Installation & Maintenance Instructions

Version 0220

SAFETY AND PROPER USAGE

To ensure safe and enduring performance of this product, you must comply strictly with the instructions enclosed herein. Non-compliance with instructions or improper handling of the product will void your warranty! Usage of this product in conditions not specified in this manual or in contrary to the instructions hereby provided is considered IMPROPER. The manufacturer will not be held liable for any damages resulting from improper use of the product.

SAFETY & WARNING INSTRUCTIONS

- Observe valid and generally accepted safety rules when planning, installing and using this product.
- Take proper measures to prevent unintentional operation of the product or damage to it.
- Do not attempt to disassemble this product or lines in the system while they are under pressure.
- Always depressurise the compressed air system before working on the system.

It is important that personnel use safe working practices and observe all regulations and legal requirements for safety when operating this product. When handling, operating or carrying out maintenance on this product, personnel must employ safe engineering practices and observe all local health & safety requirements & regulations. International users refer to regulations that prevail within the country of installation. Most accidents, which occur during the operation and maintenance of machinery, are the result of failure to observe basic safety rules or precautions. An accident can often be avoided by recognising a situation that is potentially dangerous. Improper operation or maintenance of this product could be dangerous and result in an accident causing injury or death. The manufacturer cannot anticipate every possible circumstance, which may represent a potential hazard. The WARNINGS in this manual cover the most common potential hazards and are therefore not all-inclusive. If the user employs an operating procedure, an item of equipment or a method of working which is not specifically recommended by the manufacturer he must ensure that the product will not be damaged or made unsafe and that there is no risk to persons or property.

NEVER CHANGE ORIGINAL COMPONENTS WITH ALTERNATIVES

INSTALLATION INSTRUCTIONS

Before installing this product, make sure it complies with your request and that it suits your application!

1.1 Unpack the unit and visually inspect for any transport damage incurred after leaving our factory.

1.2 Depressurise the system before installation or maintenance is carried out!

1.3 Locate a suitable condensate draining point in your compressed air system and connect your drain as illustrated.
- *Use a 30mm wrench to install the drain properly.*
- *The use of a ball valve is advisable.*

1.4 Connect the outlet to an oil/water separator. -*We advise to use the nipple supplied with your drain. If it is necessary to use an alternative nipple, make sure it is of the correct thread (1/4" BSP). Do not over tighten!*

1.5 Unscrew the top power connector screw and remove the power connector.

1.6 Connect your power supply cable to the connector as illustrated.
- *Make sure all gaskets are placed properly to ensure IP65 protection.*

1.7 Replace the top power connector and tighten the power connector screw (max. torque 0,3 Nm).
- *Make sure all gaskets are placed properly to ensure IP65 protection.*

1.8 Slowly open the ball valve to restore normal system pressure.
- *The drain is now under pressure!*

1.9 Turn on the power supply. Press and hold down the TEST button to check the valve function.
- *A purging sound must be heard.*

1.10 Your drain is ready for operation!

*Note: We advise to check this product **at least once a year** and replace serviceable parts when necessary.*

Note: Clean the strainer periodically to avoid possible blocking causes by rust and/or debris.

Note: Check the valve function periodically. A purging sound must be heard.

➡ **SEE PAGE 6 FOR ALARM INSTALLATION INSTRUCTIONS.**

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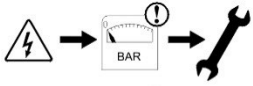
1.2



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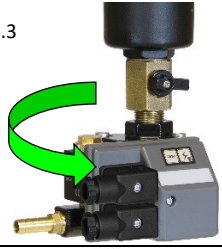

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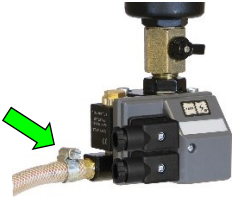

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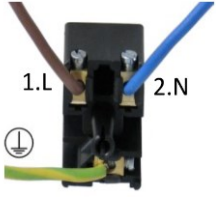

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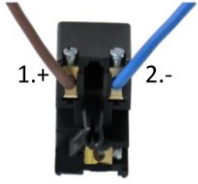

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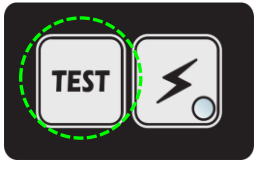

