

## Automatic chlorinator 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
- High quality stepper motor
- V-notch PRECISION RATE VALVE
- Simple installation, set up and start up

### 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.

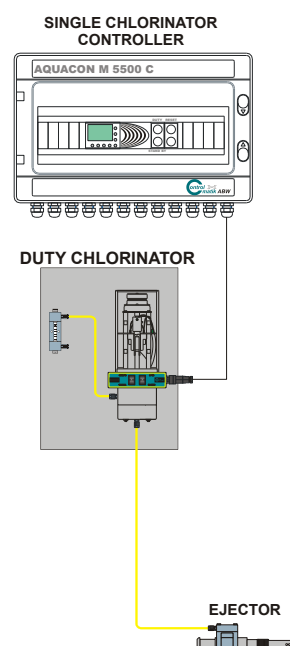
#### The unit M 3603 C consist of:

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

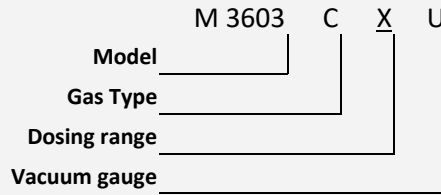
Electromotive rate valve Series M 3531 C is made of compact plastic, resistant to high concentration of chlorine gas, precision rate valve and quality driving stepper motor. Gas flow meter is also made of compact plastic, resistant to high concentration of chlorine. All seals are made of fluorocarboned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

### OPERATION PRINCIPLE

Automatic chlorinator is mounted between ejector and vacuum regulator. It is connected to either AQUA-CON 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.



ORDER CODES



**OPTIONS:**

- Gas type: "C" – Cl<sub>2</sub>, "S" – SO<sub>2</sub>

- Dosing range (g/h):

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

- Vacuum gauge : yes "U", without it the letter is not written in the code

TECHNICAL DATA



**Weight:** 6,5 kg

**Dimensions:** 500x 300 x 180 mm

**Connections:**

**Vacuum (up to 15m):**

2 kg/h – d8/d10

4 kg/h – d8/d10

10 kg/h – d12/d16

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%

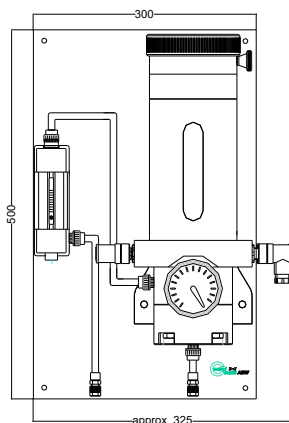
Maximum current:

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