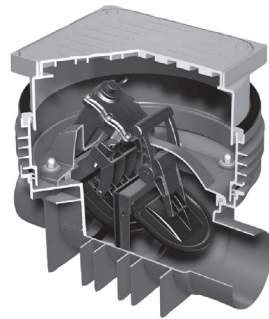


Quatrix-K automatic faecal backflow stop

Commissioning (handover), operation, inspections, servicing and troubleshooting

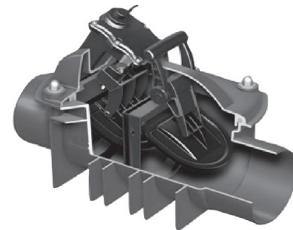
Quatrix-K automatic faecal backflow stop

with shaft system for
installation below ground



Quatrix-K automatic faecal backflow stop

without shaft system, for installation in
exposed pipelines



To ensure safe and proper usage, read the installation manual and associated instructions for use carefully, provide them to end users, and keep them safely throughout the service life of the product.

Introduction

ACO Passavant GmbH "ACO" would like to thank you for your confidence. You have purchased a product that reflects best engineering practice and has undergone quality checks prior to delivery to ensure its proper condition.



Illustrations in these instructions are provided for basic understanding only and may differ from your version of the product and the installation situation.

Service, spare parts and accessories

For spare parts and accessories please see the "Product catalogue":  <http://www.aco.com>

Please feel free to contact ACO Service if you require further information.

ACO Service

Im Gewerbepark 11c


36457 Stadtlengsfeld

Germany

Tel.: + 49 3 69 65 / 81 9 -0

Fax: + 49 3 69 65 / 81 9 -3 61

service@aco.com

For products purchased outside of Germany please visit
local ACO Group website,  <http://www.aco.com>

Guarantee

For information on warranties, please contact your local ACO stockist or local ACO Group member.

Use of symbols

Symbols are used to draw your attention to some of the information in these instructions as follows:



Tips and additional information to make your work easier



Bullets



Steps to be carried out in the specified order



References to further information contained in these instructions or in other documents

Table of contents

1	For your safety	4
1.1	Planning.....	4
1.2	Intended use	5
1.3	Owner's responsibility	5
1.4	Personnel qualification.....	6
1.5	Disposal.....	6
2	Operating modes.....	7
2.1	Automatic backflow protection (when in operation)	7
2.2	Operation during mains failure	7
3	Description of the control unit	8
3.1	Displays, operating elements and connections	8
3.2	Operating and malfunction displays	9
4	Assembly and installation	10
4.1	Connecting the control unit and motor	10
4.2	Connecting the notification systems (optional).....	11
5	Commissioning	12
5.1	Opening and closing the shaft system	12
5.2	Operating the control unit.....	13
5.3	Checking backflow detection	14
5.4	Activating the operating seal.....	15
5.5	Manually activating the operating seal	15
5.6	Activating the emergency seal	16
6	Regular inspections and servicing.....	17
6.1	Monthly inspections	17
6.2	Six-monthly inspections and servicing.....	17
6.2.1	Inspecting and cleaning the backflow unit.....	18
6.2.2	Tightness test.....	21
7	Troubleshooting	24
8	Technical data.....	25
Annex 1: Handover procedure and documentation		26
Annex 2: Maintenance log.....		28
Notes.....		30

Quatrix-K automatic faecal backflow stop

For your safety

1 For your safety



Read the safety instructions before installing and using the automatic faecal backflow stop to prevent damage to property.

1.1 Planning

EN 12056-1 (5.5.2 Flooding within the building drainage system): *"The design of a draining system shall minimize the risk of blockage with normal predictable usage of the system. The design of drainage systems shall avoid cross-flow from one sanitary appliance to another."*

EN 12056-1 (5.5.3 Flooding prevention): *"Wastewater collected or stored below flood level shall be discharged into the drainage system via an automatic wastewater lifting plant. In exceptional cases, anti-flooding valves may be permitted (see EN 12056-4)."*

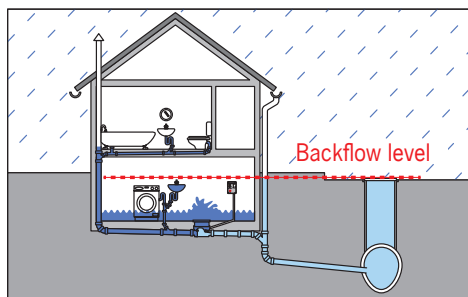
In the absence of any other specifications regarding the backflow level (e.g. in local byelaws governing public drainage systems), it is deemed to be the top of the road surface where the sewer connection is located.

NOTICE Backflow stops are designed for domestic use and may only be used if local building regulations and the following requirements according to EN 12056-4 are adhered to:

- Gradient from the drainage line into the sewage system
- Flooding does not present a health hazard or threaten valuable property
- There are only a small number of users and they have a WC available above the backflow level
- Use of the connected drainage points can be suspended in the event of a backflow

Incorrect installation:

NOTICE Incorrect installation may lead to self-flooding and backflow if drainage points above the flood level are routed to a backflow stop.

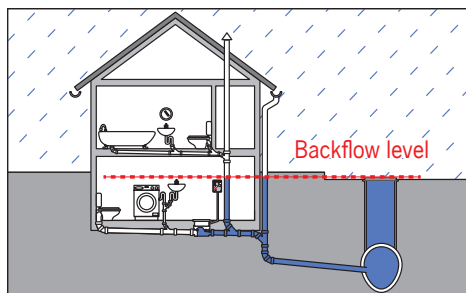


Quatrix-K automatic faecal backflow stop

For your safety

Correct installation:

Only route drainage points below the flood level to a backflow stop. Connect downpipes for surface water downstream of the backflow stop in flow direction.



1.2 Intended use


When wastewater drains overflow, e.g. following heavy rain, blockages or pumping station failures, wastewater can backflow and cause damage to buildings. The Quatrix-K automatic faecal backflow stop, type 3F according to EN 13564-1, is designed for domestic use and protects drainage points beneath the backflow level from flooding from wastewater with or without faeces from the sewage system.

