

MECON
SAFETY CONTROL

WHX

Fire hose reel tester



made
in
Germany



EN OPERATING MANUAL

IMPRINT

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SAFETY INSTRUCTIONS

1 SAFETY INSTRUCTIONS

1.1 Intended use

The fire hose reel tester is used to measure the volume flow and pressure of water in dry or wet risers of stationary, non-automatic water extinguishing systems.

NOTICE!

The user is solely responsible for the use of the measuring devices with regard to suitability, intended use, regular maintenance and calibration.

The manufacturer is not liable for any damage caused by improper or unintended use of these devices.

The appliance may only be used within the pressure and temperature limits specified in the operating instructions. Damage to the device, e.g. due to improper handling, can lead to incorrect measurement results and test certificates based on them. If the device is damaged, it must be inspected by the manufacturer. In order to achieve correct measurement results, it is recommended that the measuring device is checked once a year by the manufacturer MECON GmbH.

1.2 Certifications



» VdS certificate G424016
(only applies to WHX-Set2)

Fig. 1: Logos of the certification bodies

1.3 Manufacturer's safety instructions

The manufacturer is not liable for damages of any kind caused by the use of the device, including, but not limited to, direct, indirect, incidental, punitive and consequential damages.

For every product purchased from the manufacturer, the warranty only applies when used according to the relevant product documentation and the valid terms and conditions.

The manufacturer reserves the right to revise the content of the documents, including this disclaimer, without notice, and is not liable in any way for the possible consequences of such changes.

The operator is solely responsible for determining whether the fire hose reel tester is suitable for the intended use. MECON GmbH accepts no liability for the consequences of misuse, modifications or repairs carried out by the customer without prior consultation.

In case of a complaint, the rejected components must be cleaned of hazardous substances and returned to the manufacturer unless otherwise agreed (see 6.3).

To prevent injury to the user or damage to the unit, it is required that you read these operating instructions carefully before starting to use the device.

Special versions and special applications are not covered by this documentation.

2 INTRODUCTION

The MECON GmbH fire hose reel tester WHX is designed for testing fire hose reels with different flow rates.

2.1 Usage

The device is intended for use by authorised or qualified persons. The standards, directives and regulations as well as the operating instructions of the manufacturer of the fire hose reels must be observed.

The device is designed as a tester with orifice plate. The apertures are manufactured and calibrated for the values of the respective standard. The appropriate aperture set must be used.

The requirement according to the respective standard is fulfilled if the minimum flow pressure is reached or exceeded when using the correct orifice plate for the required flow rate.

3 SCOPE OF DELIVERY

The scope of delivery includes:

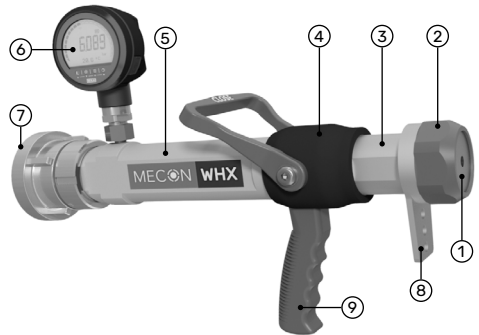
- » Transport case
- » Digital pressure gauge
- » WHX measuring device
- » Measuring orifice set (8 pcs DE / 9 pcs AT)
- » Fixing aid
- » Replacement seal 3 pcs
- » Calibration certificate
- » Conversion table
- » Operating instructions WHX and digital pressure gauge

4 DEVICE DESCRIPTION

The flow rate is determined via an orifice plate at the appliance outlet with a defined drill hole diameter and a digital pressure gauge. The orifice plates have different drill hole diameters for the various flow rates (see data sheet).

All orifice plates are calibrated with the device and a 1.5 m hose. The test certificate is enclosed with the device and is also available with the serial number at <https://download.mecon.de/downloads>.

The device consists of the following components:



- ① Orifice plate
- ② Union nut G2
- ③ Centre piece orifice plate / valve
- ④ Valve
- ⑤ Centre piece valve / coupling
- ⑥ Digital pressure gauge
- ⑦ Storz C coupling
- ⑧ Fixing aid
- ⑨ Handgrip

Fig. 2: Components of the WHX

5 COMMISSIONING AND USE

5.1 Safety

ATTENTION!

