surrounding atmosphere is compressed, different amounts of condensate will accumulate in the pressure vessel depending on the humidity and temperature of the air. This condensate is collected via the integrated condensate separator, which is located between the pressure vessel and the compressed air connection. As soon as a certain fill level is reached in the condensate separator the condensate is drained off to the outside via the condensate drain hose.

- › Place a collector tray under the condensate drain.



14 Condensate drain hose

- › Or: direct the condensate drain hose into a waste water floor drain.

6.4 Electrical installation

- › Connect the power cord to the mains socket on the rear of the unit
- › Connect the power cord to a properly installed mains socket with PE conductor.
- › Route the power cord in such a way that it is not under any mechanical tension.
- › Before commissioning, verify that the power supply voltage complies with the voltage specifications of the type plate.



DANGER

Risk of electric shock due to damaged power cord or plug

Electric shocks can cause severe injuries.

- › Do not start up the unit if the power cord or plug is damaged.
- › Replace the damaged power cord.

6.5 Overtemperature protection

The motors in the units are equipped with a temperature switch that switches the unit off if it overheats. If this happens, you will first need to determine the cause of the fault and then remedy it.



If the unit is switched off via the temperature switch, the fan of the unit will continue to run.



NOTICE

Automatic start-up of the unit after cooling down

- › Allow unit to cool down



7 Operation



Prior to working on the device or in case of danger, disconnect it from the mains (e. g. pull the mains plug).



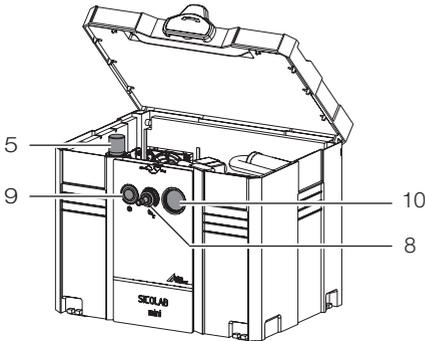
DANGER

Risk of electric shock due to defective cable connections and risk of burns due to hot surfaces if the unit is operated with the cover open.

During operation, the unit is under a live voltage and its surfaces get hot.

- › The cover of the unit must be closed during operation.
- › Regularly check cable connections for damage.

7.1 Switching the unit on/off



9 On/Off switch

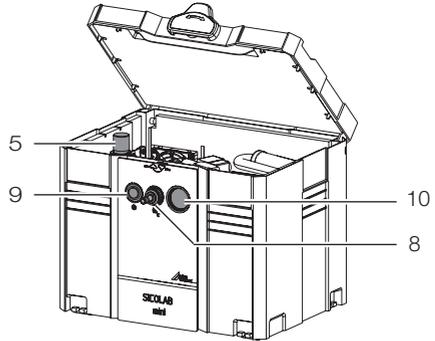
- › The unit is switched on by pressing the on/off switch (9).
The unit starts up and the pressure vessel is filled. When the cut-off pressure is reached the unit switches off automatically.
- › The unit is switched off by pressing the on/off switch (9) again.

Maximum operating pressure:	8 bar
Switch-on/cut-off pressure:	5 / 7 bar

7.2 Start-up cycles

The motors in the compressor stations are designed for 10 starts/stops per hour. More frequent switching will lead to increased wear.

7.3 Setting the pressure reducer



5 Pressure reducer

8 Quick-release coupling

9 On/Off switch

10 Pressure gauge

The pressure reducer (5) regulates the desired working pressure at the quick-release coupling (8).

The pressure reducer (5) can be adjusted. The maximum constant operating pressure is 5 bar.

Adjusting the pressure reducer:

The constant operating pressure can be adjusted by turning the pressure reducer (5). The pressure can be read off at the pressure gauge (10).

- › **To increase the supply pressure:** Turn the pressure reducer (5) clockwise towards "+".
- › **To decrease the supply pressure:** Turn the pressure reducer (5) anti-clockwise towards "-".

7.4 Notes on the cleaning gun (if present)



The cleaning gun is available as an accessory for SICOLAB mini Endo devices and is operated with compressed air.

Please refer to the information below for safe handling of the cleaning gun:

- **Safety note:** The cleaning gun is not a medical device and is therefore not approved for use on people.
- **Pushing on the attachments:** The attachments are pushed onto the safety cone on the tip of the cleaning gun.
- **Air flow regulator on the cleaning gun:** The air flow can be adjusted via the trigger. The knurled screw behind the trigger must be opened up.
- **Cleaning note:** The cleaning gun with blue silicone handle and the attachments must only be cleaned with lukewarm water and a mild cleaning agent.



WARNING

Risk of injury due to improper use of the cleaning gun if the cleaning gun is pointed at parts of the body or body openings.

The pressure of the air flow can cause injuries.

- › During operation, the cleaning gun must not be directed at parts of the body or body openings.



CAUTION

Risk of material damage due to attachments becoming detached from the cleaning gun during operation.

If the attachments become detached from the cleaning gun during operation, this can lead to material damage.

