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ENCHLOR^{INC.}

SERIES E4000 Chlorine Gas Feeders

- Industrial Quality-Economical Price
- 3-Year Limited Warranty
- Hastelloy-C Inlet Valves
- Solid Machined PVC Construction



Enchlor Inc. has been manufacturing the highest quality water treatment equipment and instrumentation since 1978. We were the first company to bring the machined E4000 series gas feed equipment to the industry in 1990. Enchlor Inc. offers this popular and proven design as a reliable and economical alternative for lower capacity gas feed systems. The **Series E4000** offers feed rates up to 100 PPD (2 kg/hr) with automatic switchover option available.

Construction

Enchlor Inc. continually strives to produce the longest lasting and most reliable gas chlorination and sulfonation equipment on the market. We believe that this means using only the highest quality materials and most rugged designs. Fine silver and Hastalloy rate valve and inlet valve components provide long life and accurate control. All body parts are machine from solid stock to provide the most durable chlorinator available

Safety

All vacuum operation. Remote ejector and direct cylinder mounting insures the highest degree of operator safety.

Economy

At last a high quality but economical chlorinator. Proof that quality and 'made in America' production does not need to be expensive.

1.0 SCOPE

This specification describes an _____ Series 4000 Gas Feeder.

2.0 DESCRIPTION

The Gas Feeder shall be the Model _____ Gas Feeder and shall be of the vacuum operated, solution feed type. The gas feeder shall have a maximum capacity of _____ pounds per day of (chlorine) gas feed and shall be equipped with (integrally or remote) mounted gas flowmeter(s) of _____ pounds of gas feed per day.

3.0 DESIGN

The gas feeder design shall provide for conveying the gas under vacuum from the vacuum regulator to the ejector/check valve assembly to insure complete system safety. The gas feeder shall be constructed of materials specially selected for wet or dry gas services. All springs used in the gas feeder shall be of a tantalum alloy. The rate valve shall be constructed of fine silver. A double thickness diaphragm shall be provided for vacuum regulation. The rate of gas feed shall be set manually and shall remain constant until manually changed. A differential pressure regulator shall not be required for gas flow control. The gas feeder shall be convertible to automatic control by insertion of a motorized control valve in the vacuum line to receive a signal from the appropriate control equipment. The gas feeder shall be comprised of the following:

Vacuum regulator(s), pressure relief valve, ejector/ diffuser assembly(ies), gas supply indicator, and one of the following three items:

1. Gas flowmeter with manual rate valve, OR
2. Indicating meter, OR
3. Panel mounted gas flowmeter(s) with manual rate valve.

Each vacuum regulator shall mount directly on the gas valve by means of a positive yoke type, gasket connection. Vacuum shall be controlled by a spring opposed diaphragm regulator which shall close tight upon loss of vacuum. Each regulator shall be equipped with a loss of gas indicator and gas flowmeter.

The gas flowmeter(s) with solid silver rate valve(s) shall be integrally mounted on the vacuum regulator or mounted on a chemical resistant panel for wall mounting. The gas flowmeter(s) shall indicate the flow of gas to a minimum of 1/20 maximum feed. Pressure will be prevented from building up in the system by means of a spring loaded, diaphragm actuated pressure relief valve located at the vacuum regulator. The gas shall vent at the vacuum regulator. The ejector/diffuser assembly(ies) shall receive all gas and ejector water and discharge the resulting solution to the point(s) of application. The ejector shall be equipped with a check valve which will prevent water from backing up into the vacuum regulator(s). A loss of water supply shall automatically shut-off the gas flow. For gas feeders of 100 pounds per day and less, the diffuser shall be an open-end outlet with a 3/4" NPT threaded and 1" I.D. hose connection for ease of field installation.

4.0 OPTIONS

AUTOMATIC SWITCHOVER FEEDER

The automatic switchover gas feeder shall be the _____ Model _____ and shall be of the vacuum operated, solution feed type and shall automatically switch the gas supply from an empty source to a full source. The system shall have automatic reset and shall not permit return to the initial source until the second is empty. The gas feeder shall have a maximum capacity of _____ pounds per day of chlorine gas feed and shall be equipped with a remote mounted gas flowmeter of _____ pounds of gas feed per day. The automatic switchover module shall be vacuum operated, switching from an empty gas source to a full source. There shall be no manual reset required when switchover has been made and the empty container replaced with a full container. The module shall be wall mounted and operated on a spring loaded toggle. The switchover module shall be factory set and shall not require field adjustment.

MANIFOLDS

(For Cylinders and Ton Containers, see Operation Bulletin 9730.94.)

Series 4000 Gas Feeders: Standard Systems

Cylinder or Manifold Mounted

<i>Description:</i>	<i>System Number:</i>	<i>Capacity:</i>
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100 ppd Standard Systems

w/ one(1) VR-400-CL2	4131C	0 - 4 ppd (75 g/h)
one(1) EJ-100-CL2	4141C	0 - 10 ppd (200 g/h)
one(1) Accessory Pack	4151C	0 - 25 ppd (0.5 Kg/h)
	4161C	0 - 50 ppd (0.9 Kg/h)
	4171C	0 - 100 ppd (2.0 Kg/h)

NOTES: 1. EJECTOR: For other than standard system ejector requirements, consult factory.

