

General

Chlorine metering units of group C 2525 operate in conformance with DIN 19 606 as full vacuum equipment and are employed mainly in water works for municipal and industrial water supply and waste water treatment. The units consist of functional elements of modular design and are characterized by high operational safety. Measuring ranges are available between 5 and 25 kg/h. The indicating range is 1:20 with an error limit of +/- 4 per cent off full 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 C 2525 WL, and a cabinet version, C 2525 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 polypropylene. 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 in conformance with DIN 19 606

Measuring ranges: 5 - 10 - 15 - 25 kg/h Cl₂ gas

Control range: 20 : 1

Instruments: **C 2525 WL**

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

C 2525 SL

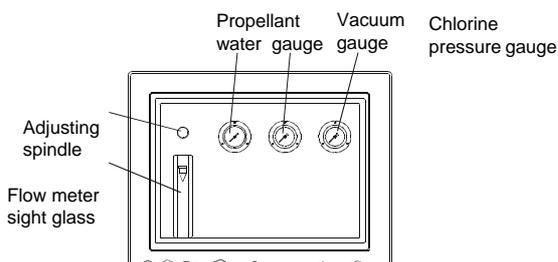
Vacuum gauge for suction pressure
Pressure gauge for chlorine gas
Pressure gauge for propellant water
Flow meter sight glass, 300 mm

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, as indicated in instruction sheet MB 2 07 10

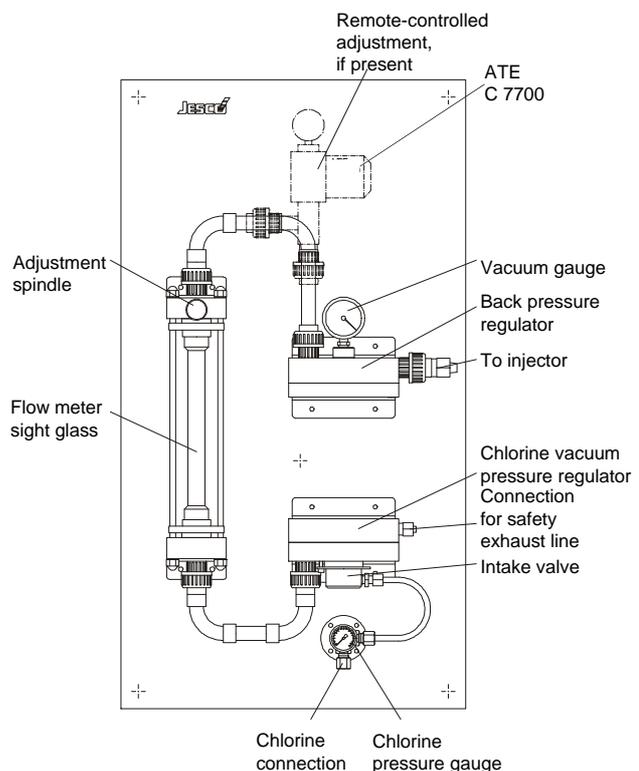
Propellant water: Ordinary clean water
Required driving pressure and water flow rate selected as dictated by the counterpressure indicated in the injector data sheets (instruction sheet MB 2 31 01)

Mass: C 2525 WL: about 16 kg
C 2525 SL: about 48 kg
Injector: about 9 kg

Cabinet version C 2525 SL



Wall-mounted version C 2525 WL



Functional description

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

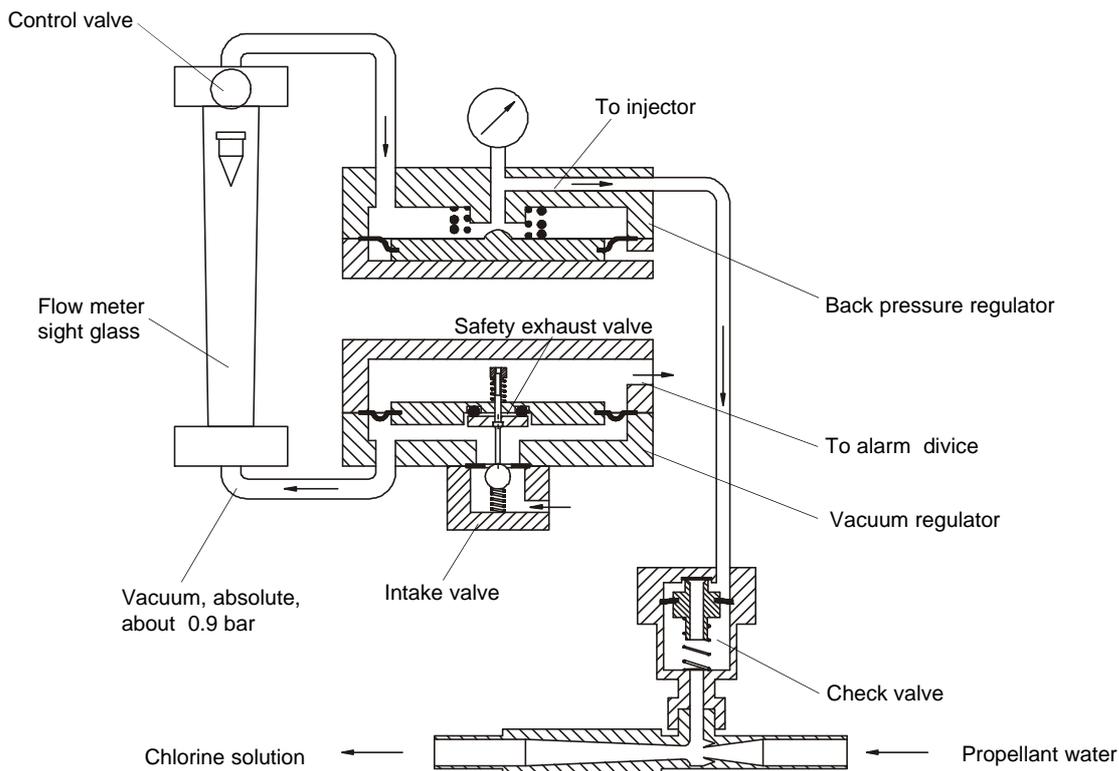
The full vacuum gas metering unit has been designed in such a way that the chlorine gas is initially shut off at the intake valve.