Hazardous substances may not be drained:

- Solids, e.g. ashes, glass, sand, textiles, cardboard
- Corrosive substances, e.g. acids, lyes, salts
- Foaming substances, e.g. cleaning, dishwashing and washing agents in large quantities
- Poisons, e.g. pesticides, pest control agents
- Oil and grease

1.3 Owner's responsibility

Functional reliability is only warranted if users perform monthly inspections and properly qualified technicians inspect and service the system every six months.

 Section 6 "Regular inspections and servicing"

Please contact your local ACO stockist or Group member who will be pleased to recommend approved inspection and servicing technicians.

Quatrix-K automatic faecal backflow stop

For your safety

1.4 Personnel qualification

According to EN 13564-2, backflow stops (type 3F) must be inspected and serviced every six months by properly qualified technicians*.

**Definition according to DIN 1986-100: "Properly qualified technicians work for companies other than the operating company, or are experts or other institutions with documented proof of the necessary expertise for operating, servicing and inspecting separator units to the extent outlined above, and who have the technical equipment required to inspect separator units. In individual cases in larger companies, these inspections may also be performed by properly qualified technicians working for the operating company provided they are authorised to work independently and are not bound by instructions, and possess the same level of qualification and access to the necessary technical equipment."*

1.5 Disposal

NOTICE Electrical appliances and rechargeable batteries are not household waste. Observe regional disposal regulations to avoid harming the environment. Your stockist must accept the return of used electrical appliances and batteries.



2 Operating modes

The operating seal (backflow flap) and emergency seal are open during normal operation and wastewater can flow into the sewage system.

2.1 Automatic backflow protection (when in operation)

The piping system fills up if backflow occurs. The resulting back pressure is channelled via the pressure hose to the pressure sensor in the control unit. The operating seal (motor driven backflow flap) closes. Wastewater can no longer drain out of the building and wastewater from the sewage system can no longer get into the building.

NOTICE Risk of flooding. If backflow has occurred, or the operating seal is closed, drainage points, e.g. WCs must not be used.

Once the back pressure starts to subside, the operating seal opens automatically.

2.2 Operation during mains failure

Battery operation:

In the event of a mains failure, the control unit automatically switches to battery operation. All functions remain available for about 12 hours, after which the control unit switches to sleep mode.


Sleep mode:

The operating seal is automatically closed in sleep mode (approx. 30 hours), and the battery protected against deep discharge. An acoustic and visual fault signal is issued every 30 seconds.

Pressing the button (6) loads the current operating state on the display of the control unit for 30 seconds; during this period, the operating seal can be opened by pressing the button (6) again. The control unit switches off automatically once the operating seal is open. Once power is restored, the control unit switches to normal operation.

After about 30 hours in sleep mode, the control unit switches off automatically to protect the battery against deep discharge. The operating seal remains closed.

Emergency seal:

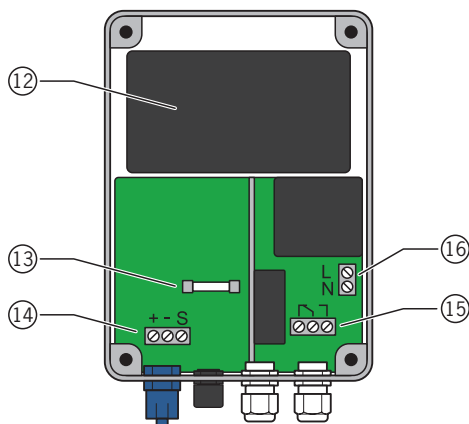
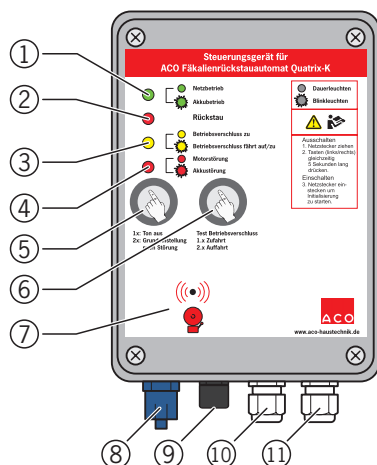
If the mains failure lasts longer than 12 hours and malfunctions occur, the emergency seal can be manually closed in the event of backflow,  Section 5.6 "Activating the emergency seal".

Quatrix-K automatic faecal backflow stop

Description of the control unit

3 Description of the control unit

3.1 Displays, operating elements and connections



- 1 = LED "green" (ready for use)
- 2 = LED "red" (backflow)
- 3 = LED "yellow" (operating seal engaged)
- 4 = LED "red" (malfunction)
- 5 = Button: Turn off alarm / basic reset following malfunction
- 6 = Button: Open/close operating seal
- 7 = Acoustic signal
- 8 = Pressure hose connection
- 9 = Motor cable connection
































- 10 = Connection of notification systems (optional)
- 11 = Mains cable connection (pre-installed)
- 12 = Battery
- 13 = Fuse (battery)
- 14 = Connection terminal for motor
- 15 = Connection terminal for fault signals (isolated)
- 16 = Connection terminal for mains input

Quatrix-K automatic faecal backflow stop

Description of the control unit

3.2 Operating and malfunction displays

Button (5) can be pressed to turn off the alarm (only in the event of backflow or malfunction).

