

# Operation Instructions

P/N 95290 8/20/14





## Reinforced Nylon Orifice Plates

### 40770 - 2 Inch Orifice Plate Kit:

Model	Hole size	Optimal Flow Range*	Color
40771	0.40 (1.01 cm)	1 - 5 scfm	White
40772	0.50 (1.27 cm)	2.5 - 8 scfm	Red
40773	0.75 (1.90 cm)	6 - 19 scfm	Yellow
40774	1.00 (2.54 cm)	11 - 34 scfm	Green
40775	1.25 (3.18 cm)	18 - 56 scfm	Blue
40776	1.40 (3.56 cm)	24 - 75+ scfm	Gray

## Stainless Steel Orifice Plates for Vertical Wellheads

### 40747 - 1.25 Inch Orifice Plate Kit:

Model	Hole size	Optimal Flow Range*
40745	0.26 ( .66cm)	0 - 2.5 scfm
40642	0.50 (1.27cm)	2.5 - 8 scfm
40643	0.75 (1.90cm)	6 - 20 scfm
40746	0.95 (2.41cm)	12 - 36+ scfm

### 40640 - 2 Inch Orifice Plate Kit:

Model	Hole size	Optimal Flow Range*
40641	0.40 (1.01 cm)	1 - 5 scfm
40642	0.50 (1.27 cm)	2.5 - 8 scfm
40643	0.75 (1.90 cm)	6 - 19 scfm
40644	1.00 (2.54 cm)	11 - 34 scfm
40645	1.25 (3.18 cm)	18 - 56 scfm
40646	1.40 (3.56 cm)	24 - 75+ scfm

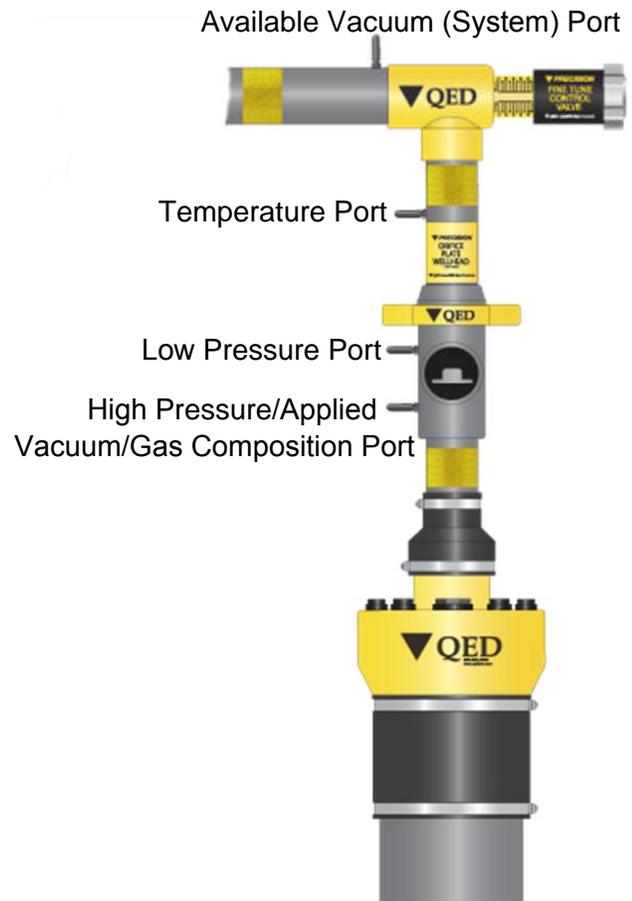
### 40660 - 3 Inch Orifice Plate Kit:

Model	Hole size	Optimal Flow Range*
40664	1.25 (3.18 cm)	16 - 52 scfm
40666	1.75 (4.45 cm)	34 - 107 scfm
40668	2.10 (5.33 cm)	54 - 170+ scfm

## Stainless Steel Orifice Plates for Horizontal Wellheads

### 40690 - 2 Inch Orifice Plate Kit:

Model	Hole size	Optimal Flow Range*
40691	0.40 (1.01 cm)	1 - 5 scfm
40692	0.50 (1.27 cm)	2.5 - 8 scfm
40693	0.75 (1.90 cm)	6 - 19 scfm
40694	1.00 (2.54 cm)	11 - 34 scfm
40695	1.25 (3.18 cm)	18 - 56 scfm
40696	1.40 (3.56 cm)	24 - 75+ scfm



QED's Quick-Change Orifice Plates are constructed of 1/16" stainless steel or fiber reinforced nylon. With several sizes of orifice plate available, it is easy to select the right plate for the appropriate pressure drop allowing for accurate flow measurement readings.