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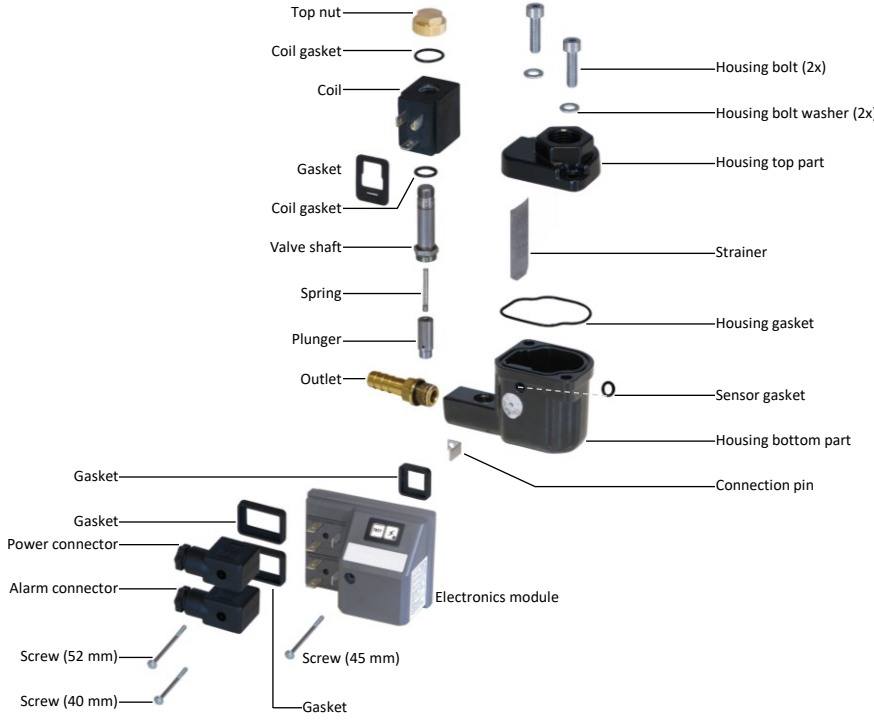
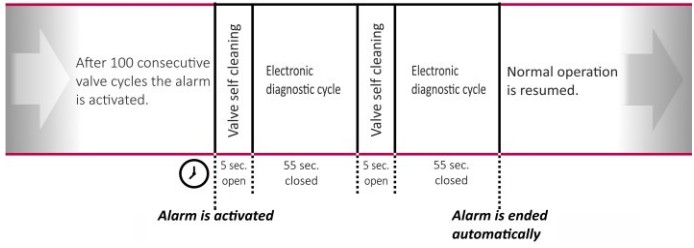

Top nut
Coil gasket
Coil
Gasket
Coil gasket
Valve shaft
Spring
Plunger
Outlet
Housing bolt (2x)
Housing bolt washer (2x)
Housing top part
Strainer
Housing gasket
Sensor gasket
Housing bottom part
Connection pin
Gasket
Gasket
Power connector
Alarm connector
Electronics module
Screw (52 mm)
Screw (40 mm)
Screw (45 mm)
Gasket

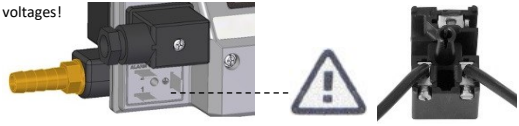
ALARM INSTALLATION INSTRUCTIONS

The drain is equipped with an alarm feature. Alarm occurs when the valve has to open too many (>100) consecutive times without a pause. The reason for this may be debris (rust) particles blocking the valve, outlet, strainer or a sensor failure indicating a service necessity. It could also mean that your drain receives more condensate than it can handle. The alarm feature can be connected to an external alarm device with its own power supply. When in alarm mode the LED light on your drain will be flashing continuously.

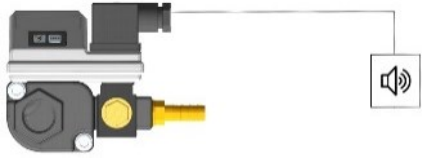
ALARM CYCLE



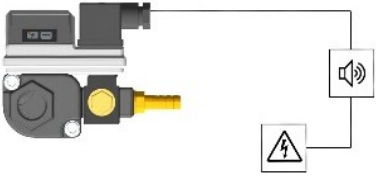
1. Unscrew the bottom alarm connector screw and remove the cap from the bottom alarm connector to connect the alarm cables to the alarm connector as shown below. Caution is required as you may be working with hazardous voltages!



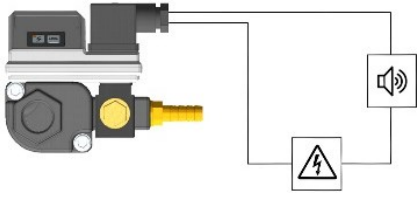
2. Connect the cable to your alarm device, any device of your choice can be applied i.e. a (flashing) light or alarm panel.



3. Connect your alarm device to a power supply. The alarm switch type is a 'contact output switch'. An external power supply is required as the alarm connection point on the drain works like a relay switch only.