LED 1	LED 2	LED 3	LED 4	Alarm	Explanation
–	–	–	–	–	Control unit switched off (no backflow monitoring) → Connect power supply
	–	–	–	–	Control unit switched on (Normal operation)
	–	–	–	–	Control unit on battery → Connect power supply
	–	–	 flashes	–	Battery test (automatic self-test)
	–	–	 at 8 second intervals	 at 30 second intervals	Battery capacity has deteriorated (wear) → Replace battery
	–	–	 at 4 second intervals	 at 2 second intervals	Battery is defective. Cannot operate during power cut → Replace battery
	–		–	–	Automatic self-test or manual operation
	–		–		Button (6) pressed to close operating seal → Press button (6) to open the operating seal
	–		–	 at 1 second intervals	Operating seal cannot close/open → Clean the backflow unit,  Section 6.2.1 "Inspecting and cleaning the backflow unit"
			–		Backflow (operating seal closed)
		–		 at 1 second intervals	Backflow malfunction → Close the emergency seal,  Section 5.6 "Activating the emergency seal"
	–		–	 at 30 second intervals	Control unit in sleep mode → Connect power supply

4 Assembly and installation



The pressure hose and motor connecting cable are 5 m long. A (10 m) cable extension set (accessory) is available to produce a permissible max. length of 15 m. Product catalogue, <http://www.aco.com>

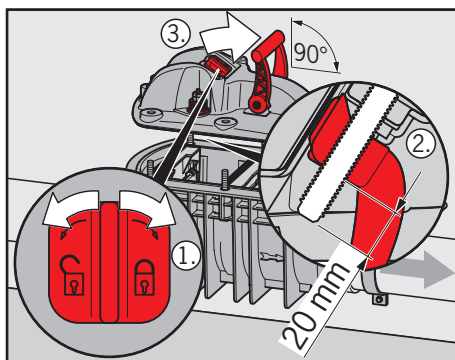
4.1 Connecting the control unit and motor

Assembling the control unit:

- Mount the control unit on an internal wall where it is protected against flooding and frost ($> 5^{\circ}\text{C}$), clearly visible and easily accessible.

Setting operating flap for motor connection

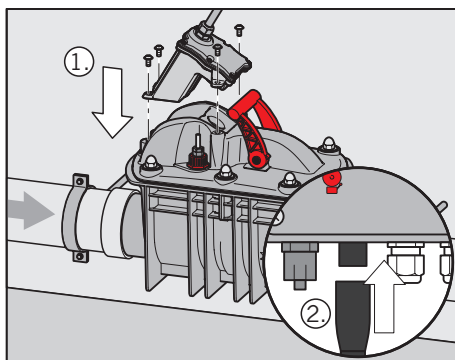
- Unscrew the cap nuts from housing cover and remove the cover.
- Place the red tommy nut on the spindle and turn it (1) until the spindle is protruding approximately 20 mm from the threaded actuator (2).
- Move the red lever (emergency seal) to a vertical position (3).
- Place the housing cover on the housing carefully engaging the flaps and tighten the cap nuts diagonally (5 – 8 N-m).



Connecting the motor:

NOTICE Position the motor carefully on the spindle (make sure the spindle is in its mount) and bolt without forcing. Check the seating of the green O-ring on the underside of the motor.

- Remove the 4 plugs (for protection during the construction period) from the threads for mounting the motor.
- Position the motor on the spindle and bolt to the housing (1).
- Insert the motor connecting cable (plug) in the control unit socket (2).



Quatrix-K automatic faecal backflow stop

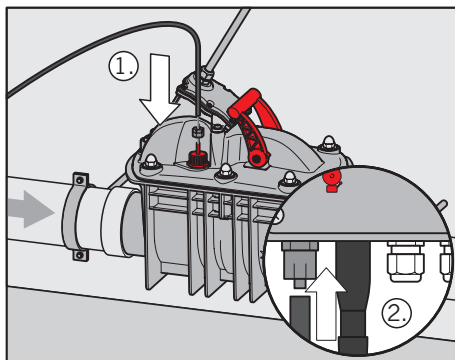
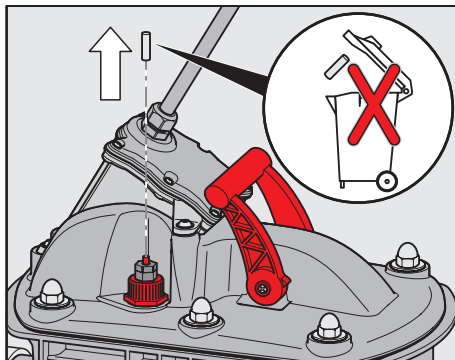
Assembly and installation

Connecting the pressure hose:


NOTICE The pressure hose shall be installed without loops or kinks at a gradient ($> 1\%$) to the automatic backflow stop to avoid moisture collection, shorten if necessary.

Both ends of the pressure hose are protected with sealing plugs against soiling.

- Cut off about 1 cm at each end of the pressure hose.
- Before connecting the hose to the housing cover, remove the sealing plug and keep in a safe place. The sealing plug is needed for tightness tests.
- Attach the pressure hose to the connection on the housing cover and tighten it using the union nut (1).
- Attach the pressure hose to the connection on the control unit and tighten it using the union nut (2).



4.2 Connecting the notification systems (optional)

The control unit has an isolated connection for notification systems (PC, telephone, alarm),  Section 3.1 "Displays, operating elements and connections". The isolated contact acts as a change-over contact and closes in the event of a malfunction.



WARNING


Risk of electric shock from live parts

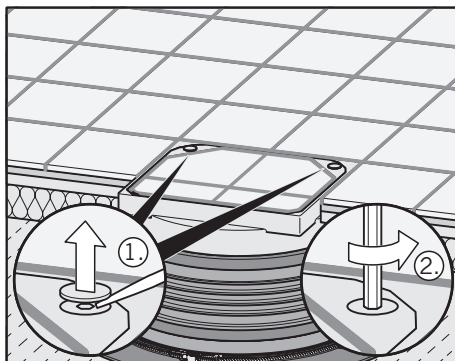
- Notification systems may only be connected to the control unit by a qualified electrician
- Max. current when connecting the cables: 500 mA

5 Commissioning

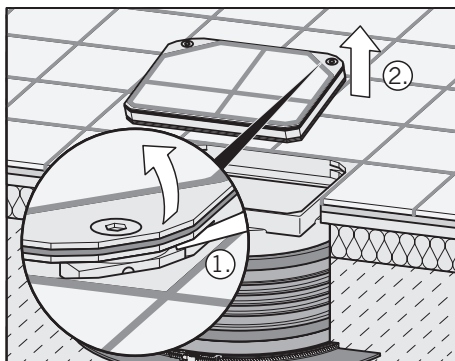
5.1 Opening and closing the shaft system

Opening the shaft system:

- Remove protective caps from locking screws, e.g. with a slotted screwdriver (1).
- Using an Allen key (size 10 mm), turn both locking screws by about $\frac{1}{4}$ towards  until they stop (2).



