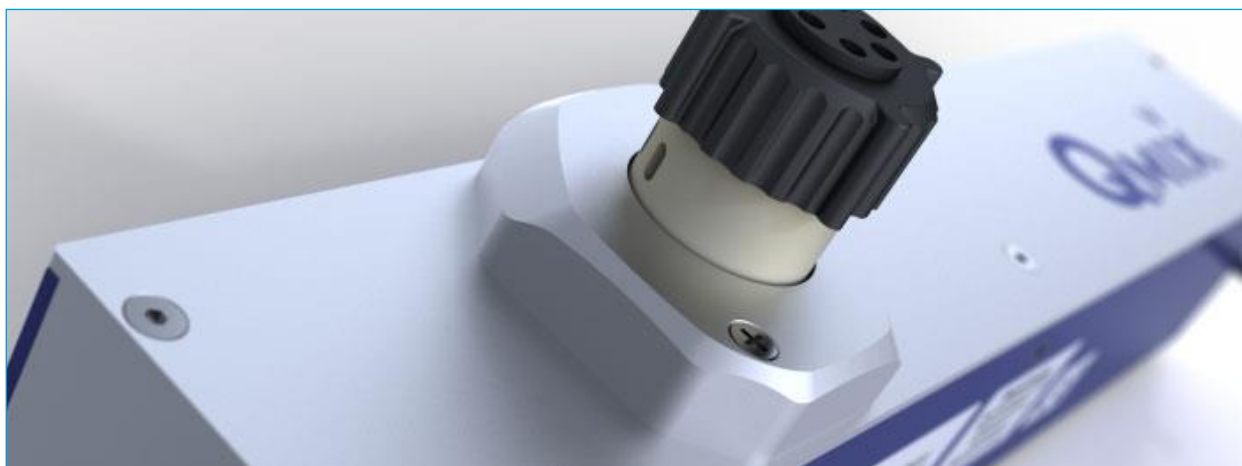
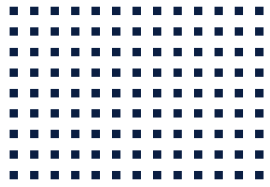


CETONI

CE QMIX V Hardware Manual Valve Module



ORIGINAL INSTRUCTIONS 2.02 – MARCH 2016



CETONI GmbH
Wiesenring 6
07554 Korbussen
Germany

T +49 (0) 36602 338-0
F +49 (0) 36602 338-11
E info@cetoni.de

www.cetoni.de

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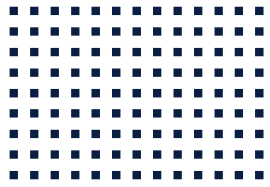
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1 Overviews and Indexes

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1.2 Change History

| REV | DATE | CHANGE |
|------------|-------------|--|
| 1.00 | 01.06.2012 | First version of Qmix hardware manual |
| 1.01 | 05.02.2013 | Various minor changes |
| 1.10 | 12.09.2013 | Added Qmix BaseXT and TC, power consumption Q+ |
| 1.11 | 21.08.2014 | Adaptation of the maximum heating temperature of the Reaction module Q+ heating column and the High temperature T-mixer due to material changes. |
| 2.00 | 08.04.2015 | Thematic splitting of the manual "Qmix hardware" |
| 2.01 | 21.08.2015 | Updating the pressure equipment directive of 97/23/EG to 2014/68/EU |
| 2.02 | 11.03.2016 | New corporate design |

2 Technical Data

2.1 Mechanical Data

| | |
|-------------------------------|------------------------------|
| DIMENSIONS (L X W X H) | 310 x 55 x ≈100 mm |
| WEIGHT | ≈800 g (vom Ventil abhängig) |
| WETTED PARTS | see Valve Manual |

2.2 Electrical Data

| | |
|--------------------------|----------------------|
| SUPPLY VOLTAGE | 24VDC |
| POWER CONSUMPTION | 24W during switching |

2.3 Interfaces

SEE VALVE MANUAL

2.4 Environment

| | |
|------------------------------|----------------------------|
| OPERATING TEMPERATURE | 0°C to 50°C |
| STORAGE TEMPERATURE | -20°C to 75°C |
| OPERATING HUMIDITY | 20% to 90%, non-condensing |
| STORAGE HUMIDITY | 20% to 90%, non-condensing |

3 Application Purpose

3.1 General Description of the Device

The Qmix valve module is a part of the Qmix micro reaction and analysis system. It allows you to switch between different channels within the microfluidic system.

