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CHLORINATOR MODEL TJ-C17

General

Chlorine metering units of group TJ-C17 operate in conformance as full vacuum equipment and are employed mainly in water works for municipal and industrial water supply and waste water treatment. The units consist functional elements of modular design characterized and are bγ operational safety. Measuring ranges are available between 0.25 to 30 kg/h. The indicating range is 1:20 with an error limit of +/ - 4 per cent offull scale deflection. The length of the flow meter Sight glass is 300 mm.

The chlorine metering units are available in a wall mounting version, type TJ-C17 WL, and a cabinet version, TJ-C17 SL. The cabinet version is equipped with a steel frame which is coated with epoxy resin; a removable plastic cover is placed over the frame.



The front panel consists of black polypropene. The front panel includes a gas pressure gauge and propellant water pressure gauge as well as a vacuum gauge for indicating the vacuum in the line to the injector.

Technical data

Design type : Full vacuum chlorine gas metering unit

Measuring ranges : Up to 30 kg/h Cl2 gas

Control range : 20: 1

Instruments : TJ-C17 WL

Vacuum gauge for suction pressure Pressure gauge for chlorine gas Flow meter sight glass, 300 mm

TJ-C17 SL

Vacuum gauge for suction pressure Pressure gauge for chlorine gas Pressure gauge for propellant water Flow meter sight glass, 300 mm

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Operating mode : 1. Manual valve adjustment

2. Stop-and-go operation by actuation of

propellant water supply

3. Electrical remote control by hand or from a Controller with the use of a control valve.

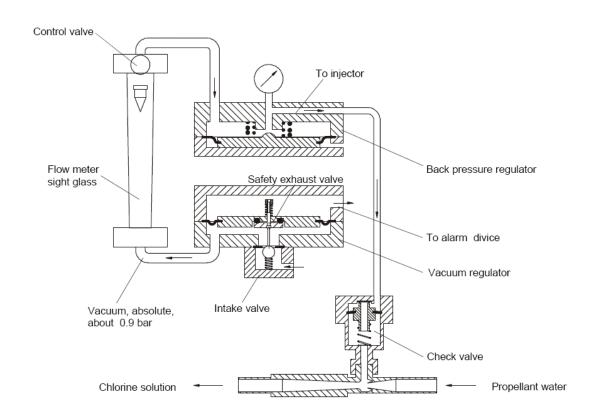
Propellant water : Ordinary clean water required driving pressure

And water flow rate selected as dictated by the Counter pressure indicated in the injector data

Sheets

Mass : TJ-C17 WL: about 16 kg

TJ-C17 SL: about 48 kg Injector: about 9 kg



Functional description

The operating principle can be explained in a simplified manner as follows:

The full vacuum gas metering unit has been designed in such a way that the chlorine gas is initially shut off at the intake valve.

Chlorine gas can flow at the desired rate only if a vacuum is generated at the injector after opening the propellant water supply line.

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The vacuum causes a pressure difference in the unit with respect to the atmosphere; the action of this pressure difference on a diaphragm opens the intake valve. The flow rate of chlorine is adjusted by means of the control valve on the flow meter sight glass.

The chlorine gas is drawn by suction through the back pressure regulator, which compensates for fluctuations in the injector suction rate, and is dissolved in the propellant water there. The chlorine solution then flows to the injection site and is added to the water being treated.