- Lift up the cover (on the side with the locking screws).

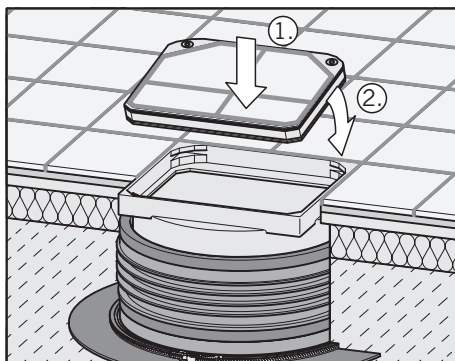


If the lifting plate is too stiff:


- Wedge a slotted screwdriver (1) under one corner beneath the O-ring (on the side with the locking screws).
- Lift up the cover and remove (2).

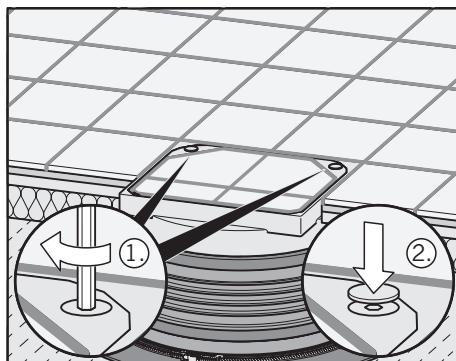
Closing the shaft system

- Remove the O-ring and lubricate with petroleum jelly.
- Re-position the O-ring in the upper groove on the insert place.
- Place the cover in the top section: First slide the cover into the groove in the top section (1) then fold it shut (2).



Quatrix-K automatic faecal backflow stop Commissioning


- ➔ Using an Allen key (size 10 mm), turn both locking screws by about $\frac{1}{4}$ towards  until they stop (1).
- ➔ Replace the protective caps on the locking screws (2).

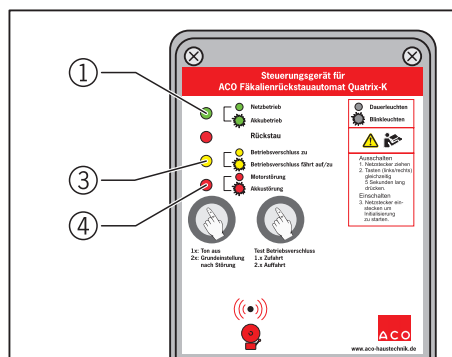


5.2 Operating the control unit

Once power has been connected, the control unit switches itself on and performs a self-test.

Switching the control unit on:

- ➔ Connect the mains plug to a mains socket with fuse protection.
- Green LED (1) lights up: Control unit is ready for operation (power supply is established)
- Red LED (4) flashes (for about 15 seconds): Charge status of the battery (in the control unit) is being tested
 - If the charge state is too low, the battery will self charge (max. 10 minutes)
 - Red LED (4) flashes and alarm sounds: Battery totally discharged, is defective or fuse is defective,  Section 3.2 "Operating and malfunction displays"
- Yellow LED (3) flashes: Operating seal (backflow flap) is being checked. This involves closing and re-opening the backflow flap
 - Only green LED (1) lights up: Automatic backflow stop is ready for operation

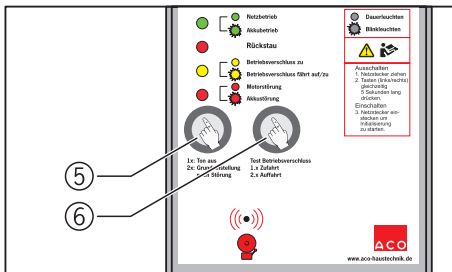


Quatrix-K automatic faecal backflow stop Commissioning

Switching the control unit off:

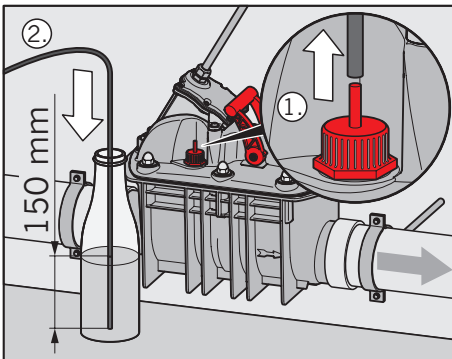
- ➔ Disconnect the mains plug.
- ➔ Press buttons (5) and (6) simultaneously for approx. 3 seconds.

All the LEDs will light up once as confirmation.



5.3 Checking backflow detection

- ➔ Remove the pressure hose from the pressure hose connection (housing cover) (1).
- ➔ Insert the pressure hose approx. 150 mm into a container filled with water, such as a bottle (2).



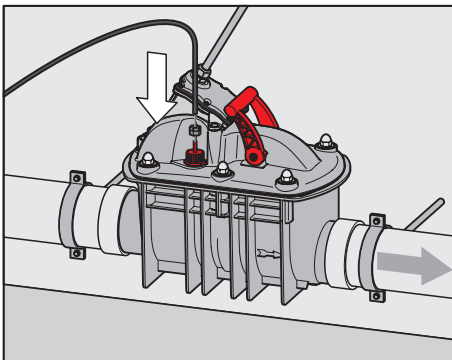
Correct backflow detection:

- Red LED (2) lights up
 - Yellow LED (3) flashes while the operating seal closes
 - Yellow LED (3) lights up and alarm sounds when the operating seal is closed
- ➔ Press button (5) to deactivate the alarm signal.

- Remove the pressure hose from the container and re-attach it to the pressure hose connection and tighten the union nut.



Once the pressure hose has been removed from the container, the operating seal opens automatically after about 30 seconds.



