

# ESXVIk EZgfaXXHS/hW





# Operation & Maintenance Instructions Read these operation and maintenance instructions before start up!

To be held for future reference.

#### **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.

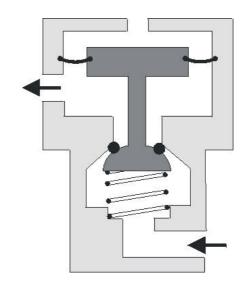
At the same time the safety shutoff valve prevents water from entering into the vacuum regulator even if the ejector non-return valve is untight.



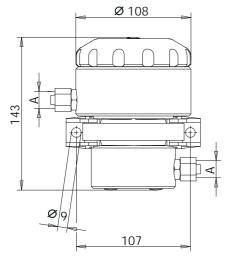
#### **Function**

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 vlave 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**



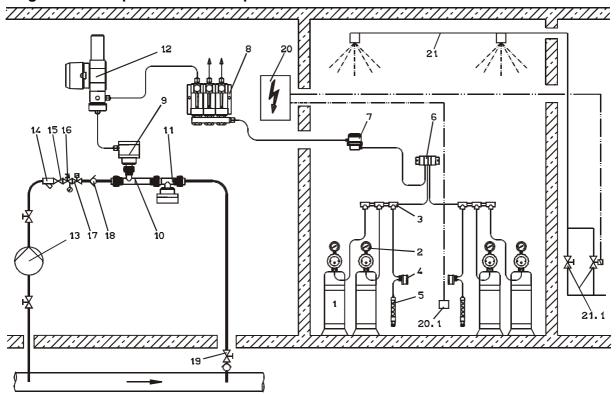
#### Technical data

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	PartNo.	
PE tubing d8/12	5 kg/h	20401009	
PE tubing d12/16	15 kg/h	20401010	
PVC screwing			
DN10/d16	15 kg/h	20401011	

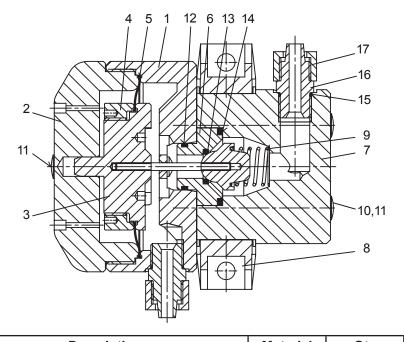
#### Diagram of a complete chlorination plant



#### Legend

1	Chlorine cylinder		13	Pressure boosting pump	MB 2 29 01
	Vacuum regulator C 2211	MB 2 04 11	14	Dirt trap	MB 2 29 04
	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	
5	Activated carbon cartridge	MB 2 04 11		with pressure gauge	MB 2 29 04
6	Chlorine changeover switch C 2005	MB 2 04 05	17	Solenoid valve	MB 2 29 04
7	Safety shutoff valve	MB 2 04 06	18	Ball backpressure valve	
8	Measuring glasses,		19	Chlorine solution inlet	MB 2 34 01
	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			

#### Lutz-Jesco GmbH



Pos.	Description	Material	Qty	Part No.
1	Housing bottom	PVC	1	35298
2	Housing cover	PE	1	35011
3	Diaphragm disc	PVC	1	37517
4	Threaded ring M 50 x 2 mm	PVC	1	28806
5 *	Ring diaphragm d 94/57 mm	FPM	1	81599
6	Valve seat holder	PVC	1	35155
7	Valve chamber	PVC	1	35151
8	Tubular joint d 75 mm	PE	1	32619
9	Pressure spring d 20x33 mm	Hastelloy C	1	82298
10 *	Cylinder head screw M 5x65	A2	4	83756
11	Cover	PVC	5	83851
12 *	O-Ring d 19x2,5 mm	FPM	1	80817
13 *	O-Ring d 12,4x2,62 mm	FPM	1	80004
14 *	O-Ring d 32,9x3,53 mm	FPM	1	80077
15 *	O-Ring d 14x1,78 mm	FPM	2	80003
	Clamping connection G 3/8 for tubing d 8/12 mm		10366	
16	Clamping connection G 3/8 for tubing d 12/16	PVC	2	15537
10	G 3/8 - d 16 external			15535
	G 3/8 - G 1/4 i			82908
	Cap nut for tubing d 8/12 mm	PVC		10365
17	Cap nut for tubing d 12/16		2	15534
	Screwing DN 10/d 16	PVC / FPM		88171
-	Arrow plate	PVC	1	87395
Valve, complete				
-	Hose connection d 8/12 mm			20401009
-	Hose connection d 12/16 mm			20401010
-	PVC screwing DN 10 / d 16			20401011
-	Threaded connection G 1/4 i			20401020
	*			•

<sup>\* =</sup> recommended spare parts

## Warranty



Please copy and send with the device.

If the device breaks down within the period of warranty, please return it in a cleaned condition with the complete warranty application, filled out.

Sender	
Company:	Phone: Date:
Address:	
Contact person:	
	Delivery date:
Device type:	Serial no.:
Nominal capacitynominal pressure:	
Description of fault:	
Type of fault:	
Mechanical fault	2. Electrical fault
o premature wear	o loose connections such as plug connector or cable
o wear parts	o operating elements (e.g., switches/buttons)
o breakage/other damage	o electronics - corrosion
o damage in transit	
3. Leaks	4. No or inadequate function
o connections	o defective diaphragm
o dosing head	o other
Service conditions of the device	
Point of use / system designation:	
Accessories used (Suction line, etc.):	
Commissioning (date):	
Duty peroid (approx. operating hours):	

Please describe the specifics of the installation and provide a simple diagram with details of the material, diameter, length and levels.

### **Declaration of harmlessness**



Please copy and send in with your device! Please display anon the outer packaging!

	Declaration of harmlessness (please fill out a separate form for each appliance)
We forward the following device for repai	S:
Type of device:	
Part-no.:	
Order-no.:	
Delivery date:	
Reason for repair:	
Medium used:	Properties: irritant: yes/no corrosive: yes/no
We hereby certify that the machine has b biological and radioactive materials as w	en thoroughly cleaned inside and out before its dispatch and that it is free from health risk chemical, Il as having been drained of oil. *)
If the manufacturer find it necessary to c	rry out further cleaning work, we accept the charge will be made to us.
We certify that the aforementioned inforn	ation is correct and complete and that the unit is dispatched in compliance with legal requirements.
Company / address:	Phone: Fax:
	E-Mail:
Customer-number: Contact person:	
 Date	Signature / stamp
*) If not applicable please cross out!	