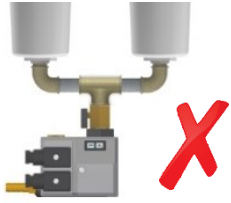


4. Connect the power supply to the drain alarm connector to close the circle. Replace the connector and tighten the connector screw (Max. torque 0,3Nm). *Make sure the gasket is secured properly to ensure IP65 rating.*



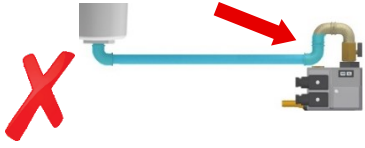
ADDITIONAL INSTALLATION INSTRUCTIONS

Each condensate draining point should have its own drain. Do not use one drain for multiple draining points.

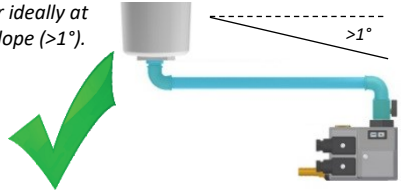


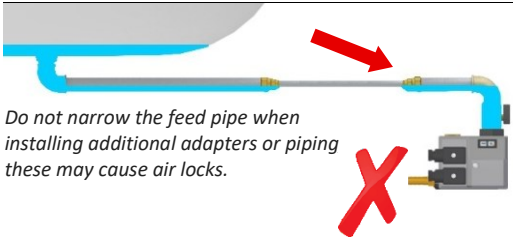
Use one drain for each individual draining point.

Avoid water pockets when installing the drain pipe, this will create an air lock.

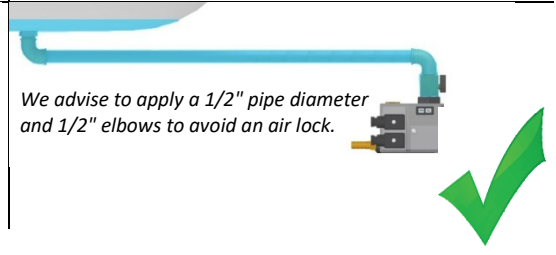


The 1/2” drain pipe must be horizontal or ideally at a downwards slope (>1°).





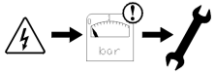
Do not narrow the feed pipe when installing additional adapters or piping these may cause air locks.



We advise to apply a 1/2" pipe diameter and 1/2" elbows to avoid an air lock.

CLEANING INSTRUCTIONS (1/2)

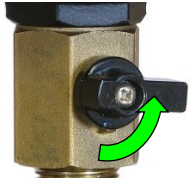
These instructions are for cleaning the drain. If your drain requires maintenance, i.e. replacement of wearing components, please refer to our dedicated maintenance instructions (supplied with the service kit).



Depressurise the system before installation or maintenance is carried out!

2.1 Stop the condensate supply, i.e. close the ball valve which is installed in front of the drain.
2.2 Press the TEST button to empty the drain of any residual condensate and to depressurise the drain.
2.3 Switch off the electrical supply and remove the top power connector by unscrewing the top connector screw. - Make sure the display is off to check if the power supply is successfully disconnected.
2.4 Remove the outlet hose.
2.5 Remove the drain using a 30mm wrench.
2.6 Unscrew the electronics module screw.
2.7 Carefully remove the electronics module. - *Make sure not to damage the sensor pin!*
2.8 Open the housing by unscrewing the two housing bolts using a 5mm Allen key. Remove the top part from the reservoir.
2.9 Take out the strainer and clean it thoroughly.
2.10 Unscrew the top nut and remove the coil.
2.11 Remove the valve shaft using a 13mm wrench.
2.12 Clean all the valve parts and bottom part of the housing.

2.1



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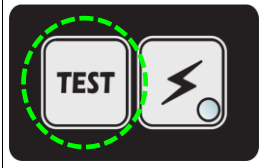

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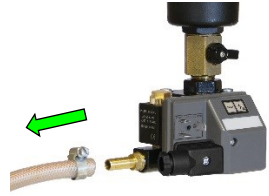

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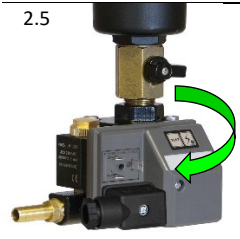

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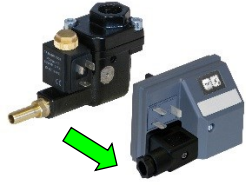

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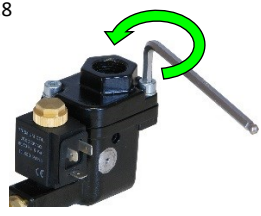

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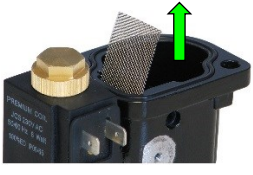

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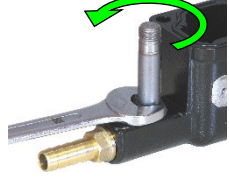


2.12

CLEANING INSTRUCTIONS (2/2)

These instructions are for cleaning the drain. If your drain requires maintenance, i.e. replacement of wearing components, please refer to our dedicated maintenance instructions (supplied with the service kit).

