

# Double safety

## Safety shutoff valve



### Vacuum dosing systems

Total vacuum chlorinators in accordance with DIN 19606 are configured in accordance with high safety standards. Chlorine gas does not escape even following destruction of the dosing lines; only ambient air is sucked into the vacuum system. Should the vacuum regulator experience a fault, a safety blow-off valve effects pressure relief in the vacuum system. Opening upon even the lowest level of positive pressure, it draws the chlorine gas into the gas detector in a targeted fashion.

### Safety shutoff valve

The coincidental and simultaneous incidence of a defective vacuum line and a leaking inlet valve means that the safety blow-off valve cannot be tripped, because the defective vacuum line prevents the build-up of positive pressure. The chlorine gas escapes at another location in an uncontrolled fashion.

The safety shut-off valve prevents this from happening, ensuring the highest possible level of safety for the total vacuum chlorinator. The shutoff valve also prevents water penetration into the vacuum controller if the injector check valve is leaky.

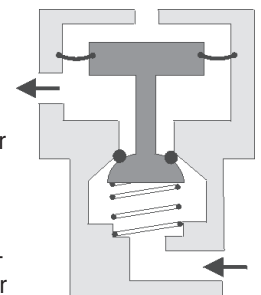
DIN 19606 prescribes that the safety shut-off valve be installed in all installations in which the injector is not located in the chlorine gas room.

### Functions

- Lock the vacuum line upon insufficient vacuum
- Protect the vacuum regulator against water from the injector

### Mode of operation

In normal operation, the injector draws in the chlorine gas. The injector vacuum sucks the diaphragm downwards against the spring and opens the valve. The chlorine gas can flow. Should the injector have come to a standstill or the vacuum be insufficient, the spring closes the valve. Chlorine gas can no longer flow. At the same time, the valve functions as an additional non-return valve with diaphragm reinforcement and protects the vacuum regulator against water from the injector.



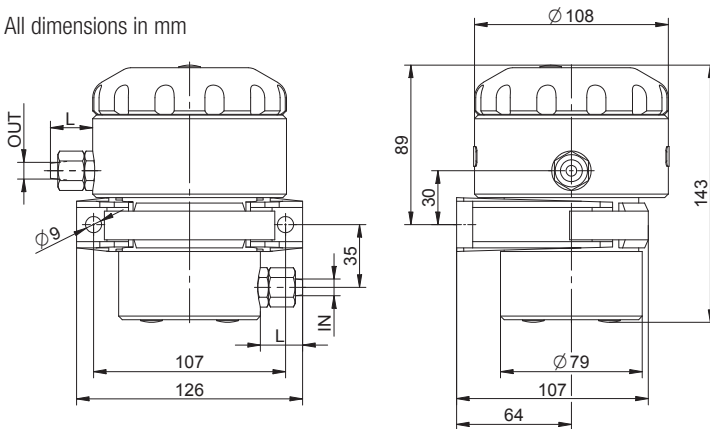
## Technical data

### Safety shutoff valve

Chlorine gas flow rate	Hose connection 8/12 mm	kg/h	5
	Hose connection 12/16 mm	kg/h	15
	PVC threaded connection DN12 / Ø 16 mm	kg/h	15
Response vacuum		mbar	-50
Permitted operating pressure	Input side	bar	8
	Output side	bar	4
Nominal width			DN12
Material in contact with the media			PVC, PVDF, Hastelloy, FPM
Weight		g	1200 approx.

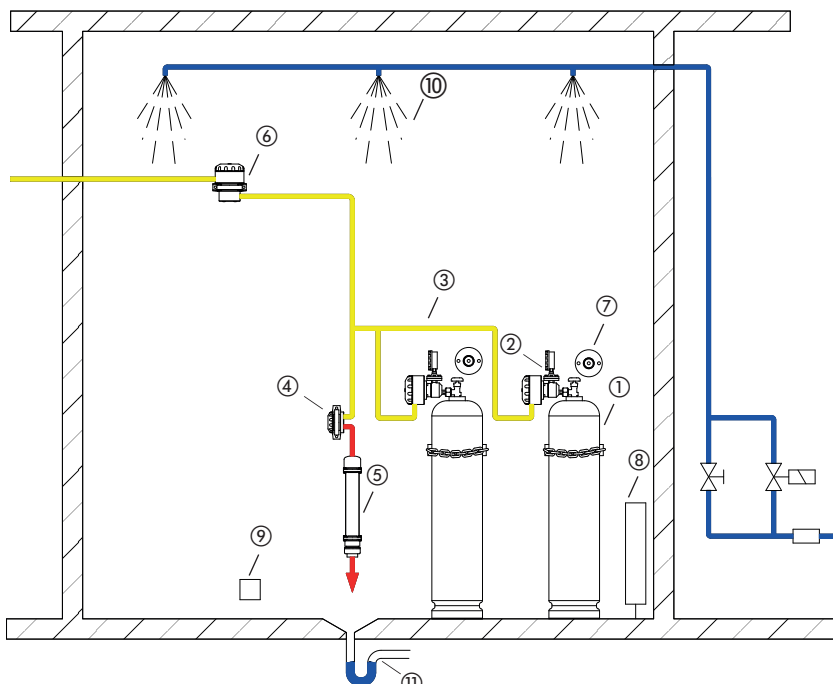
## Dimensions

All dimensions in mm



Connection (IN / OUT)	Dimension L
Hose connection 8/12 mm	26.5
Hose connection 12/16 mm	36.5
PVC threaded connection DN12 / Ø 16 mm	47.5

## Installation example



Item	Description
①	Chlorine cylinder
②	Vacuum regulator
③	Manifold
④	Safety blow-off valve
⑤	Activated carbon cartridge
⑥	Safety shutoff valve
⑦	Wall holder
⑧	Room heating
⑨	Gas sensor
⑩	Sprinkler system
⑪	Floor drainage

— Water  
— Chlorine gas  
— Safety blow-off line