Series 4000 Gas Feeders: Remote Feed Point Systems

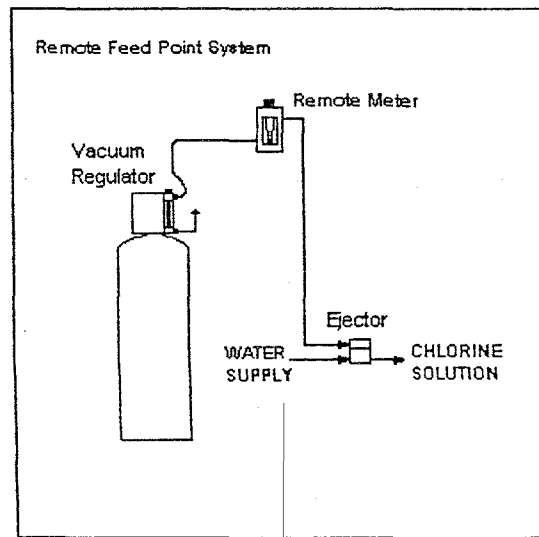
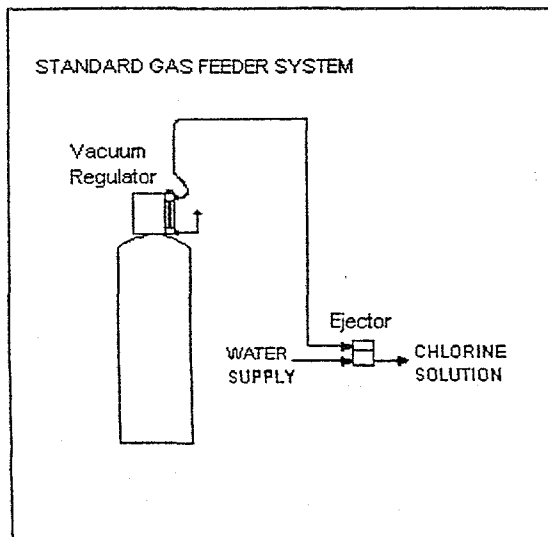
Cylinder or Manifold Mounted

<i>Description:</i>	<i>System Number:</i>	<i>Capacity:</i>
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100 ppd Remote Feed Point Systems

w/ one(1) VR-400-CL2	4133C	0 - 4 ppd (75 g/h)
one(1) MP-480-CL2	4143C	0 - 10 ppd (200 g/h)
one(1) EJ-100-CL2	4153C	0 - 25 ppd (0.5 Kg/h)
one(1) Accessory Pack	4163C	0 - 50 ppd (0.9 Kg/h)
	4173C	0 - 100 ppd (2.0 Kg/h)

NOTES: 1. EJECTOR: For other than standard system ejector requirements, consult factory.



