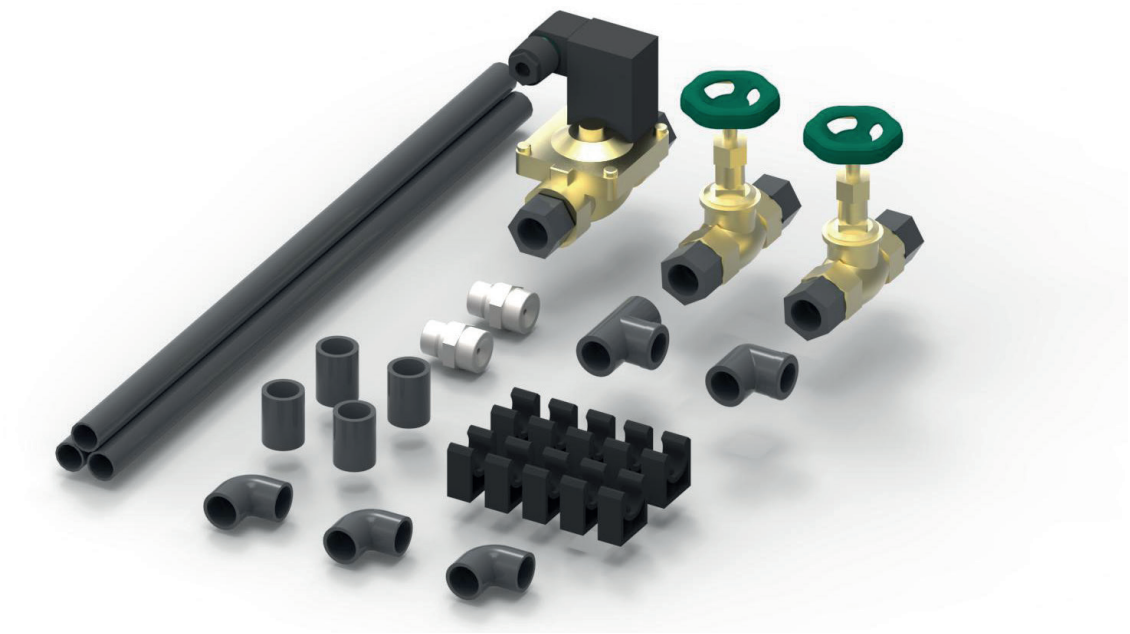
Binding and safe disposal of released gas

Sprinkler system



Binding and safe disposal of released gas

To ensure a high level of safety, the German regulation for the prevention of industrial accidents GUV 8.15 / UVV 65 prescribes that chlorine gas rooms be fitted with a water sprinkler system. These serve the binding and safe disposal of any released gas.

Lutz-Jesco provides the following sprinkler versions:

- **Ceiling sprinkler** with 2 PVC G1/2 mist nozzles including manually-operated shutoff valve
- **Ceiling sprinkler** with 2 PVC G1/2 mist nozzles including manually-operated shutoff valve and 230 V electromagnetic valve
- **Ceiling sprinkler** with two PVC G1/2 mist nozzles, including a manually-operated shutoff valve and a 230 V electromagnetic valve, 2 brass manually-operated shutoff valves for the solenoid valve shutoff 10 m Ø20 PVC pipe.

The number and arrangement of the spray nozzles with a spray angle of 120° depends on the local conditions. You need to deploy sufficient nozzles to ensure that the entire room is filled with a water screen.

Automatic operation

In the majority of cases, the sprinkler system is controlled by a gas warning device. A solenoid valve is used to this end, which is fitted in parallel to the manually-operated shutoff valve. This enables the sprinkler system to be triggered manually or automatically at any time.

Minor chlorine leakages often occur during the changing of the chlorine cylinder. To prevent unnecessary triggering of the sprinkler system, automatic operation may be interrupted for the period of the cylinder change, as long as the sprinkler system automatically returns to its active state after the changeover procedure. This is achieved e.g. via installation of a door contact switch in the electrical supply line to the solenoid valve.

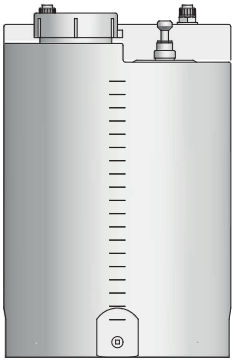
Technical data

Sprinkler system		
Nozzle supply pressure	bar	min. 3
Water consumption per nozzle	l/min	30
Spray angle	°	120

Double safety

Manual activation must be possible from outside the room. Nevertheless, for reasons of frost-protection, we recommend installing the manually-operated shutoff valve within the chlorine gas room. To satisfy both requirements, we provide an optional shutoff valve with a spindle extension, so that the hand wheel can be led to the outside of the chlorine gas room.

Sprinkler system standard - accessories



Chlorine neutralisation system

For connecting to the sprinkler system in the chlorine gas room

Consisting of:

- 200 litre PE tank
- Hand rammer
- DN20 injector for evacuating the neutralisation agent from the container
- PVC pipes and PVC fittings for installation
- 2 PVC ball valves for the filling and extraction connection

Technical data:

- Extracted quantity approx. 500 l/h
- Operating water pressure 4 bar
- Operating water volume 2400 l/h

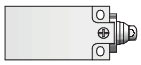
Filling the container requires approx. 100 kg of sodium thiosulphate for the chlorine neutralisation.

Spray nozzle PVC G1/2

for ceiling sprinkler

Flow 30 l/min (at 3 bar)

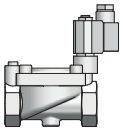
spraying angle 120°



Door contact interrupter

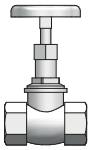
Switches off the sprinkler system solenoid valve when opening the door to the chlorine gas room.

Prevents unintended activation of the sprinkler system when changing the chlorine cylinder.



Solenoid valve G3/4 / PN16

230VAC, 1Ph, 50/60 Hz, normally closed

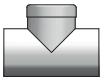


Shutoff valve G3/4 i, brass

Optionally complete with spindle extension for ceiling sprinkler

Reduction G3/4 a, PVC

For mounting of shutoff valve and solenoid valve.



T-piece Ø20 i - G1/2 i - Ø20 i

For sprinkler nozzle mounting.

Guard red with inspection window

For wall installation, with a lateral cylinder lock and emergency hammer.

Lutz-Jesco GmbH
Am Bostelberge 19
30900 Wedemark
Phone: +49 5130 5802-0
Fax: +49 5130 580268
E-mail: info@lutz-jesco.com
Internet: www.lutz-jesco.com