- › Before using the unit, make sure that the attachments are properly secured on the cleaning gun.

8 Maintenance



De-energise the unit prior to working on it or in the event of potential danger (e. g. pull the mains plug) and prevent it from being switched back on again.

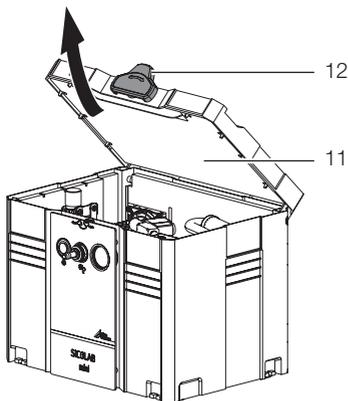
8.1 Maintenance schedule

Maintenance interval	Maintenance work
Monthly	› Check the fan, clean the unit (see "8.6 Checking the fan")
Annually	› Replacement of the air intake filter cartridge – if there is a high concentration of dust, this must be done every six months (see "8.3 Replace the air intake filter cartridge")
Annually	› Replace the fine filter 5µm in the condensate separator (see "8.4 Replacing the fine filter (5 µm) in the condensate separator")
Every 7 operating hours	› Replace the fine filter 0.3 µm in the hose of the cleaning gun (see "8.5 Replacing the fine filter 0.3 µm")
In accordance with national law	› Performance of recurring safety inspections (e.g. pressure container inspections, electrical safety inspections) in accordance with applicable national laws.

8.2 Preparations when replacing a filter

The following steps need to be carried out before any maintenance work can be performed on the unit:

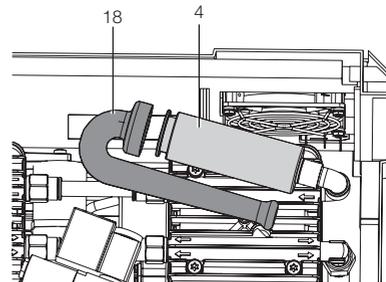
- › Allow the unit to cool down.
- › Switch off the unit.
- › Disconnect the mains plug and prevent the unit from being switched back on again.
- › Evacuate the unit using e.g. a compressed air pistol (accessory) connected to the quick-release coupling until the pressure gauge displays 0 bar.
- › Open the lock on the unit cover.
- › Lift up the unit cover.



- 11 Unit cover
- 12 Unit cover lock

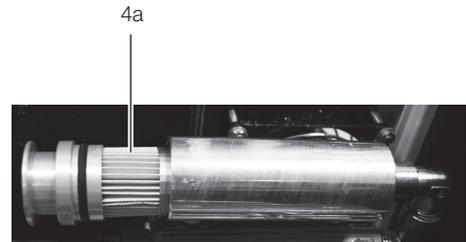
8.3 Replace the air intake filter cartridge

- › Pull off the noise reducer from the air intake filter.



- 4 Air intake filter
- 18 Silencer

- › Pull the air intake filter cartridge out of the air intake filter.

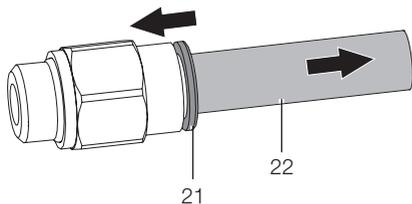
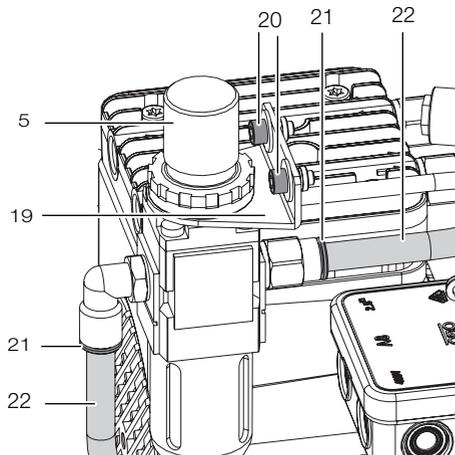


- 4a Air intake filter cartridge

- › Insert a new air intake filter cartridge and push it into the air intake filter.
- › Push the noise reducer onto the air intake filter and close the cover of the unit.

8.4 Replacing the fine filter (5 µm) in the condensate separator

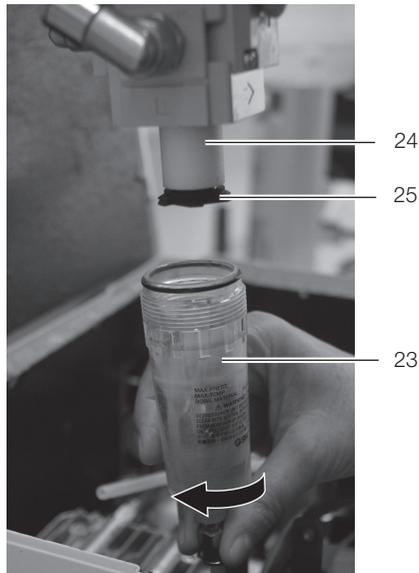
- › Detach the cheese head screws of the holding bracket (pressure reducer with condensate separator) from the frame of the unit using a 4 mm Allen key.
- › Disconnect two hoses as shown from the condensate separator. Press back the release ring on both sides with your fingers or using a release tool and keep it pressed in this position. Pull the hose straight out of the push fit connection.



