

### General description

Full-vacuum chlorinators are designed according to the highest safety standard DIN19606. Even in the case of a line rupture chlorine gas cannot escape, only ambient air is sucked into the vacuum system. If the vacuum regulator function is faulty a safety blow-off valve is opened thus providing for a pressure relief in the vacuum system. This happens even at low-value overpressure and the chlorine gas is lead directly to the gas detector.

However, should the unhappy case occur that both the vacuum line and the inlet valve are defective, the safety blow-off valve cannot react. As a result of the defective vacuum line no overpressure can be built up. Thus uncontrolled escape of chlorine gas occurs at another point.

By using the safety shutoff valve this case is avoided so that the highest possible safety of the full-vacuum chlorinators is guaranteed.

At the same time the safety shutoff valve prevents water from entering into the vacuum regulator even if the ejector non-return valve is untight.

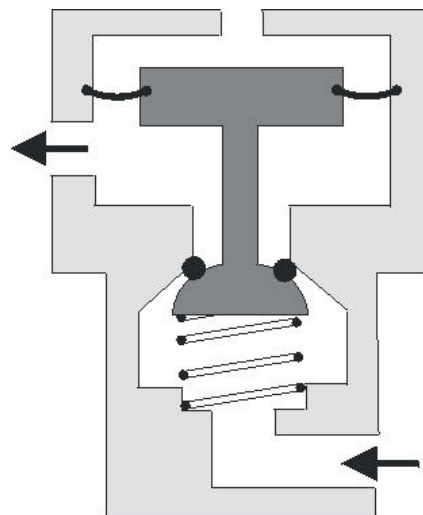


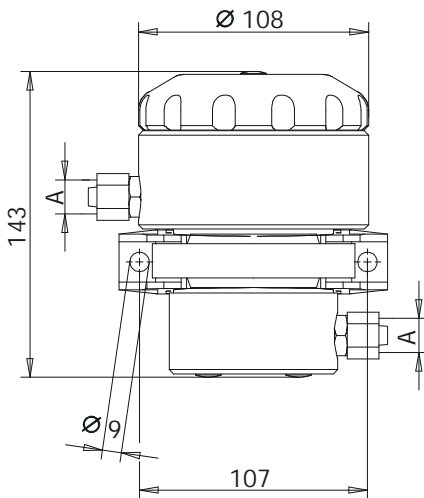
# Safety Shutoff Valve

### Function

During operation of a chlorinator according to DIN19606 the ejector builds up a vacuum. As a result of this vacuum, the safety shutoff valve is opened via the diaphragm surface first and only then the vacuum regulator is opened. During operation the shutoff valve is virtually a mere connecting pipe for the metering plant.

If the ejector is switched off, the vacuum collapses and the shutoff valve closes due to spring loading. The valve completely shuts down the metering line so that even at a high overpressure at the valve inlet chlorine gas cannot reach the end of the line. By mounting the safety shutoff valve within the area of the chlorine gas line being monitored by the gas warning device the plant is absolutely safe even in the case of malfunction (see also installation diagram on the back).