The test device generates a recoil force during use, depending on the pressure and water flow rate. Slow opening and closing is recommended. A secure stand and a firm hold of the measuring device are prerequisites for safe operation.

The hand must not be within the range of movement of the valve handle.

NOTICE!

It must be ensured that any escaping water during the test cannot cause any damage.

The fixing aid provided on the appliance should be hooked into the opening of the flushing tank to minimise recoil.

Watch out for water splashing back to avoid damage to property.

NOTICE!

All devices have been carefully checked for functionality before despatch. Check the outer packaging for damage or signs of improper handling immediately upon receipt.

Report any damage to the carrier and your sales representative. In such a case, a description of the defect, the type and

the serial number of the device must be provided.

Unpack the device with care to avoid damage.

Check that the delivery is complete (see chapter 3).

Use the nameplate to check whether the flowmeter supplied corresponds to your order.

5.2 Hose connection

The connections are equipped with Storz couplings and must be securely tightened using a suitable hook spanner.



Fig. 3: Storz coupling with hook spanner

ATTENTION!

Incorrectly closed connections can lead to the hose coming loose, which can move due to the escaping water and cause injury or material damage. Incorrectly secured connections can result in leaks.

5.3 Commissioning

Use the orifice plate labelling to check whether the orifice plate used is suitable for the measurement. If necessary, the orifice plate must be changed (see chapter 5.4).

The measurement should only be carried out with the fixing aid or a fixed mounting of the device, especially with orifice plates for high volume flows, as the recoil force can be unexpected and can lead to injuries.

After connecting and checking the hose connection for secure closure, the measurement is started by opening the valve handle.

5.4 Changing of the orifice plates

The orifice plates are calibrated for the flow rate to be measured.

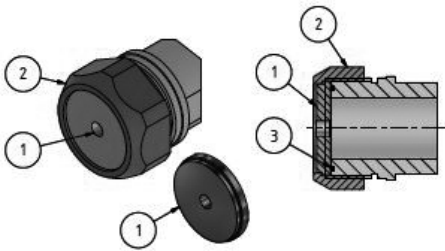


Fig. 4: Installation of the orifice plate

The cover (1) is installed as shown in the illustration. The union nut (2) must be hand-tightened. Ensure that the supplied seal (3) is used correctly.

5.5 Use of the connection adapter

There are ventilation openings on the front side of the connection adapter as well as on the outer surface of the union nut. These must not be blocked. Small amounts of water may escape when opening and closing the valve, as well as during low flow rates.

6 SERVICE

6.1 Storage

Store the empty measuring device in a dry and dust-free place, preferably in the transport unit provided. After use, it is advisable to dry the device and the orifice plates. Avoid damp heat. The permissible storage temperatures are $-20\text{ °C} \dots 60\text{ °C}$ ($-4\text{ °F} \dots 140\text{ °F}$). Avoid external loads on the device.

6.2 Maintenance and calibration

It must be checked regularly whether the aperture openings are sharp-edged. In accordance with the VdS certification, a maintenance and calibration interval of 12 months must be observed for the measuring device. The type plate must not be removed from the device or components.

6.3 Returning the device to the manufacturer

Due to careful manufacturing processes and quality controls of the device, trouble-free operation can be expected if the device is operated in accordance with these instructions. Should it nevertheless become necessary to return the device to MECON GmbH, please note the following:

ATTENTION!

For reasons of legal regulations on environmental protection and occupational health and safety and to maintain the health and safety of our employees, all devices returned to MECON GmbH for repair must be free of toxic and hazardous substances. This also applies to the cavities of the devices.

If necessary, the device must be neutralised or rinsed by the customer before being returned to MECON GmbH .

The customer must complete and confirm the corresponding form, which can be downloaded from the MECON GmbH website, and enclose it with the return shipment:

<https://www.mecon.de/files/daten/downloads/en/Confirmation-of-decontamination.pdf>