5.4 Activating the operating seal

Closing the operating seal:

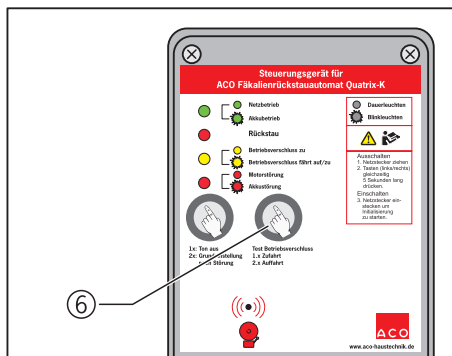
- Press button (6). Alarm sounds.



The alarm can only be deactivated with button (5) in the event of backflow or malfunction.

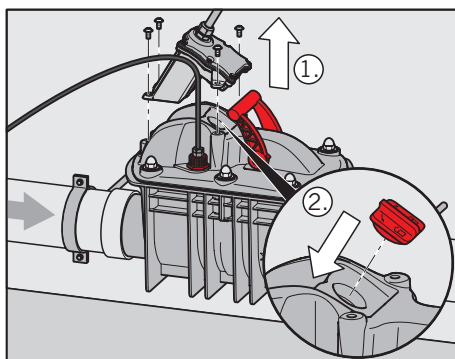
Opening the operating seal:

- Press button (6) again.



5.5 Manually activating the operating seal

- Unscrew the motor from the housing cover (1).
- Place the red tommy nut on the spindle (2).

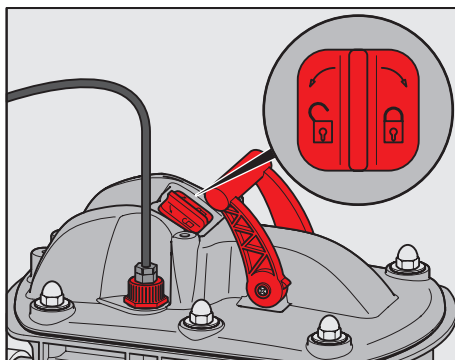


Closing the operating seal:

- Turn the red tommy nut clockwise until it locks.


Opening the operating seal:

- Turn the red tommy nut anti-clockwise until it locks.
- Connect the motor, Section 4.1 "Connecting the control unit and motor".



5.6 Activating the emergency seal

NOTICE The emergency seal must be open for water to drain. Close the emergency seal if a malfunction occurs during backflow, e.g. in extremely heavy rain.

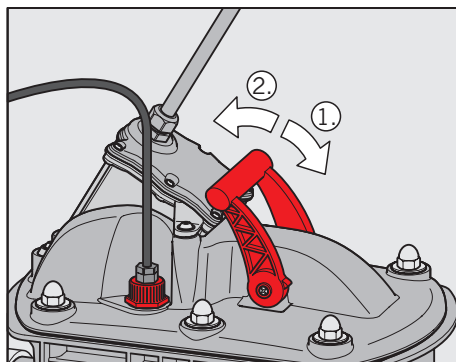
If the emergency seal cannot be activated correctly and easily,  Section 6.2.1 "Inspecting and cleaning the backflow unit".

Closing the emergency seal:

- Push the red lever in flow direction until it locks (clicks audibly into place) (1).


Opening the emergency seal:

- Push the red lever against the flow direction until it locks (2).





Conclude commissioning by testing seal integrity,  Section 6.2.2 "Tightness test".

6 Regular inspections and servicing


Keep records of all inspections, e.g. to provide evidence of maintenance in the event of an insurance claim,  Annex 2 "Maintenance log" (template).




6.1 Monthly inspections

Once a month, the following steps need to be carried out:

- Open and close the emergency seal,
 Section 5.6 "Activating the emergency seal"
- Close the operating seal (press button (6)) and re-open it (press button (6) again)
- Shaft systems only: Check the seal on the cover for visible damage,  Section 5.1 "Opening and closing the shaft system"

6.2 Six-monthly inspections and servicing

The following must be performed by properly qualified technicians at six-monthly intervals,  Section 1.4 "Personnel qualification":

- Inspect and clean the backflow unit,  Section 6.2.1 "Inspecting and cleaning the backflow unit".
 - ☐ Clean the backflow unit
 - ☐ Check the seals and sealing surfaces. Replace damaged seals
 - ☐ Check the mechanics and condition of moving parts. Grease all moving parts. Replace worn or damaged parts
 - ☐ Make sure all parts have been correctly installed
- Tightness test,  Section 6.2.2 "Tightness test"
- Check backflow detection,  Section 5.3 "Checking backflow detection"



CAUTION

Risk of infection from contact with water containing faeces

- Wear liquid-tight disposable gloves
- Avoid skin and eye contact
- Wash hands thoroughly after cleaning

Quatrix-K automatic faecal backflow stop

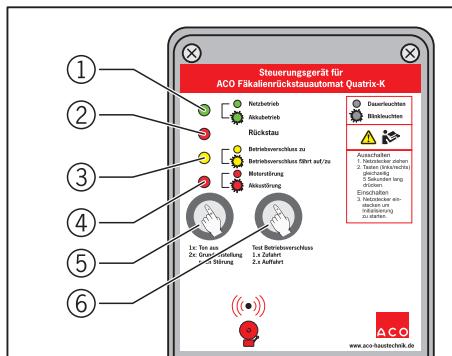
Regular inspections and servicing

6.2.1 Inspecting and cleaning the backflow unit

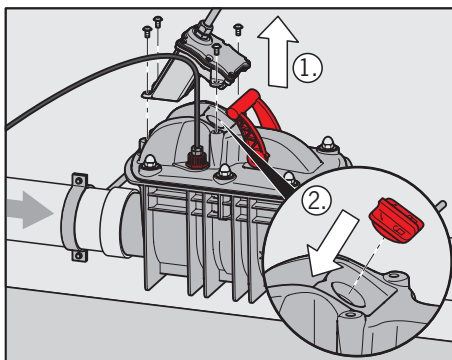
Switching the control unit off:

- Disconnect the mains plug.
- Press buttons (5) and (6) simultaneously for approx. 3 seconds.