3.2 Intended Use

The Qmix valve module is used to switch between different channels within the microfluidic system. It is intended for use in a Qmix micro reaction system from CETONI. Application usually takes place in laboratory-like rooms.

3.3 Reasonably Foreseeable Faulty Application

A use for applications distinct from the intended purpose can lead to dangerous situations and is to be omitted.



CAUTION. The unit must not be used as a medical device or for medical purposes.

3.4 Safety Advice

For the safe operation of Qmix valve module it is necessary to observe the safety measures from the general section of the manual for the Qmix micro reaction module.

Take into account in particular the information regarding the European Pressure Equipment Directive 2014/68/EU.



IMPORTANT. Please read this manual as well as the related software manual carefully and completely before putting your Qmix system into operation.

Additionally please read the general parts of the manual carefully and completely before putting your Qmix system into operation.

4 Transportation and Storage

The individual modules must not be lifted or transported plugged-together. Transportation of plugged-together devices is only allowed in the original packaging.

Use the original packaging for transportation or shipping of the module.

Concerning the storage conditions, please observe the data from chapter “Technical data”.

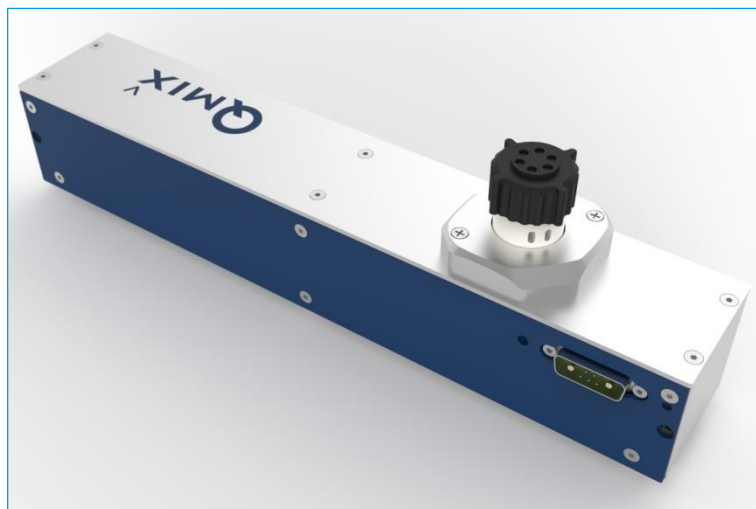


CAUTION. Transportation, storage or operation of the modules below 0°C with water in the fluid passages may cause damage to the module.



CAUTION. Risk of damaging the device. Do not transport the modules plugged-together.

5 Hardware



The valve module V allows the integration of Rheodyne TitanEX and TitanHP series into the Qmix System.

Information concerning the fluidic function, the connections, wetted parts and wear parts of the valve can be found in the related valve manual. The operation concerning the software is treated in the related software manual.



CAUTION. Pay attention that the fittings and tubes of your choice withstand the pressure to be expected during application.



CAUTION. Check chemical resistance of the wetted parts against the used chemicals before using the device.



IMPORTANT. Please read valve manual carefully and completely before bringing your Qmix valve module into service.

6 Maintenance and Care

If used in accordance with intended purpose, the device is maintenance-free. Should there be a failure despite this, which you cannot eliminate yourself, or which requires opening the device, please contact CETONI GmbH to coordinate further actions. The device may only be opened by CETONI GmbH or thereby authorized service staff. Otherwise the warranty and guarantee claims are void.

Software-related troubles are dealt with in the Software Manual.

For cleaning it please rub the surface gently with a soft, damp cloth. The cloth must not be wet, so that no fluency can trickle into the device. In case of a heavier soiling you can also use a little bit of detergent or alcohol.