- 5 Pressure reducer with condensate separator
- 19 Holding bracket
- 20 Hexagon socket screws
- 21 Release ring
- 22 Hose

- › Take out the condensate separator to the top, allowing the condensate hose to remain on the condensate separator.
- › Undo the cover of the condensate separator by twisting it clockwise.
- › Replace the filter element of the fine filter and close it off with a black sealing cap.

- › Screw on the cover of the condensate separator. Push in the hoses as far as they will go into the relevant push fit connection and lightly tug on them to check they are securely seated. Avoid subjecting the hose connections to tensile forces or torsion forces.



- 23 Cover of the condensate separator
- 24 Fine filter filter element
- 25 Sealing cap

- › Screw the holding bracket for the pressure reducer with condensate separator to the frame of the unit and close the cover of the unit.

8.5 Replacing the fine filter 0.3 µm

For SICOLAB mini Endo

- Pull off the hoses from the fine filter 0.3 µm.
- Push the hose ends onto the new fine filter 0.3 µm and secure them with the cable ties.



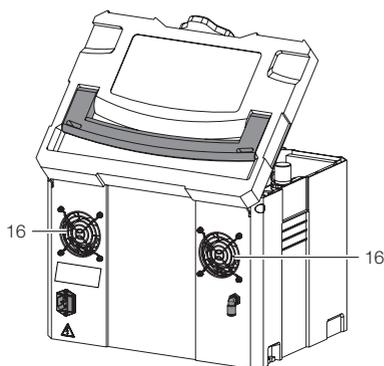
8.7 Cleaning

- Regularly check the ventilation openings on the front and rear of the unit for soiling. Clean if required.
- Remove dirt and dust deposits from the interior of the unit.
- Wipe the surface of the unit with a damp cloth. Cleaning agents may cause discolouration of the surface.

EN

8.6 Checking the fan

Perform a monthly visual inspection of the fan to check that it moves freely. If a fan is locked the unit must be taken out of operation. The fans run constantly when the compressor is operational.



16 Ventilator



9 Tips for operators and service technicians



Any repairs exceeding routine maintenance may only be carried out by qualified personnel or our service.



Prior to working on the device or in case of danger, disconnect it from the mains (e. g. pull the mains plug).

Fault	Probable cause	Solution
Unit does not start	No power supply voltage.	<ul style="list-style-type: none"> › Switch on the unit. › Check that the power supply matches the data on the type plate. › Check the mains plug. › Check the fuses on the power plug / replace them as required.
	Air intake filter blocked	<ul style="list-style-type: none"> › Insert a new air intake filter.
	Compressor is overloaded	<ul style="list-style-type: none"> › Disconnect the unit from the mains supply and allow it to cool down. › Reduce the ambient temperature. › Check that the application is suitable. › Contact customer service.
Unit too noisy	Mechanical damage	<ul style="list-style-type: none"> › Contact customer service.
Unit does not switch off even though no air is being taken	Leak in the system	<ul style="list-style-type: none"> › Check external lines for leak-tightness. › Contact customer service.
Reduction in air flow	Air intake filter soiled	<ul style="list-style-type: none"> › Replace the air intake filter at least 1x per year. The air intake filter must never be cleaned.
	Excessive ambient temperature	<ul style="list-style-type: none"> › Ensure that cooling is more effective.
	Unsuitable materials drawn in	<ul style="list-style-type: none"> › Only convey approved materials.
Water dripping from air consumers	Pressure reducer with condensate separator and fine filter 5 µm defective	<ul style="list-style-type: none"> › Contact customer service.
No compressed air from the cleaning gun	The knurled screw (dosage mechanism) on the cleaning gun is tight.	<ul style="list-style-type: none"> › Unscrew the knurled screw



Service

Dürr Technik GmbH & Co. KG
74301 Bietigheim-Bissingen
Telephone +49 (0) 71 42 / 90 22 - 20
Fax +49 (0) 71 42 / 90 22 - 99
email: service@duerr-technik.de

Replacement

Telephone +49 (0) 71 42 / 9022 - 0
Fax +49 (0) 71 42 / 9022 - 99
email: office@duerr-technik.de

The following information is required when ordering spare parts:

- Type designation and item number
- Order number as appears on the spare parts list
- Quantity required
- Exact shipping address
- Shipping information

Repairs/return delivery

Ensure that the unit is **depressurized** before transport! Use the original packaging when returning units, if possible. Always pack the units in a plastic bag. Use recyclable packing material.

Return delivery address:

Dürr Technik GmbH & Co. KG
Pleidelsheimer Straße 30
74321 Bietigheim-Bissingen
-Germany-

International addresses for Dürr Technik

www.duerr-technik.com

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