

AUTOMATIC CHLORINATOR

series M 3603 C

- ⇒ **4 –20 mA PROPORTIONAL CONTROL INPUT**
- ⇒ **MODBUS COMMUNICATION**
- ⇒ **5-POINT VALVE CALIBRATION**
- ⇒ **MANUAL OR AUTOMATIC CONTROL**
- ⇒ **LED INDICATION OF THE VALVE POSITION**
- ⇒ **VACUUM INDICATION**
- ⇒ **MADE OF QUALITY MATERIALS**
- ⇒ **HIGH QUALITY STEPPER MOTOR**
- ⇒ **V-NOTCH PRECISION RATE VALVE**
- ⇒ **SIMPLE INSTALLATION, SET UP AND START UP**

OPERATION PRINCIPLE

Automatic chlorinator is mounted between ejector and vacuum regulator. It is connected to either AQUACON M 5500 C, AQUAProcessor series M 5700 C or directly to SCADA software, through PLC units, which opens or closes the motor valve through 4-20mA current signal or ModBUS communication, according to the signal received from water flow meter and/or residual chlorine analyser. In case of controller malfunction the feed rate can easily be set manually on the motor valve (switch remote/manual and switch open/close). In case of motor valve failure, manual feed can be adjusted by manual knob on the top of the motor valve.

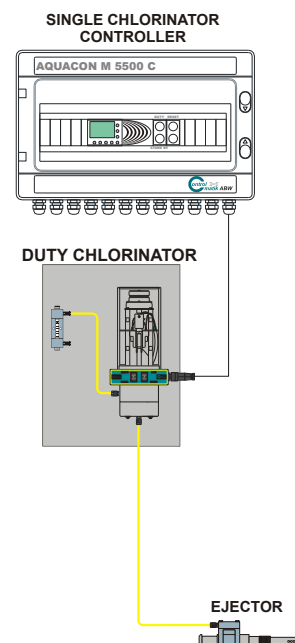
GENERAL

Automatic chlorinator series M 3603 C is a heavy duty feed unit intended for accurate manual or automatic feed of chlorine gas into water. It is designed to be controlled through 4-20mA current signal or ModBUS communication. In case of need it can simply be switched to manual control.

The unit M 3603 C consist of:

- Motor rate valve series M 3531 C
- Gas flow meter of corresponding capacity
- Vacuum gauge
- Wall mounting board

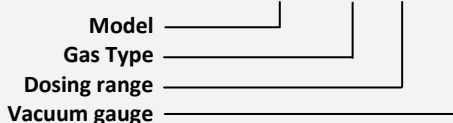
Electromotive rate valve Series M 3531 C is made of compact plastic, resistant to high concentration of chlorine gas, precision rate valve and quality driving stepper motor. Gas flow meter is also made of compact plastic, resistant to high concentration of chlorine. All seals are made of fluorocarboned hydrogen's (FPM/FKM) resistant to aggressive gases. All this guarantees a safe, long and accurate functioning of automatic chlorinator.



ORDER CODES



M 3603 C/X U



OPTIONS:

- Gas type: "C" – Cl₂, "S" – SO₂
- Dosing range*: is chosen from technical data table below and the suitable number is written into the ordering code
- Vacuum gauge : yes "U", without it the letter is not written in the code

TECHNICAL DATA



Dosing range(X)* : (in g/h)

- 1 up to 12
- 2 up to 25
- 3 up to 100
- 4 up to 200
- 5 up to 500
- 6 up to 1000
- 7 up to 2000
- 8 up to 4000
- 9 up to 10000

Connections:

- Vacuum (up to 15m):**
 2 kg/h – d8/d10 - 3/8"
 4 kg/h – d8/d10 - 3/8"
 10 kg/h – d12/d16 - 5/8"

Weight:

6,5 kg

Dimensions:

500x 300 x 180 mm

For larger vacuum lines, see table:
Chlorine vacuum line size requirements

ELECTRICAL DATA



Analog input:

Current input:
0 .. 4 – 20 mA (internal resistance 100 Ω)

Voltage input:
0 .. 2 – 10 V (internal resistance 100 KΩ)

Function:
Valve position = Analog input value

Digital input:

Electrical function:
Internal supply digital input

Maximum voltage:
24 V

Maximum current:
1 mA

Signal "1" at 10 V
Signal "0" at 4 V

Function:
Contact normally closed = Valve in operation
Contact open = Valve failure

Analog output:

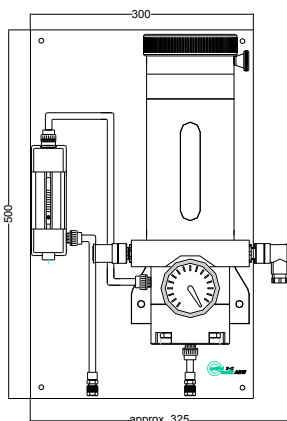
Voltage
22 VDC
Current output
4 – 20 mA

Function:
Analog output value = Valve position
Analog output value < 3,6 mA or >21,6 mA indicating valve failure.

Digital output:

Electrical function:
Potential-free contact
Maximum voltage:
30 VDC ali 24 VAC +10%
Maximum current:
200 mA
Function:
Valve failure (contact is open or closed)

MEASURE DRAWINGS



Valve power supply:

24 VDC nominal, 20 - 30 VDC

Maximum consumption: 6 W