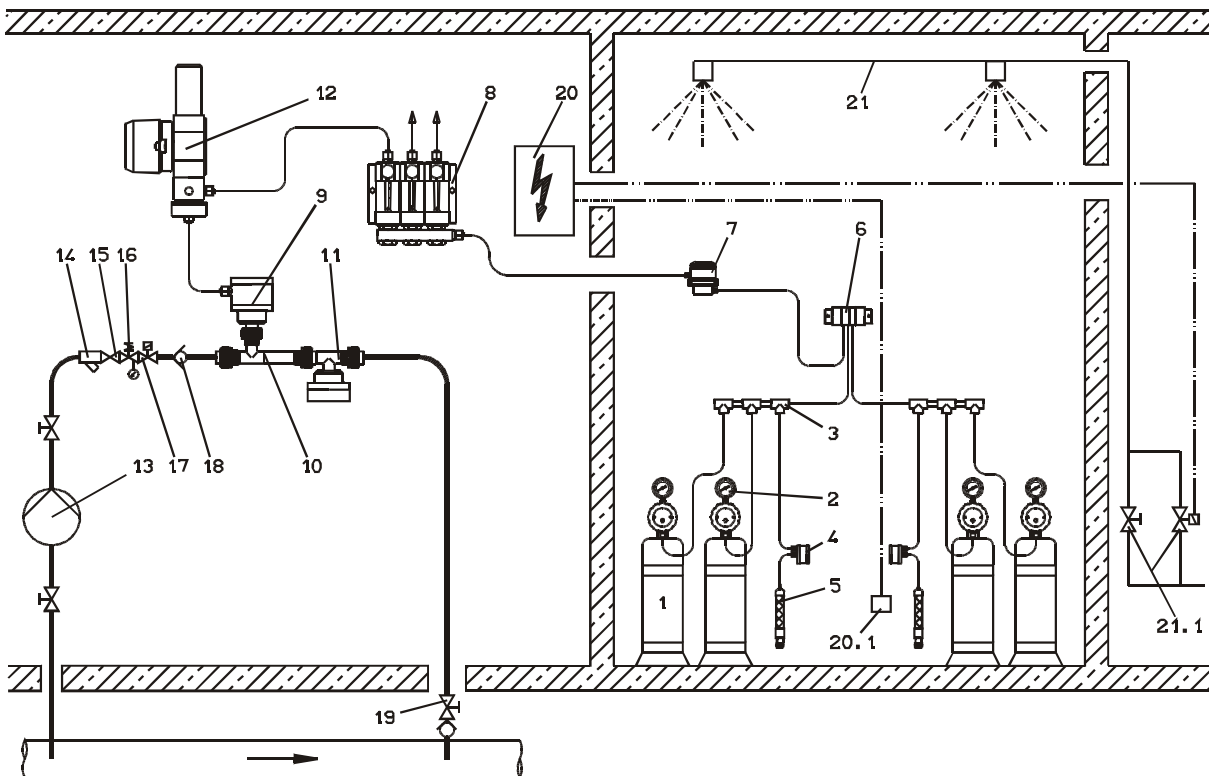


**Dimensions**

**Technical data**

Materials	PVC / Viton / Hastelloy
Flow rate	up to 15 kg/h see table
Response vacuum	50 mbar
Weight	1.2 kg
Installation	by means of a clamp
Connections	see table

**Part numbers**

Connection "A"	max. flow	Part.-No.
PE tubing d8/12	5 kg/h	20401009
PE tubing d12/16	15 kg/h	20401010
PVC screwing DN10/d16	15 kg/h	20401011

**Diagram of a complete chlorination plant**

**Legend**

1 Chlorine cylinder		13 Pressure boosting pump	MB 2 29 01
2 Vacuum regulator C 2211	MB 2 04 11	14 Dirt trap	MB 2 29 04
3 Vacuum collecting line	MB 2 23 02	15 Shutoff valve	MB 2 29 04
4 Safety valve	MB 2 04 11	16 Pressure reducing valve with pressure gauge	MB 2 29 04
5 Activated carbon cartridge	MB 2 04 11	17 Solenoid valve	MB 2 29 04
6 Chlorine changeover switch C 2005	MB 2 04 05	18 Ball backpressure valve	MB 2 29 04
7 Safety shutoff valve	MB 2 04 06	19 Chlorine solution inlet	MB 2 34 01
8 Measuring glasses, distribution block	MB 2 04 11	20 Gas warning device	MB 2 36 04
9 Ejector backpressure valve	MB 2 32 01	20.1 Sensor for gas warning device	MB 2 36 04
10 Ejector	MB 2 31 01	21 Sprinkler plant	MB 2 41 00
11 Vacuum breaker	MB 2 33 02	21.1 Fittings for sprinkler plant	
12 Control valve C 7700	MB 2 07 10		