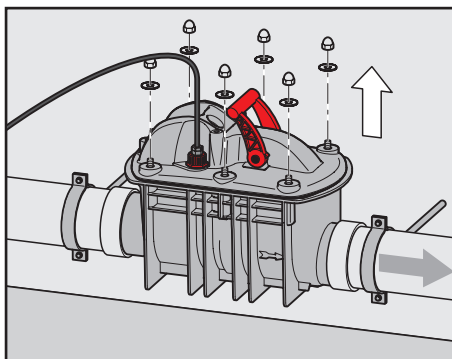
All the LEDs will light up once as confirmation.



- Unscrew the motor from the housing cover (1).
- Place the red tommy nut on the spindle and turn clockwise until it locks (2).



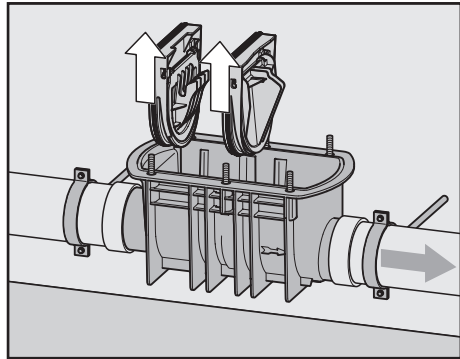
- Unscrew the cap nuts from housing cover and remove the cover.



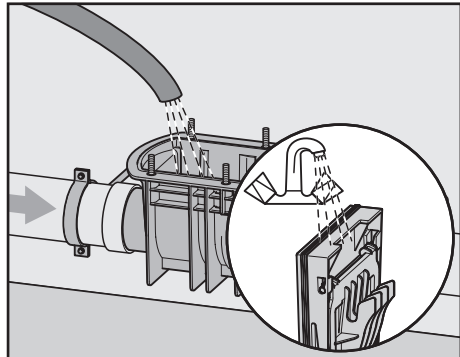
Quatrix-K automatic faecal backflow stop

Regular inspections and servicing

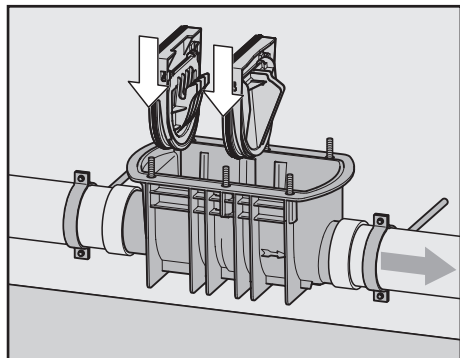
- Lift the backflow and emergency seal flaps out of the housing.



- Check the sealing surfaces and seals for visible damage. Replace damaged seals.
- Remove deposits on the housing. Wash the housing, backflow flap and emergency seal flap with clean water.
- Check the mechanics and condition of moving parts. Grease all moving parts. Replace worn or damaged parts.



- Replace the backflow and emergency seal flaps in the housing.

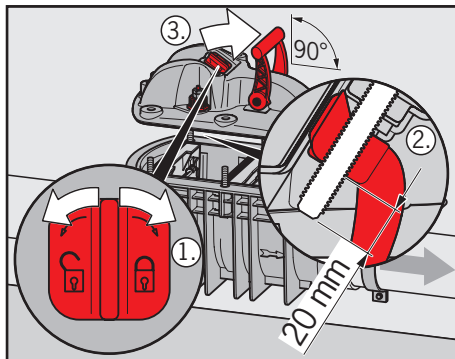


Quatrix-K automatic faecal backflow stop

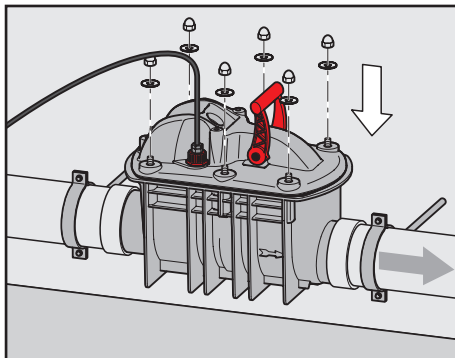
Regular inspections and servicing

NOTICE When positioning the housing cover, make sure the spindle and the emergency lock are correctly positioned.

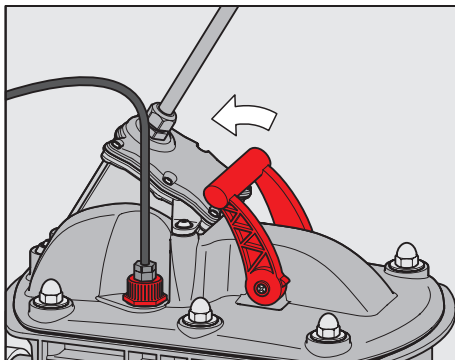
- Place the red tommy nut on the spindle and turn it (1) until the spindle is protruding approximately 20 mm from the threaded actuator (2).
- Move the red lever (emergency seal) to a vertical position (3) so that the bottom of the lever slides into the flap guide.



- Place the housing cover on the housing and tighten the cap nuts diagonally (5 – 8 N·m).
- Assemble the motor and connect the pressure hose, see Section 4.1 "Connecting the control unit and motor".



- To open the emergency seal, push the red lever against the flow direction until it locks.
- Switch on the control unit, see Section 5.2 "Operating the control unit".



Quatrix-K automatic faecal backflow stop


Regular inspections and servicing

6.2.2 Tightness test

The test includes simulating a backflow using a test funnel (included in the scope of supply).

The seal integrity of the backflow unit is deemed to be sufficient if less than 500 ml (0.5 l) of water is needed to top up the test funnel within 10 minutes.

If this is not the case, clean the backflow unit. Coarse deposits are frequently the problem,

 Section 6.2.1 "Inspecting and cleaning the backflow unit".

