

**omega.com**<sup>®</sup>

Ω OMEGA<sup>®</sup>

# DVG64

## Electronic Vacuum Gauge

INSTRUCTION  
SHEET

M3805/0502



### DVG64 SPECIFICATIONS

Display	Updated every $\Omega$ second. 1 micron resolution below 200 micron of vacuum
Sensor Type	Thermistor
Connector Type	Standard 1/4 inch male flare fitting
Vacuum Range	0 - 12,000 Microns (0 - 1,600 Pascals) with vacuum increasing/decreasing indicator when above 12,000 Microns
Scale	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr
Operating Temp. Range	35°F to 125°F ( 2°C to 52°C)
Overpressure	300 PSI max (20 Bar)
Accuracy	+/-10% (0 to 1000 microns)
Power Source	9 Volt Alkaline battery (not included)
Continuous Usage	Over 35 hours
Auto Shut off	After 10 minutes when vacuum reading is above 12,000 Microns (12 Torr)
Weight	6.7 ounces
Dimensions	5-1/2"H X 3"W X 1-1/4"D

### DVG64 STEP TABLE

Vacuum (microns)	Micron (mTorr) Step	Pascal Step	Bar Step	InHg Step	PSI Step
15000 - 8000	1000	100	1	0.05	0.02
8000 - 5000	500	50	0.5	0.02	0.01
5000 - 2000	250	25	0.25	0.01	0.005
2000 - 1000	50	5	0.05	0.002	0.001
1000 - 500	10	1	0.01	0.0005	0.0002
500 - 200	5	0.5	0.0005	0.0002	0.0001
200 - 0	1	0.1	0.0001	0.00005	0.00002

### FEATURES

- Reads vacuum in 7 international units
- Uses  $\Omega$  the battery power than other models
- Cleaning port provides quick cleaning and drying of sensor
- Uses standard 9V Alkaline battery
- Convenient built-in hanger

### OPERATING CONTROLS

- Turning the vacuum gauge ON: Press and hold the ON button for about 3 seconds, until "POWER UP" appears on the display.
- Turning the vacuum gauge OFF: Press the OFF button  
To prolong battery life, when vacuum reading is above 12,000 Microns for about 10 minutes, the unit will automatically turn OFF.
- Changing the scale: Press the Scale button to change the display to the next scale. The scale order is: Microns, PSI, Inches of mercury (InHg), milliBars, Pascals, Torr and milliTorr. DVG64 will keep the scale settings even if the power is turned OFF.

### UNDERSTANDING THE DISPLAY

- When the vacuum reading is above 12,000 Microns (1,600 Pascals), the first line of the display shows "Atm." The second line displays a bar graph to indicate the direction in which the vacuum is moving. When the bar graph is moving from left to right, the pressure is increasing. When the bar graph is moving from right to left, the pressure is decreasing. The speed of the bar graph indicates how fast the pressure is increasing or decreasing. The bar graph indicator may be inaccurate for a few seconds after the evacuation of the system has begun.

- The bar graph disappears if the vacuum does not change for about 10 seconds. When the vacuum reading is below 12,000 Microns (1,600 Pascals), the vacuum in the selected units is displayed.

### CONNECTING TO THE VACUUM SYSTEM

The VG64 should only be connected to the vacuum system at the vacuum port. The "Auxiliary Port" is primarily for cleaning and should normally be closed with the supplied cap.

### CLEANING THE VACUUM SENSOR

It is recommended that the sensor be cleaned periodically to maintain unit accuracy. Oil and other contaminants reduce the accuracy of the unit. Follow the instructions below for cleaning.

- Close the Vacuum port with the supplied cap.  
Open the Auxiliary port.
- Use an eyedropper to pour about 2 teaspoons of ordinary rubbing alcohol into the Auxiliary port.
- Close the Auxiliary port with the supplied cap. Both the Vacuum and Auxiliary ports should now be closed.
- Shake the DVG64 unit for about 10 seconds. A slight movement of the vacuum sensor in the case is normal and does not affect the internal connection in any way.
- Open both the Vacuum and the Auxiliary ports.  
Empty the alcohol, and air dry the sensor.
- Close both the Vacuum and the Auxiliary ports with the supplied caps when the DVG64 is not used. This prevents contamination of the sensor.



OMEGAnet® Online Service  
www.omega.com

Internet e-mail  
info@omega.com

**Servicing North America:**

**USA:**  
ISO 9001 Certified

One Omega Drive, Box 4047  
Stamford CT 06907-0047  
Tel: (203) 359-1660 FAX: (203) 359-7700  
e-mail: info@omega.com

**Canada:**

976 Bergar  
Laval (Quebec) H7L 5A1  
Tel: (514) 856-6928 FAX: (514) 856-6886  
e-mail: info@omega.ca

**For immediate technical or application assistance:**

**USA and Canada:** Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA®  
Customer Service: 1-800-622-2378 / 1-800-622-BEST®  
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN®  
TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA

**Mexico:**

En Español: (001) 203-359-7803 e-mail:espanol@omega.com  
FAX: (001) 203-359-7807 info@omega.com.mx

**Servicing Europe:**

**Benelux:**

Postbus 8034, 1180 LA Amstelveen, The Netherlands  
Tel: +31 (0)20 3472121 FAX: +31 (0)20 6434643  
Toll Free in Benelux: 0800 0993344  
e-mail: sales@omegaeng.nl

**Czech Republic:**

Rudé armády 1868, 733 01 Karviná 8  
Tel: +420 (0)69 6311899 FAX: +420 (0)69 6311114  
Toll Free: 0800-1-66342 e-mail: info@omegashop.cz

**France:**

11, rue Jacques Cartier, 78280 Guyancourt, France  
Tel: +33 (0)1 61 37 29 00 FAX: +33 (0)1 30 57 54 27  
Toll Free in France: 0800 466 342  
e-mail: sales@omega.fr

**Germany/Austria:**

Daimlerstrasse 26, D-75392 Deckenpfronn, Germany  
Tel: +49 (0)7056 9398-0 FAX: +49 (0)7056 9398-29  
Toll Free in Germany: 0800 639 7678  
e-mail: info@omega.de

**United Kingdom:**

ISO 9002 Certified  
One Omega Drive, River Bend Technology Centre  
Northbank, Irlam, Manchester  
M44 5BD United Kingdom  
Tel: +44 (0)161 777 6611 FAX: +44 (0)161 777 6622  
Toll Free in United Kingdom: 0800-488-488  
e-mail: sales@omega.co.uk

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

**WARNING:** These products are not designed for use in, and should not be used for, patient-connected applications.



**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

**OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.**

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

**RETURN REQUESTS / INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2002 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.