\* For best practice and most efficient operation, use the next smaller orifice plate when the pressure differential is less than 0.5 inches of water column; Use the next larger orifice plate when the pressure differential is greater than 5 inches of water column.

**How it works:**

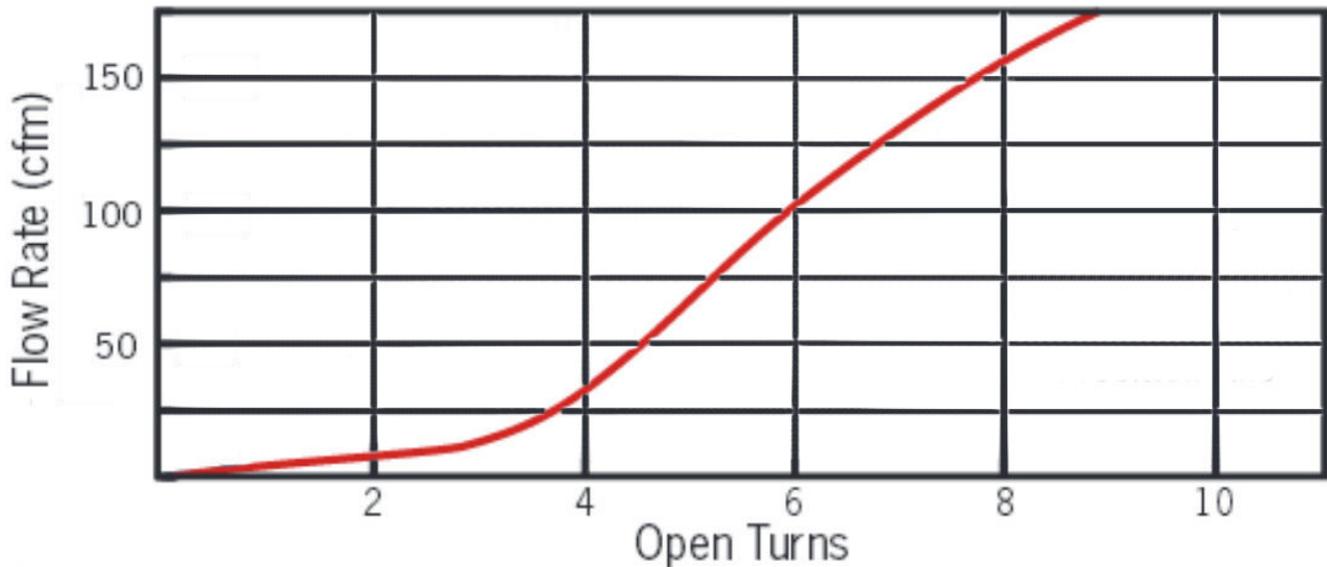
The QED CV2000 Precision Fine Tune Control Valve is a metered rising stem, angle globe valve. The valve has been designed to allow fine tuning of the gas flow from landfill gas collection wells, especially at very low gas flow rates. The rising stem valve exposes more of the metered scale as it is opened, allowing you to see and record numerically exactly how far open the valve is.

**Installation:**

The valve will work in any orientation, and regardless of which pipe port is connected to the intake gas.

**Operation:**

Turn the stainless steel valve handle counterclockwise to open. As the valve is opened, the yellow metered label is exposed, and indicates the relative position of the valve. The chart below shows the approximate gas flow rate (at 40"wc vacuum) that can be expected for a given number of turns of the valve from the closed position.



**Specifications:**

- Recommended pressure:** 5 psi
- Maximum temperature:** 140° F
- Flow at 40" wc vacuum:** 200 scfm
- Materials:** 304 stainless steel, PVC, Viton

This limited warranty is in lieu of and excludes all other representations made by advertisements, distributors, agents, or manufacturer's sales representatives, and all other warranties, both express and implied. There are no implied warranties of merchantability or of fitness for a particular purpose for goods covered hereunder.

