

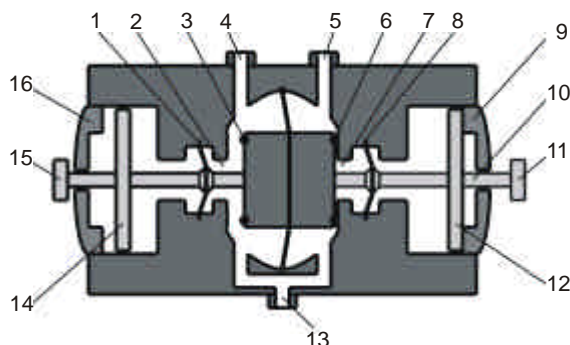
General

The supply of chlorine from a metering system with only one cylinder or battery inevitably leads to failure of the chlorination when empty and requires personnel in order to change cylinders. The demand for continuous chlorination, particularly in such sensitive hygiene areas as swimming pools, requires an operating system that operates with as little maintenance as possible and maximum reliability.

The chlorine changeover unit C 2006 meets this demand and also operates without any auxiliary energy whatsoever. For a changeover, it is sufficient for the injector to lower the vacuum below the normal range because of the empty cylinder. The changeover unit can only be used for chlorine gas in a vacuum.

Functional description

The diagram shows the changeover unit in a position in which chlorine gas inlet 4 is connected to outlet 13. Inlets 4 and 5 are hermetically sealed from one another by a diaphragm. The chambers are limited externally by the diaphragms 1 and 8. The changeover function is achieved by alternately sealing O-rings 3 and 6 at ports 2 and 7.



The switching position is secured by the magnets 9 and 16 which alternately hold back the steel discs 12 and 14 mounted on the switching spindle 10.

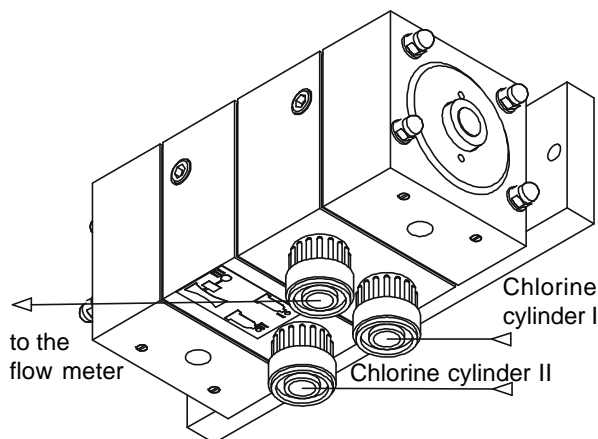
The switching position is revealed by protrusion of buttons 11 and 15 which can also be actuated manually. When the vacuum on the left-hand side of the diaphragm increases because the chlorine cylinder connected to 4 has emptied, the constant pressure on the right-hand side of the diaphragm will predominate in the position illustrated, until the pressure difference exerts sufficient force on the diaphragm to separate the steel disc 12 from magnet 9. Since the retaining force of the magnet decreases sharply with increasing distance, the diaphragm bounces to the left with the switching spindle 10 and all valve parts mounted on the spindle until steel disc 14 contacts the magnet 16. O-ring 3 has now sealed port 2 and O-ring 6 opens port 7. Inlet 5 is now connected to outlet 13.

The chlorine changeover unit can only be used if the gas has already been safely transferred to the vacuum. All conventional vacuum controllers to DIN 19606 can be used for this purpose, especially the vacuum controller C 2211/2212, see data sheets MB 2 04 11 and MB 2 04 12.

Gas at overpressure must not be connected.



