



MATHESON

The Gas Professionals

6295 Series Excess Flow Valves



Operation Instructions

*READ AND COMPLY WITH THESE INSTRUCTIONS BEFORE
INSTALLING, OPERATING, OR SERVICING*

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I. SERVICE

General Service

A unit which is not functioning in a normal manner should be removed from service until such time that repairs or replacement can be made. Upon completion of repair, full testing should be performed to assure the user that the unit has been returned to its original operating parameters. MATHESON can repair or replace equipment. To arrange for repair or replacement service, call 1-800-828-4313 and ask for the Warranty Administrator. **No product will be received by MATHESON without indication of gas service and without proper return material authorization provided by the warranty administrator. (All repairs must be made by MATHESON or an assigned and approved facility to maintain any warranties or guarantees).**

If the unit is under an applicable warranty, return the unit to MATHESON for repair or replacement. To arrange for warranty service, call 1-800-828-4313 and ask for the Warranty Administrator. **No product will be received by MATHESON without indication of gas service and without proper return material authorization provided by the warranty administrator.**

If advised by the Warranty Administrator to return the product to MATHESON, prepare the product for shipment and write, in large lettering the RMA Number assigned by the Warranty Administrator on the outside of the box. Also, if required by the Warranty Administrator, supply the completed RMA form with the product. Make sure that the product is adequately packaged, in the original shipping container if possible, and shipped prepaid (MATHESON will not accept COD freight) with a description of the observed deficiency to the attention of the:

Warranty Administrator
MATHESON
166 Keystone Drive
Montgomeryville, PA 18936

The user is expected to periodically inspect the product for leaks, loose or worn parts, broken or non-functioning components and to address those situations immediately. If the user would require verbal assistance in ascertaining the potential of a problem with any MATHESON product, contact the local MATHESON branch for assistance or your MATHESON Sales Representative.

II. LIMITED WARRANTY

This equipment is sold by MATHESON under the warranties set forth in the following paragraphs. Such warranties are extended only with respect to the purchase of this equipment directly from MATHESON or MATHESON's Authorized Agent as new merchandise and are extended to the first Buyer thereof other than the purpose of resale.

For a period of one year from date of original delivery (ninety days in corrosive service) to Buyer or to Buyer's order, this equipment, is warranted to be free from functional defects in materials and workmanship and to conform to the description of this equipment contained in this manual and any accompanying labels and/or inserts, provided that this equipment is properly operated under the conditions of normal use and that regular and periodic maintenance and service is performed or replacements are made in accordance with the instructions provided. Expendable parts of this equipment are similarly warranted to be free from functional defects in materials and workmanship and to conform to the description of this equipment contained in this manual and any accompanying labels and/or inserts. The foregoing warranties shall not apply if the equipment has been repaired other than by MATHESON or a service facility designated by MATHESON, or if this equipment has not been operated and maintained in accordance with written instructions provided by MATHESON, or has been altered by anyone other than MATHESON, or if the equipment has been subject to abuse, misuse, negligence or accident.

MATHESON's sole and exclusive obligation and the Buyer's sole and exclusive remedy under the above warranties is limited to repairing or replacing, free of charge, at MATHESON's sole discretion, the equipment or part which is telephonically reported to be a problem to the local MATHESON Branch Location, and which if so advised, is returned with a written statement of the observed deficiency, not later than seven days after the expiration of the applicable warranty, to the MATHESON Gas Equipment Technology Center during normal business hours, transportation charges prepaid, and which, upon examination, is found to comply with the above warranties. The Buyer shall pay for return trip transportation charges for the equipment or part.

MATHESON shall not be otherwise liable for any damages including but not limited to incidental damages, consequential damages, or special damages, whether such damages result from negligence, breach of warranty or otherwise.

There are no express or implied warranties that extend beyond the warranties hereinabove set forth. MATHESON makes no warranty of merchantability or fitness for a particular purpose with respect to the equipment or parts thereof.

Acceptance of the equipment by the final buyer indicates the final buyer's acceptance of all warranties and limitations set forth above.