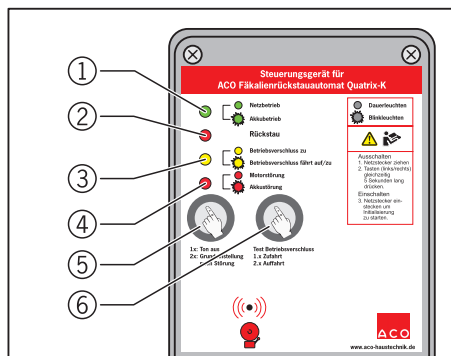
Repeat the test.

Replace the backflow unit if more than 500 ml (0.5 l) of water still has to be used to top up within 10 minutes.

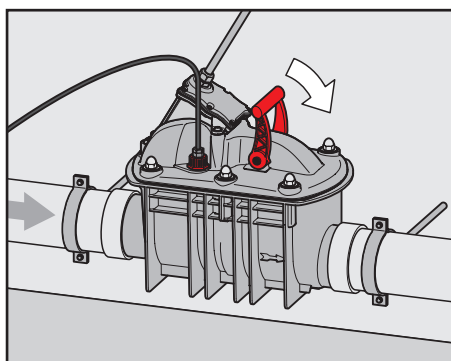
Performing the test:

→ Press button (6) to close the operating seal.

Alarm sounds.



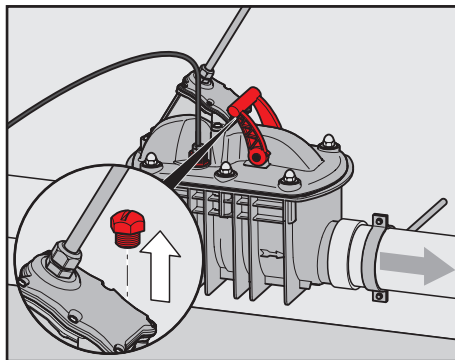
→ To close the emergency seal, push the red lever in flow direction until it locks (clicks audibly into place).



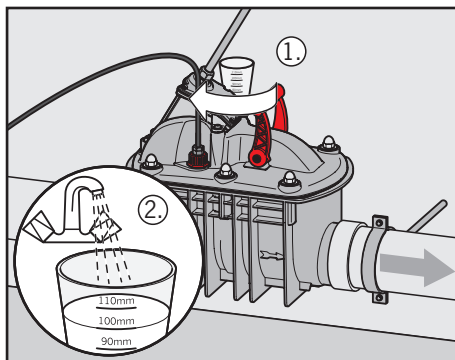
Quatrix-K automatic faecal backflow stop

Regular inspections and servicing

- Unscrew the red plug from its housing.

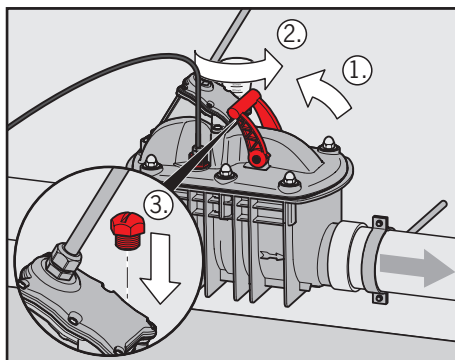


- Screw the test funnel into the thread (1).
- Fill the funnel with clean water up to the "100 mm" mark (2).
- Top up with water if the level drops.



After testing:

- To open the emergency seal, push the red lever against the flow direction until it locks (1).
- Unscrew the test funnel from the thread (2).
- Screw the red plug into the housing (3).



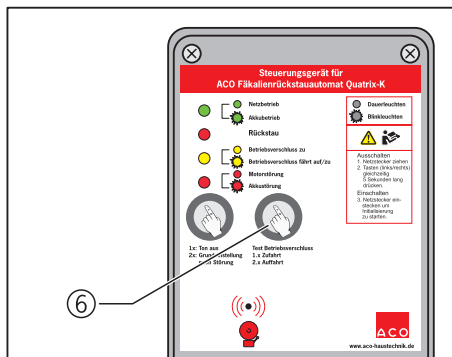
Continue servicing by checking backflow detection,
➤ Section 5.3 "Checking backflow detection".

Quatrix-K automatic faecal backflow stop

Regular inspections and servicing

→ Press button (6) to open the operating seal.

Alarm goes off.



7 Troubleshooting



WARNING


Risk of electric shock from live parts






Only a qualified electrician may replace batteries or fuses, or perform any other repairs on the control unit or motor.

CAUTION

Risk of infection from contact with water containing faeces

- Wear liquid-tight disposable gloves
- Avoid skin and eye contact
- Wash your hands thoroughly

If the control unit does not indicate a malfunction,  Section 3.2 "Operating and malfunction displays", other causes may be responsible. If the actions listed below fail to remedy the problem, the system will need to be repaired by ACO or an authorised service centre.

Fault	Cause(s)	Remedy/ies
The emergency seal won't activate, or does not click (audibly) into place	Lever (emergency seal) was put in the wrong position when assembling the housing cover.	→  Section 6.2.1 "Inspecting and cleaning the backflow unit"
	Cap nuts on the housing cover are screwed on too tightly	
The operating seal won't activate	The operating seal is clogged up with deposits (dirt)	→  Section 6.2.1 "Inspecting and cleaning the backflow unit"
	Spindle was put in the wrong position when assembling the housing cover	→ If water backflows: Close the emergency seal,  Section 5.6 "Activating the emergency seal"
No backflow detection	Pressure hose not installed or connected properly, or damaged	→  Section 4.1 "Connecting the control unit and motor"
	Housing cover does not close air tight	→  Section 6.2.1 "Inspecting and cleaning the backflow unit"