QED Environmental Systems warrants to the purchaser of its products that products, materials and/or workmanship shall reasonably conform to descriptions of the products and shall be free of defects in material and workmanship.

All warranty durations are calculated from the original date of purchase—determined as beginning the date of shipment from QED facilities and the date QED is notified of a warranty claim. This warranty shall be limited to the duration and conditions set forth below.

**1. Wellheads** - Warranted for one (1) year: 100% material and 100% workmanship.

**2. Precision Fine Tune Control Valves** - Warranted for two (2) years: 100% material and 100% workmanship.

This warranty will be void in the event of unauthorized disassembly of component assemblies. Defects in any equipment that result from abuse, operation in any manner outside the recommended procedures, use and applications other than for intended use or exposure to chemical or physical environments beyond the designated limits of materials and construction, will also void the warranty.

Chemical attack by liquids, gases or abrasive substances contacting equipment and accessories shall not be covered by this warranty. QED will only warrant that the supplied materials will conform to published QED specifications and generally accepted standards for that particular material.

QED Environmental Systems shall be released from all obligations under all warranties if any product covered hereby is repaired or modified by persons other than QED service personnel (unless such repair by others is made with the written consent of QED); resold to other parties; and/or moved to or used on a site other than originally specified.

It is understood and agreed that QED Environmental Systems shall in no event be liable for incidental or consequential damages resulting from its breach of any of the terms of this agreement, nor for special damages, nor for improper selection of any product described or referred to for a particular application. Liability under this warranty is limited to repair or replacement F.O.B. QED's factory, or its appointed agent's shop, of any parts which prove to be defective within the duration and conditions set forth herein, or repayment of the purchase price at the option of QED, provided the products have been returned in accordance with the duration and conditions set forth herein.

### **Buyer's Remedies**

The buyer's exclusive and sole remedy on account of or in respect to the furnishing of defective material or workmanship shall be to secure replacement thereof as aforesaid. QED shall not in any event be liable for the cost of any labor expended on any such product or material or for any special, direct, indirect or consequential damages to any one by reason of the fact that it shall have been deemed defective or a breach of said warranty.

### **Warranty Claims Procedure (Responsibility of purchaser)**

The original purchaser's sole responsibility in the instance of a warranty claim shall be to notify QED or its appointed agent, of the defect, malfunction, or other manner in which the terms of this warranty are believed to be violated. The purchaser may secure performance of obligations hereunder by contacting the Customer Service Department of QED or its appointed agent, and:

1. Identifying the product involved by model or serial number, or other sufficient description, that will allow QED, or its appointed agent, to determine which product is defective.
2. Specifying where, when, and from whom the product was purchased.
3. Describing the nature of the defect or malfunction covered by this warranty.

4. After obtaining authorization from QED, sending the malfunctioning component via a RMA# (Return Material Authorization number) to the address below or to its appointed agent

**QED Environmental Systems  
2355 Bishop Circle West  
Dexter, Michigan 48130**

**(800) 624-2026      Toll-Free in North America  
(734) 995-2547      Tele.  
(734) 995-1170      FAX**

5. Equipment must be cleaned before shipment or it will be cleaned by QED before any work is performed. The customer will be charged for such cleaning.

If any product covered hereby is actually defective within the terms of this warranty, purchaser must contact QED, or its appointed agent, for determination of warranty coverage. If the return of a component is determined to be necessary, QED, or its appointed agent, will authorize the return of the component at Purchasers expense. If the product proves not to be defective within the terms of this warranty, then all costs and expenses in connection with the processing of the Purchaser's claim and all costs for repair, parts, labor, and shipping and handling, as authorized by owner hereunder, shall be borne by the Purchaser. In no event shall such allegedly defective products be returned to QED, or its appointed agent, without its consent, and QED's, or its appointed agent's, obligations of repair, replacement or refund are conditional upon the buyer's return of the defective product to QED, or its appointed agent. All equipment returned to QED will be appropriately cleaned of contamination before shipping.