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

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.


Catalogue numbers

Chlorine gas metering unit, complete with injector and check valve, 5 m PE exhaust hose, \varnothing 8/12 and fastening hardware, as well as test ammonia

Measuring range kg/h Cl ₂	Injector *	C 2525 / WL	C 2525 / SL
0,25 to 5	E	20232422	20232426
0,50 to 10	C	20232423	20232427
0,75 to 15	C	20232424	20232428
1,25 to 25	F	20232425	20232429

* The local propellant water supply conditions may demand a different injector; see MB 2 31 01.

Example for ordering

For continuous chlorination of effluent, chlorine gas is required at a flow rate of 16 kg/h. Because of space limitations, the cabinet version cannot be accommodated; hence, the wall-mounted version with a measuring range up to 25 kg/h Cl₂ has been selected.

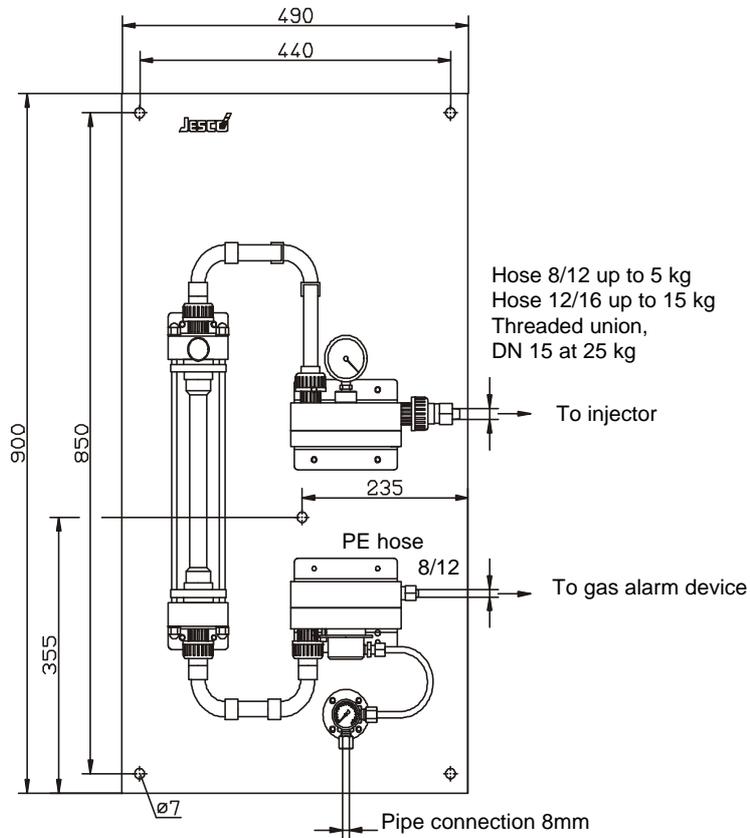
Since the maximal permissible amount constantly drawn from a chlorine canister is 1 per cent of the contents, about 1600 kg of liquid chlorine must be available for withdrawal at a rate of 16 kg/h. For this purpose, either three 500 kg drums or two 1000 kg drums (or more for extending the time intervals between canister replacement) may be employed. As dictated by the number of drums connected and the recommended equal number for use as switchable reserve canisters, the flexible connecting hoses and manifold lines must be selected from the dimensional sheets, MB 2 23 01.

The ordering text is as follows:

Chlorine gas metering unit for wall mounting, complete with injector and check valve, 5 m exhaust hose with fastening hardware and test ammonia

Type C 2525 WL Catalogue number: 20232425

Dimensional drawing, C 2525,
wall-mounted version



Dimensional drawing, C 2525,
cabinet version