2.13 Replace the valve parts and tighten the valve shaft using a 13mm wrench (max. torque 7 Nm).

2.14 Replace the coil and gaskets. Tighten the top nut.
- *Make sure all gaskets are properly placed to ensure IP65 protection.*

2.15 Replace the strainer.

2.16 Replace the top part of the housing and tighten the two housing bolts using a 5mm Allen key (max. torque 10 Nm).

2.17 Replace the electronics module. Make sure you don't damage the sensor pin.
- *Make sure all gaskets are properly placed to ensure IP65 protection.*

2.18 Tighten the electronics module screw (max. torque 0,3 Nm).

2.19 Reconnect your drain as illustrated.
- *Use a 30mm wrench to install the drain properly.*

2.20 Reconnect the outlet.

2.21 Replace the top power connector and tighten the top connector screw (max. torque 0,3 Nm).
- *Make sure all gaskets are placed properly to ensure IP65 protection.*

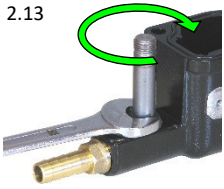
2.22 Slowly open the ball valve to restore normal system pressure.
- The drain is now under pressure!

2.23 Turn on the power supply. Press and hold down the TEST button to check the valve function.
- *A purging sound must be heard.*

2.24. Your drain is ready for operation!

Note: Check the valve function periodically. A purging sound must be heard.

2.13



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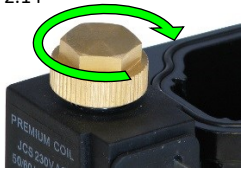

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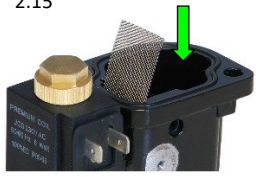

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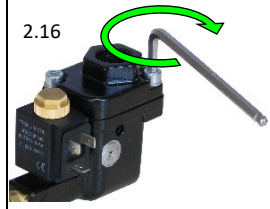

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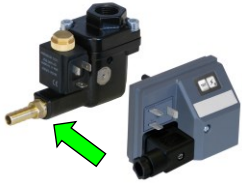

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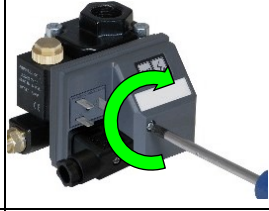

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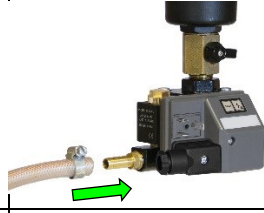

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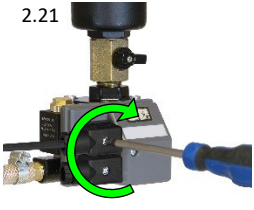

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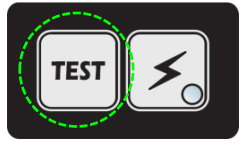

2.24

TECHNICAL SPECIFICATIONS

Max. compressor capacity	10 m^3/min.	350 cfm.
Min. / Max. system pressure	0 Bar / 16 Bar	0 Psi / 230 Psi
Min. / Max. medium temperature	1 °C / 50 °C	34 °F / 122 °F
Valve type	2/2 way, direct acting	
Valve orifice	2 mm	
Inlet connection + height	1/2" BSP *or* NPT, 74 mm	1/2" BSP *or* NPT, 2.9"
Outlet connection + height	1/4" BSP, 1.5 cm	1/4" BSP, 0.6"
Valve seals	FPM	
Supply voltage option	230VAC *or* 115VAC *or* 24VAC *or* 24VDC (see label on unit!)	
Connectors	DIN 43650-B	
Serviceable valve	Yes	
TEST Feature	Yes	
Environmental protection	IP65 (NEMA4)	
Integrated mesh strainer	Yes	
Alarm feature type	Contact output switch (voltage free) available in two versions: **A1** and **A2** **A1** = Normally open contacts, closed when in alarm phase. **A2** = Normally closed contacts, open when in alarm phase.	
Alarm feature specification	Max. 230VAC, max 4A, 1000VA or 200VDC, 100W and min 5VDC, 100mA	

SERVICE CHART

Date	*Description*	*Name*

DIMENSIONS (mm)