

## Installation & Maintenance Instructions

# FLUIDRAIN COMBO

Timer controlled condensate drain



08/09

### GENERAL OPERATION

The FLUIDRAIN COMBO is an all-in-one timer drain with an integrated ball valve and strainer. The FLUIDRAIN COMBO saves installation time and protects against large particles found in condensate, thanks to the integrated ball valve and strainer.

The unit can be shut off from the compressed air system, enabling easy and safe work to be carried out.

The FLUIDRAIN COMBO can be installed on all compressed air system components (compressors, after coolers, dryers, filters, pressure vessels and drip legs), regardless of their size or capacity - simply adjust the interval and discharge settings to suit the particular compressed air system.

The operation is automatic and consistent.

## **SAFETY INSTRUCTIONS**

### **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! This product is designed to drain condensate from compressed air systems. 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.

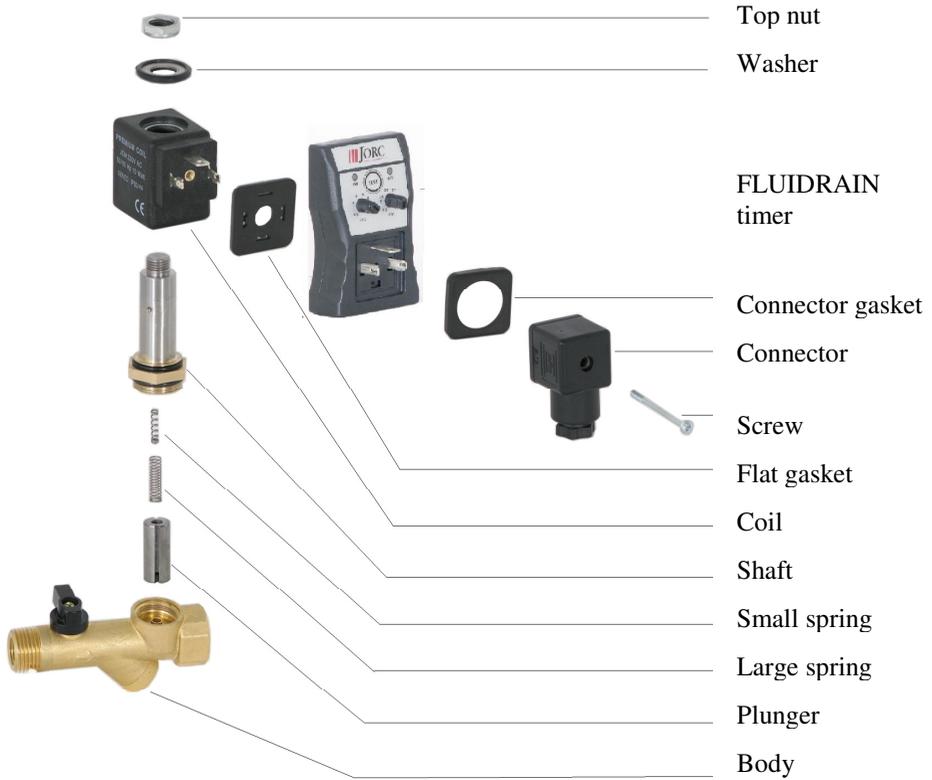
### **SAFETY & WARNING INSTRUCTIONS**

#### **ATTENTION**

- 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.**

# EXPLODED VIEW - IDENTIFY ALL COMPONENTS DIAGRAM

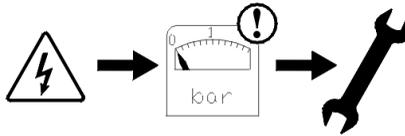


# INSTALLATION INSTRUCTIONS

## IMPORTANT NOTICE

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

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

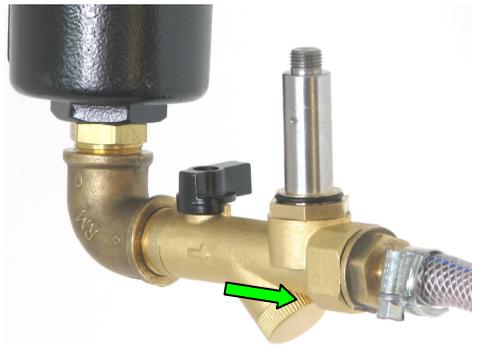


2. Depressurise the system before installation or maintenance is carried out!

3. The drain is shipped fully assembled! Disassemble the drain before installation by unscrewing the screw in the connector and the top nut above the coil (see page 3 for an exploded view).



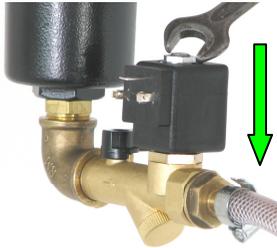
4. Locate a suitable condensate draining point on your compressed air system and connect your valve as illustrated below. Connect the outlet to an oil/ water separator. We recommend using a JORC condensate cleaner.



- Make sure the arrow on the valve body complies with the flow direction of the condensate.
- Do not use the valve shaft as lever!

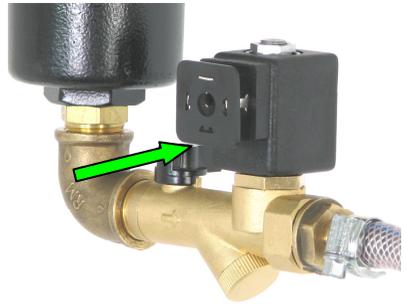
## INSTALLATION INSTRUCTIONS

5. Slide the coil on to the valve shaft and replace the washer and top nut. Tighten the top nut (max. torque 1Nm) using a 14 mm wrench.