8 Technical data

Quatrix-K control unit	
Characteristic data	Values
Mains voltage:	230 V/AC, 50 – 60 Hz
Power consumption:	4.5 W (operation)
	1.5 W (standby)
Mains protection:	at least B10, 10 A (automatic circuit breaker)
Circuit protection	Thermal cutout (mains transformer)
Control unit protection type:	IP 56
DC motor protection type:	IP 68 (24 hours at 3 m immersion)
Battery:	12 V/DC, 1.2 Ah (lifetime approx. 3 years)
Fuse (battery):	2.5 A, slow blow
Operational readiness in the event of mains failure:	approx. 12 hours (battery operation)
Automatic shutdown during battery operation:	after about 30 hours (sleep mode)
Alarm volume:	approx. 85 dB
Dimensions (H x W x D):	approx. 180 mm x 115 mm x 75 mm
Control unit art. no.:	
Battery art. no.:	
Quatrix-K automatic faecal backflow stop	
Characteristic data	Values
State factory inspection test certificate no.:	7381398-14z
Classification:	Type 3F (EN 13564-1)
Shaft system load class:	K3 (EN 1253-1)
Art. no. (Quatrix-K for installation in exposed pipelines):	620368 (DN/OD 110)
	620468 (DN/OD 125)
	620369 (DN/OD 160)
Art. no. (Quatrix-K with shaft system for installation below ground):	620370 (DN/OD 110)
	620487 (DN/OD 125)
	620371 (DN/OD 160)

Quatrix-K automatic faecal backflow stop

Annex 1: Handover procedure and documentation

Annex 1: Handover procedure and documentation

Commissioning and induction by the company performing the work in the presence of the client.

Date of commissioning: _____

Date of handover: _____

Product identification

Product	Art. no.	Serial no. (type plate)	Year built (type plate)	Nominal width DN/OD	Shaft system
<input type="radio"/> Quatrix-K				<input type="radio"/> 110 <input type="radio"/> 125 <input type="radio"/> 160	<input type="radio"/> with <input type="radio"/> without
<input type="radio"/> Quatrix-K control unit					

Technical supervisors

	Work performed by	Work accepted by	Client
Name:			
Contact:			
Tel.:			
Fax:			
Email:			
Address:			

Quatrix-K automatic faecal backflow stop

Annex 1: Handover procedure and documentation

Check list (to be completed by the company performing the work)

Inspections	Remarks	OK	Not OK
Installation of the unit	Piping systems, connections, flow direction, supports	○	○
State of the unit	Visual inspection: exterior damage, soiling	○	○
Version with shaft system	Shaft system opens/closes without problems (no tension present)	○	○
Unit functions	Operating seal manually closed/opened (📖 Section 5.5)	○	○
	Emergency seal (📖 Section 5.6)	○	○
Tightness test	Test (📖 Section 6.2.2)	○	○
Backflow detection	Test (📖 Section 5.3)	○	○
Control unit installation	Mounted in an accessible place, protected against flooding and frost, connections, pressure hose installation	○	○
Control unit functions	Self-test (📖 Section 6.2.1), functions, operations, reports	○	○

Induction (to be given by the company performing the work)

Induction	Remarks	Yes	No
Induction:	Functions, operation, operating tips, troubleshooting, obligatory servicing	○	○
Handover:	Instructions for use	○	○
	Installation instructions	○	○

Remarks:

Signature (work performed by): _____

Signature (work accepted by): _____

Quatrix-K automatic faecal backflow stop

Annex 2: Maintenance log

Annex 2: Maintenance log

Make copies of the maintenance log for future services.

Six-monthly servicing and inspection may only be performed by properly qualified technicians,

 Section 1.4 "Personnel qualification".

Date of service: _____

Date of last service: _____

Last service performed by: _____

Product identification

Product	Art. no.	Serial no. (type plate)	Year built (type plate)	Nominal width DN/OD	Shaft system
<input type="radio"/> Quatrix-K				<input type="radio"/> 110 <input type="radio"/> 125 <input type="radio"/> 160	<input type="radio"/> with <input type="radio"/> without
<input type="radio"/> Quatrix-K control unit					

Technical supervisors

	Work performed by	Work accepted by	Client
Name:			
Contact:			
Tel.:			
Fax:			
Email:			
Address:			

Quatrix-K automatic faecal backflow stop

Annex 2: Maintenance log

Prior to servicing

State of the plant	Evaluation
Level of soiling:	<input type="radio"/> low <input type="radio"/> medium <input type="radio"/> high
Signs of wear:	<input type="radio"/> low <input type="radio"/> medium <input type="radio"/> high
Shaft system was/is flooded:	<input type="radio"/> yes <input type="radio"/> no
Alarm sounds/sounded:	<input type="radio"/> yes <input type="radio"/> no
Operating state:	<input type="radio"/> Mains <input type="radio"/> Battery <input type="radio"/> Sleep mode
Fault signals since last servicing:	

Servicing check list

Servicing work	Performed
Motor removed from housing cover and re-assembled (📖 Section 4.1)	<input type="radio"/> yes <input type="radio"/> no
Operating seal manually closed/opened (📖 Section 5.5)	<input type="radio"/> yes <input type="radio"/> no
Emergency seal closed/opened (📖 Section 5.6)	<input type="radio"/> yes <input type="radio"/> no
Backflow unit and all parts inspected and cleaned (📖 Section 6.2.1)	<input type="radio"/> yes <input type="radio"/> no
Tightness test performed (📖 Section 6.2.2)	<input type="radio"/> yes <input type="radio"/> no
Backflow detection checked (📖 Section 5.3)	<input type="radio"/> yes <input type="radio"/> no
Self-test (control unit) performed (📖 Section 6.2.1)	<input type="radio"/> yes <input type="radio"/> no
Reset to "Normal operation" following servicing: Operating and emergency seals open, power supply checked	<input type="radio"/> yes <input type="radio"/> no
Unit in good operating condition	<input type="radio"/> yes <input type="radio"/> no

Parts replaced:

Remarks:

Signature (work performed by): _____

Signature (work accepted by): _____

Quatrix-K automatic faecal backflow stop

Notes

Notes

[illegible]

Quatrix-K automatic faecal backflow stop

ACO Passavant GmbH

Im Gewerbepark 11c

D 36457 Stadtlengsfeld

Tel.: + 49 36965 819-0

Fax: + 49 36965 819-361

www.aco-haustechnik.de

ACO. The future of drainage.