Series 4000 Gas Feeders: Switchover Systems

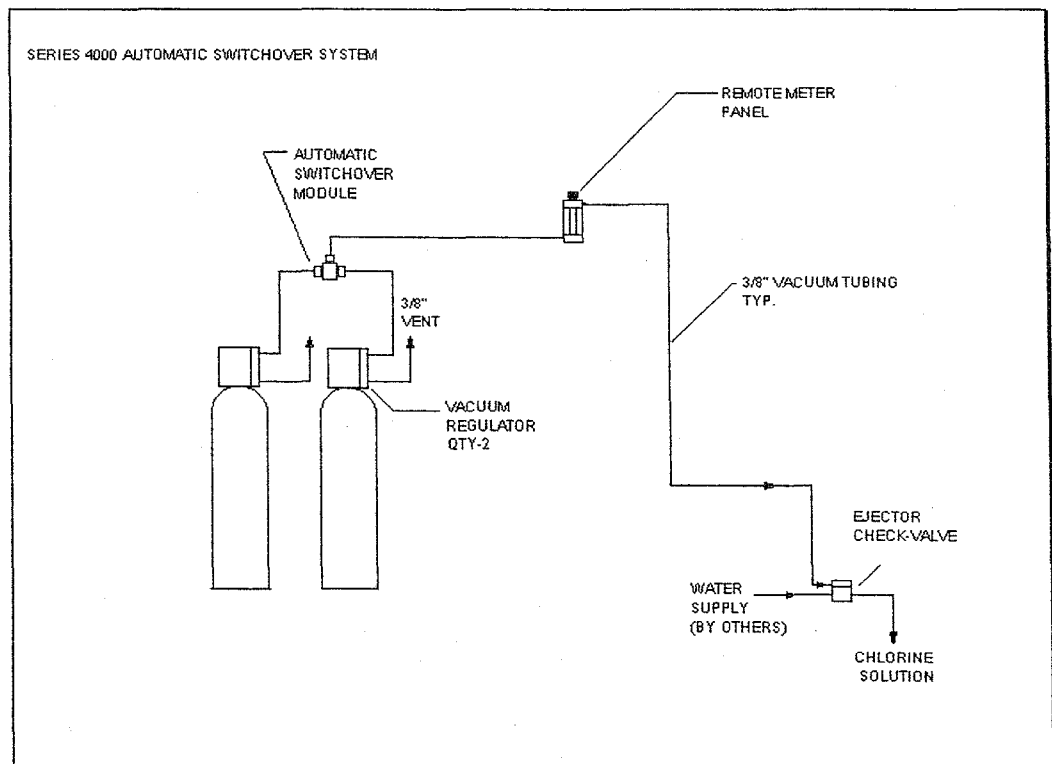
Cylinder or Manifold Mounted

<i>Description:</i>	<i>System Number:</i>	<i>Capacity:</i>
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100 ppd Switchover Systems

w/ two(2) VR-400-CL2	4135C	0 - 4 ppd (75 g/h)
one(1) SO-100-CL2	4145C	0 - 10 ppd (200 g/h)
one(1) MP-480-CL2	4155C	0 - 25 ppd (0.5 Kg/h)
one(1) EJ-100-CL2	4165C	0 - 50 ppd (0.9 Kg/h)
one(1) Accessory Pack	4175C	0 - 100 ppd (2.0 Kg/h)

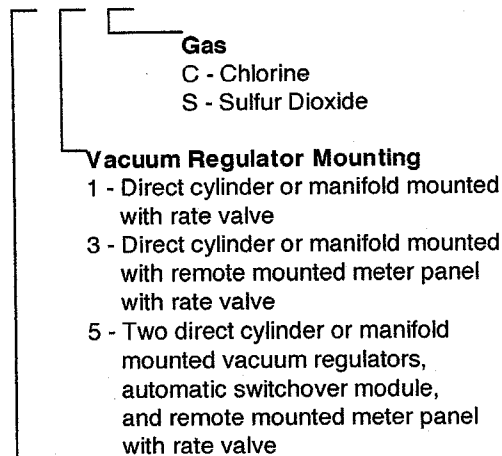
- NOTES:** 1. **EJECTOR:** For other than standard system ejector requirements, consult factory.
2. **Extra feed point adder:** includes (1) Meter Panel and (1) Ejector assembly



Technical Data

Model Information Code

Model E4 1



Available Gas Rotometers

- 3 - 4 ppd (75 g/h)
- 4 - 10 ppd (200 g/h)
- 5 - 25 ppd (0.5 kg/h)
- 6 - 50 ppd (0.9 kg/h)
- 7 - 100 ppd (2.0 kg/h)

Standard Supplied Equipment with Each Available Model

- 25' (8m) 3/8" vacuum and vent tubing
- (2) two vent outlet screens
- (1) one Standard Installation and Spare Parts Kit

Accuracy: within 4% of max rotometer capacity
Operating Range: 20:1, manual, 10:1 automatic
Back Pressure: Maximum back pressure at point of application for a standard ejector is 140 psig. For pressures greater than 140 psig, consult factory.
Tubing Connections: 3/8" vacuum and vent
Operating Temperature: Ejector, 35°F to 120°F; Other components, -20°F to 120°F

Model

E41__1C

- (1) one vacuum regulator with gas rotometer, rate valve and chlorine supply indicator
- (1) one ejector/diffuser assembly
- 25' (8m) 3/8" vacuum and vent tubing
- (1) one vent outlet screen
- (1) one Standard Installation and Spare Parts Kit

E41__3C

- (1) one vacuum regulator with gas rotometer and chlorine supply indicator (no rate valve)
- (1) one remote mounted meter panel with gas rotometer and rate valve
- (1) one ejector/diffuser assembly
- 25' (8m) 3/8" vacuum and vent tubing
- (1) one vent outlet screen
- (1) one Standard Installation and Spare Parts Kit

E41__5C

- (2) two vacuum regulators with gas rotometers and chlorine supply indicators (no rate valves)
- (1) one automatic switchover module, vacuum operated
- (1) one remote mounted meter panel with gas rotometer and rate valve
- (1) one ejector/diffuser assembly
- 25' (8m) 3/8" vacuum and vent tubing
- (1) one vent outlet screen
- (1) one Standard Installation and Spare Parts Kit

Standard Installation and Spare Parts Kit (included with all of above models)

- (10) ten #GAE-LED-111 lead gaskets
 - (1) one cylinder wrench
 - (1) one Ammonia bottle for checking connections
 - (2) two #GAE-BUN-106 nozzle gaskets
 - (1) one #GAE-VIT-122 ejector seat
 - (1) one #VRE-455-500 replacement filter
 - (1) one Operation and Maintenance Manual
- Lifetime Warranty – Contact Factory for Detail

Represented by:

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