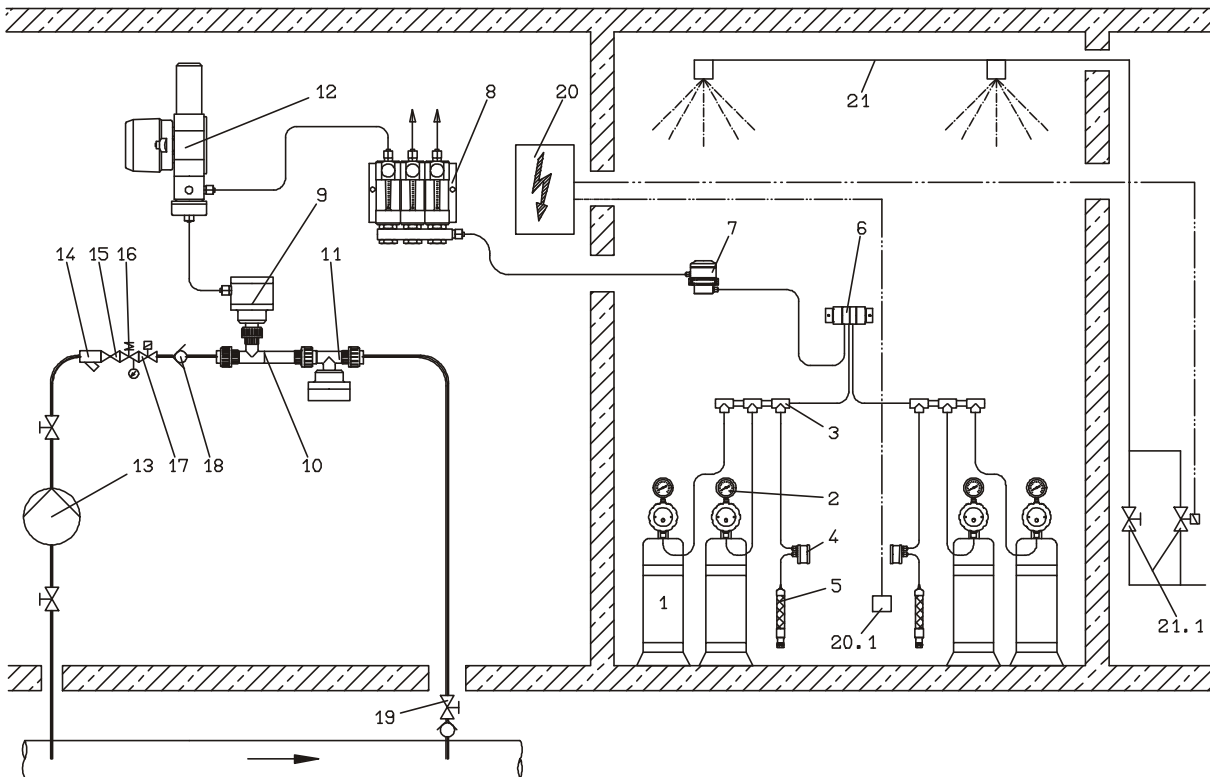
Dimensioned drawing



Technical data

Dimensions:	75• x 164	
Material:	PVC, PE, PTFE, PVDF, Viton, Monel, Hastelloy	
Connections:	Screw coupling G3/4" DN 10	
Weight:	1.6 kg	
Flow rate:	10 kg/h at 0.8 bar absolute	
Order No.:	20435435	
Tubing connection kit:	8/12	35441
	2/16	35442

Installation example



Legend

1	Chlorine cylinder		12	Control valve C 7700	MB 2 07 10
2	Vacuum controller C 2211	MB 2 04 11	13	Booster pump	MB 2 29 01
3	Vacuum collecting line	MB 2 23 02	14	Dirt trap	MB 2 29 04
4	Relief valve	MB 2 04 11	15	Shutoff valve	MB 2 29 04
5	Activated carbon cartridge	MB 2 04 11	16	Pressure reducing valve with pressure gauge	MB 2 29 04
6	Chlorine changeover unit C 2006	MB 2 04 13	17	Solenoid valve	MB 2 29 04
7	Backstop	MB 2 04 11	18	Ball check valve	
	or		19	Inlet for chlorine solution	MB 2 34 01
	Safety nonreturn valve	MB 2 04 06	20	Chlorine gas warning device	MB 2 36 04
8	Metering glass or distribution block	MB 2 04 11	20.1	Sensor for gas warning device	MB 2 36 04
9	Ejector non-return valve	MB 2 32 01	21	Sprinkler system	MB 2 41 00
10	Ejector	MB 2 31 01			
11	Vacuum breaker	MB 2 33 02	21.1	Fittings for sprinkler system	

Note

Not all the parts illustrated are essential. The actual scope of the installation must be carefully planned by a specialist.

Important

The changeover unit has to be installed between the vacuum controller and the metering glass.