

Safe operation with vacuum technology

C 2700-V - Vacuum Regulator for Chlorine Gas



Line systems in vacuum

State of the art chlorinators are designed for vacuum operation. Thus ensuring the highest safety standards for handling of this toxic medium are met. In regulating the vacuum the C 2700-V provides the main function of these kinds of chlorinators.

Mode of operation

Pressurised chlorine gas flows from the chlorine barrel to the vacuum regulator. The vacuum regulator consists of an inlet valve and the diaphragm chamber. The chlorine gas in the inlet valve is under positive pressure; a vacuum is in the diaphragm chamber.

The PVC output of the vacuum regulator is connected to the injector. Sufficient vacuum draws the diaphragm disc upwards and pushes the valve cone downward against the spring force. The inlet valve opens and the amount of chlorine required flows into the membrane chamber. If the vacuum is not sufficient, the spring closes the system again. This results in a constant vacuum in the piping downstream of the vacuum regulator.

A constant vacuum ensures maximum system safety: In the event of a leak, ambient air is drawn into the tube without enabling a dangerous amount of chlorine gas to escape into the atmosphere.

If the valve cone does not close properly due to heavy soiling, slight overpressure builds up in the membrane chamber. In the event of such faults, the safety valve in the diaphragm disc opens and vents the system vents to a neutralisation system, e.g., a chlorine eliminator or an activated carbon cartridge.

Functions

- Flow rate with chlorine gas: up to 200 kg/h
- Safe operation with vacuum technology
- Included safety valve
- Highly durable materials
- Optional pressure gauge

Adapting to your Installation

All materials are selected based on expertise obtained by Lutz-Jesco from handling the materials. To make them suitable for your application, Lutz-Jesco provides different types of connections and optional pressure gauges.

Technical data

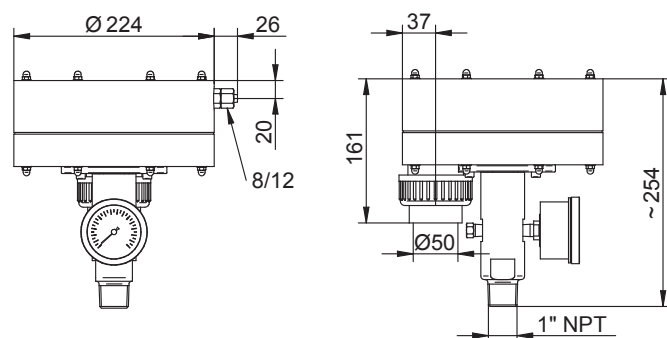
Vacuum regulator for chlorine gas C 2700-V

Chlorine gas flow rate	kg/h	max. 200
Inlet pressure	bar	1.5 – 16
Operating vacuum	mbar	-50
Relief pressure	mbar	500
Connections	Cemented connection	1" NPT outside (inlet) and PVC screw connection DN 40 (outlet)
	Flange connection	Flange DN 25 with groove (inlet) and PVC glued socket DN 40 (outlet)
Materials in contact with the media	Inlet valve	Monel, nickel-plated brass and Hastelloy
	Vacuum unit	PVC
	Seals	FPM, PTFE
Optional pressure gauge	bar	0 – 16
Weight (with flange and pressure gauge)	kg	2.3 approx.
Ambient temperature	°C	10 – 50 (no direct sunlight)

Dimensions

Vacuum regulator with threaded connection

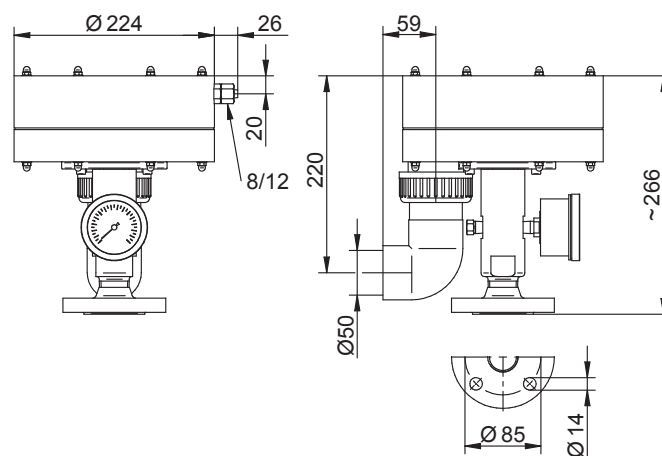
All dimensions in mm



Vacuum regulator with flange connection

(Flange DN25 / PN40 with groove (form D) according to EN1092)

All dimensions in mm



C 2700-V standard - accessories



Activated carbon cartridge

With bracket and 3 m hose for installation in the blow-off line, connection for PE hose $\varnothing 8/12$

Retains small amounts of chlorine and prevents chlorine gas alarm as a result of short-term system-related leakage.



Flange

- Counterflange - 1" NPT female thread with tongue
- Counterflange - welding neck flange with tongue



Bottle with ammonia solution

For leak test of the connection



Liquid sealant

For connecting 1" NPT fittings