III. USER RESPONSIBILITY

This equipment will perform in conformity with the description thereof contained in this manual and accompanying labels and/or inserts when installed, operated, maintained and repaired in accordance with the instructions provided. This equipment must be checked periodically, with the frequency of such inspections depending upon the scope of use. Damaged, worn or contaminated equipment should not be used. Parts that are broken, missing, plainly worn, distorted or contaminated should be replaced immediately. Should such repair or replacement become necessary, MATHESON recommends that a telephonic or written request for service advice be made to the MATHESON Equipment Engineering Group in Montgomeryville Pennsylvania or to the nearest MATHESON branch location.

This equipment or any of its parts should not be altered without the prior written approval of MATHESON Equipment Engineering Group. The user of this equipment shall have the sole responsibility for any malfunction, which results from improper use, faulty maintenance, damage, improper repair or alteration by anyone other than MATHESON or a service facility designated by MATHESON. Further, the ultimate user of the equipment is responsible for the training and safe operation of the equipment by personnel in his/her employ.

IV. GENERAL

1. This excess flow valve is designed to provide automatic shut off of gas flow under failure conditions which cause a flow in excess of the valve rating.
2. A provision for higher purge flows is provided for purging without nuisance shut off.
3. The valve is a $\frac{1}{4}$ turn valve, providing two positions - AUTO and OPEN (RESET). The valve handle is provided with cutouts which line up with a label on the valve bonnet.

V. INSTALLATION

1. Only personnel trained in pipe or face seal connections should install the EFV.
2. After installation, leak checking is required to prevent leaks of dangerous gases.

VI. OPERATION

1. If purging with an inert gas is desired, turn the handle so that the cutouts line up with OPEN (RESET) on the bonnet label. In this position, the valve is locked open, and will not shut off regardless of the flow rate. See Figure 1.

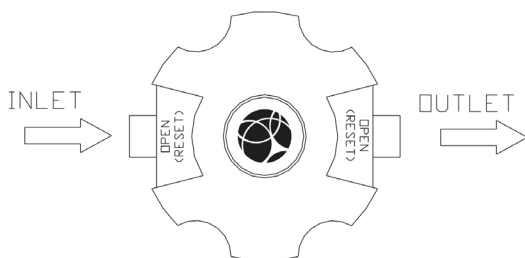


FIGURE 1

NOTE: DO NOT OPERATE THIS VALVE IN THE OPEN (RESET) POSITION WITH ANY DANGEROUS GASES. THIS POSITION IS PROVIDED FOR PURGING WITH INERT GASES, OR FOR RESETTNG THE VALVE AFTER A SHUTOFF DUE TO AN EXCESS FLOW CONDITION. FAILURE TO RUN IN THE AUTO POSITION MAY RESULT IN A HAZARDOUS CONDITION.

2. To operate with process gas, turn the handle so that the cutouts line up with AUTO. In this position, the valve will automatically shut off when the flow rate exceeds the rating of the valve. See Figure 2.

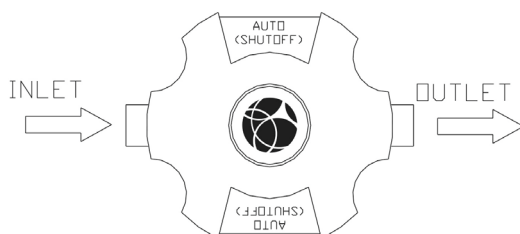


FIGURE 2

3. Opening the cylinder valve or other process valves too quickly into a line which has a vacuum or low pressure condition compared to the pressure upstream of the EFV may cause the valve to trip due to a surge of gas into

the low pressure line downstream of the valve. Opening the valves slowly will prevent this condition from occurring. If this condition cannot be prevented in this manner, pressurizing the downstream side of the valve may be necessary to prevent the surge of gas.

4. If the condition persists after pressurizing the downstream side of the valve, the flow rate of the system and the flow rating of the valve should be checked to ensure proper sizing of the EFV.



166 Keystone Drive
Montgomeryville, PA 18936
800-828-4313
www.mathesongas.com
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