*The coil can be rotated 360° around the valve, you can align the coil as desired.*

6. Place the flat gasket over the coil connection pins.



*Make sure there is no debris between the gasket and the coil.*

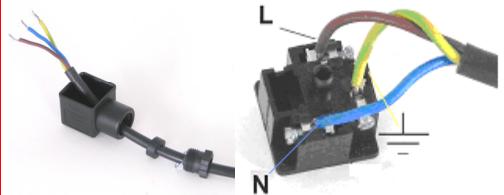
7. Mount the timer on to the coil as illustrated below, you can mount the timer up-right or upside-down.



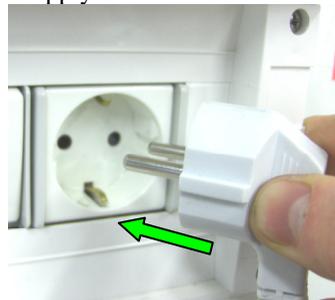
9. Place the connector gasket on the connector, plug the connector on the timer as illustrated below and tighten the screw (max. torque 1Nm). Make sure both gaskets are secured properly to ensure IP65 rating.



8. Remove the protection cap from the connector and connect your power cable to the connector as shown below.

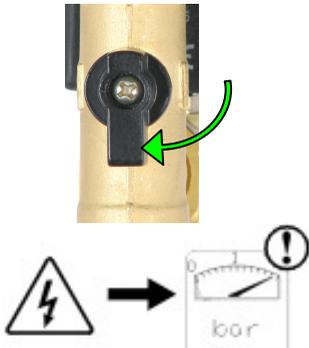


10. After double checking that the power supply corresponds with the voltage specified on the coil and falls within the range specified on the back of the timer, you can switch the power supply ON.



## INSTALLATION INSTRUCTIONS

11. Slowly open the ball valve to restore normal system pressure.



12. Press the TEST button to check the valve function.



13. The drain is now at full system pressure and will periodically discharge any condensate it receives from your compressed air system fully automatic and continuous.

You can now alter the ON / OFF times if required.

14. Adjust the ON button to suit your system i.e. 2 sec.



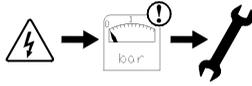
15. Adjust the OFF button to suit your system i.e. 20 min.



16. Your FLUIDRAIN COMBO is ready for operation!

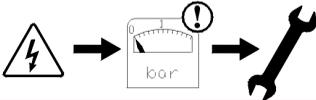
## CLEANING INSTRUCTIONS

These instructions are for cleaning the FLUIDRAIN COMBO. If your FLUIDRAIN COMBO 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!**

1. Close the condensate supply, i.e. close the ball valve.



2. Press the TEST button to empty the unit of any residual condensate and to depressurise the FLUIDRAIN COMBO valve.



3. Switch off the electrical supply.



*Make sure the power is switched OFF before continuing this cleaning operation !*

5. Remove the connector, coil and timer assembly from the valve shaft.



4. Unscrew the valve top nut using a 14 mm wrench.



6. Unscrew the valve shaft using a 23 mm wrench.



*Do not use the valve shaft as a lever!*

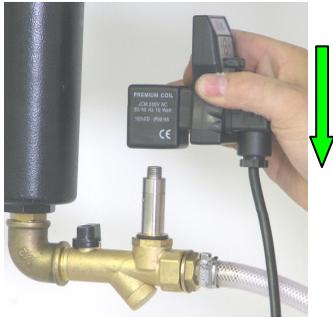
## CLEANING INSTRUCTIONS

7. Clean all the valve parts, body and shaft.



*Note: if any parts are damaged please replace them using a service kit!*

9. Reposition the coil, connector and timer assembly on to the valve, replace the washer and top nut and tighten the top nut (max. torque 1Nm) using a 14 mm wrench.



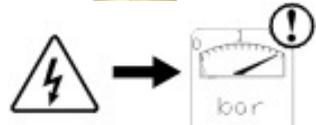
8. Reassemble the inner parts and shaft. Screw the shaft assembly back on to the valve body using a 23 mm wrench (max. torque 10Nm).



10. Switch on the electrical supply.



11. Slowly open the ball valve to restore normal system pressure.



12. Press the test button to check the valve function.



13. Your FLUIDRAIN COMBO is ready for operation!



## TECHNICAL SPECIFICATIONS

Interval Time (OFF time)	0,5 – 45 min.
Discharge Time (ON time)	0,5 - 10 sec.
Supply voltage	24 – 240VAC/DC 50-60Hz (± 10%)
Switch current	1,0 A max.
Case Material	ABS plastic FR grade
Connection	DIN 43650A ISO 4400
Indicators	Yellow LED's, indicating ON/OFF

Valve type	2/2-Way direct acting valve
Connections	1/4", or 1/2" BSP or NPT
Max. Pressure	0 – 16 BAR
Operating Temperature	2°C / 55°C ambient
Media Temperature	Max. 90°C
Valve body	Forged Brass, 4 mm orifice
Insulation	Thermal group H

## CERTIFICATIONS

CE	Yes
cULus	Yes
RoHS	Yes
IP65	Yes



## DIMENSIONS (MM)

